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CONNECT SOUTHWEST LA: A TOD SPECIFIC PLAN FOR WEST ATHENS-WESTMONT DRAFT EIR

County of Los Angeles

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Table of Contents

Contents Page

1. EXECUTIVE SUMMARY 1-1
1.1 INTRODUCTION 1-1
1.2 ENVIRONMENTAL PROCEDURES 1-1
1.2.1 EIR Format 1-2
1.2.2 Type and Purpose of This DEIR 1-4
1.3 PROJECT LOCATION 1-4
1.4 PROJECT SUMMARY 1-5
1.5 SUMMARY OF PROJECT ALTERNATIVES 1-11
1.5.1 No Project/Existing General Plan Alternative 1-12
1.5.2 Reduced Intensity Alternative 1-13
1.5.3 Alternative Land Use Plan 1-14
1.6 ISSUES TO BE RESOLVED 1-15
1.7 AREAS OF CONTROVERSY 1-15
1.8 SUMMARY OF ENVIRONMENTAL IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE AFTER MITIGATION 1-16
2. INTRODUCTION 2-1
2.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT 2-1
2.2 NOTICE OF PREPARATION 2-2
2.3 SCOPE OF THIS DEIR 2-6
2.3.1 Impacts Considered Less Than Significant 2-6
2.3.2 Potentially Significant Adverse Impacts 2-6
2.3.3 Unavoidable Significant Adverse Impacts 2-7
2.4 INCORPORATION BY REFERENCE 2-10
2.5 FINAL EIR CERTIFICATION 2-11
2.6 MITIGATION MONITORING 2-11
3. PROJECT DESCRIPTION 3-1
3.1 PROJECT LOCATION 3-1
3.1.1 Regional Location 3-1
3.1.2 Project Site 3-1
3.2 STATEMENT OF OBJECTIVES 3-1
3.3 PROJECT CHARACTERISTICS 3-2
3.3.1 Description of the Project 3-2
3.4 INTENDED USES OF THE EIR 3-29
4. ENVIRONMENTAL SETTING 4-1
4.1 INTRODUCTION 4-1
4.2 REGIONAL ENVIRONMENTAL SETTING 4-1
4.2.1 Regional Location 4-1
4.2.2 Regional Planning Considerations 4-1
4.3 LOCAL ENVIRONMENTAL SETTING 4-5
4.3.1 Location and Land Use 4-5
4.3.2 Scenic Features 4-5
4.3.3 Climate and Air Quality 4-6
4.3.4 Cultural and Tribal Cultural Resources 4-6
4.3.5 Hazards and Hazardous Materials 4-9
4.3.6 Noise 4-9
4.3.7 Public Services and Utilities 4-9
4.3.8 Transportation and Traffic 4-10
4.3.9 General Plan and Zoning 4-10
4.4 ASSUMPTIONS REGARDING CUMULATIVE IMPACTS 4-11
4.6 REFERENCES 4-17

Table of Contents

Contents Page

5. ENVIRONMENTAL ANALYSIS 5-1

5.1 AESTHETICS 5.1-1
5.1.1 Environmental Setting 5.1-1
5.1.2 Thresholds of Significance 5.1-8
5.1.3 Plans, Programs, and Policies 5.1-9
5.1.4 Environmental Impacts 5.1-9
5.1.5 Cumulative Impacts 5.1-16
5.1.6 Level of Significance Before Mitigation 5.1-17
5.1.7 Mitigation Measures 5.1-17
5.1.8 Level of Significance After Mitigation 5.1-17
5.1.9 References 5.1-17
5.2 AIR QUALITY 5.2-1
5.2.1 Relevant Programs and Regulations 5.2-1
5.2.2 Environmental Setting 5.2-10
5.2.3 Thresholds of Significance 5.2-15
5.2.4 Plans, Programs, and Policies 5.2-18
5.2.5 Environmental Impacts 5.2-20
5.2.6 Cumulative Impacts 5.2-31
5.2.7 Level of Significance Before Mitigation 5.2-32
5.2.8 Mitigation Measures 5.2-32
5.2.9 Level of Significance After Mitigation 5.2-34
5.2.10 References 5.2-35
5.3 CULTURAL RESOURCES 5.3-1
5.3.1 Environmental Setting 5.3-1
5.3.2 Thresholds of Significance 5.3-7
5.3.3 Plans, Programs, and Policies 5.3-8
5.3.4 Environmental Impacts 5.3-8
5.3.5 Cumulative Impacts 5.3-12
5.3.6 Level of Significance Before Mitigation 5.3-12
5.3.7 Mitigation Measures 5.3-12
5.3.8 Level of Significance After Mitigation 5.3-14
5.3.9 References 5.3-14
5.4 GREENHOUSE GAS EMISSIONS 5.4-1
5.4.1 Environmental Setting 5.4-1
5.4.2 Thresholds of Significance 5.4-18
5.4.3 Plans, Programs, and Policies 5.4-21
5.4.4 Environmental Impacts 5.4-22
5.4.5 Cumulative Impacts 5.4-36
5.4.6 Level of Significance Before Mitigation 5.4-36
5.4.7 Mitigation Measures 5.4-36
5.4.8 Level of Significance After Mitigation 5.4-36
5.4.9 References 5.4-36
5.5 HAZARDS AND HAZARDOUS MATERIALS 5.5-1
5.5.1 Environmental Setting 5.5-1
5.5.2 Thresholds of Significance 5.5-11
5.5.3 Plan, Programs, and Policies 5.5-12
5.5.4 Environmental Impacts 5.5-13
5.5.5 Cumulative Impacts 5.5-19
5.5.6 Level of Significance Before Mitigation 5.5-20
5.5.7 Mitigation Measures 5.5-21
5.5.8 Level of Significance After Mitigation 5.5-21

Table of Contents

Contents Page

5.5.9 References 5.5-21
5.6 HYDROLOGY AND WATER QUALITY 5.6-1
5.6.1 Environmental Setting 5.6-1
5.6.2 Thresholds of Significance 5.6-15
5.6.3 Plans, Programs, and Policies 5.6-16
5.6.4 Environmental Impacts 5.6-16
5.6.5 Cumulative Impacts 5.6-22
5.6.6 Level of Significance Before Mitigation 5.6-22
5.6.7 Mitigation Measures 5.6-22
5.6.8 Level of Significance After Mitigation 5.6-22
5.6.9 References 5.6-22
5.7 LAND USE AND PLANNING 5.7-1
5.7.1 Environmental Setting 5.7-1
5.7.2 Thresholds of Significance 5.7-4
5.7.3 Plans, Programs, and Policies 5.7-4
5.7.4 Environmental Impacts 5.7-7
5.7.5 Cumulative Impacts 5.7-28
5.7.6 Level of Significance Before Mitigation 5.7-29
5.7.7 Mitigation Measures 5.7-29
5.7.8 Level of Significance After Mitigation 5.7-29
5.7.9 References 5.7-29
5.8 NOISE 5.8-1
5.8.1 Environmental Setting 5.8-1
5.8.2 Thresholds of Significance 5.8-21
5.8.3 Plans, Programs, and Policies 5.8-21
5.8.4 Environmental Impacts 5.8-22
5.8.5 Cumulative Impacts 5.8-29
5.8.6 Level of Significance Before Mitigation 5.8-30
5.8.7 Mitigation Measures 5.8-30
5.8.8 Level of Significance After Mitigation 5.8-32
5.8.9 References 5.8-33
5.9 POPULATION AND HOUSING 5.9-1
5.9.1 Environmental Setting 5.9-1
5.9.2 Thresholds of Significance 5.9-6
5.9.3 Plans, Programs, and Policies 5.9-7
5.9.4 Environmental Impacts 5.9-7
5.9.5 Cumulative Impacts 5.9-9
5.9.6 Level of Significance Before Mitigation 5.9-9
5.9.7 Mitigation Measures 5.9-9
5.9.8 Level of Significance After Mitigation 5.9-9
5.9.9 References 5.9-9
5.10 PUBLIC SERVICES 5.10-1
5.10.1 Fire Protection and Emergency Services 5.10-1
5.10.2 Police Protection 5.10-5
5.10.3 School Services 5.10-8
5.10.4 Library Services 5.10-12
5.10.5 References 5.10-16
5.11 RECREATION 5.11-1
5.11.1 Environmental Setting 5.11-1
5.11.2 Thresholds of Significance 5.11-7
5.11.3 Plans, Programs, and Policies 5.11-8
5.11.4 Environmental Impacts 5.11-8

Table of Contents

Contents Page

5.11.5 Cumulative Impacts 5.11-13
5.11.6 Level of Significance Before Mitigation 5.11-14
5.11.7 Mitigation Measures 5.11-14
5.11.8 Level of Significance After Mitigation 5.11-14
5.11.9 References 5.11-14
5.12 TRANSPORTATION AND TRAFFIC 5.12-1
5.12.1 Methodology 5.12-1
5.12.2 Environmental Setting 5.12-7
5.12.3 Thresholds of Significance 5.12-35
5.12.4 Plans, Programs, and Policies 5.12-38
5.12.5 Environmental Impacts 5.12-38
5.12.6 Cumulative Impacts 5.12-85
5.12.7 Level of Significance Before Mitigation 5.12-86
5.12.8 Mitigation Measures 5.12-86
5.12.9 Level of Significance After Mitigation 5.12-87
5.12.10 References 5.12-88
5.13 TRIBAL CULTURAL RESOURCES 5.13-1
5.13.1 Environmental Setting 5.13-1
5.13.2 Thresholds of Significance 5.13-6
5.13.3 Plans, Programs, and Policies 5.13-7
5.13.4 Environmental Impacts 5.13-7
5.13.5 Cumulative Impacts 5.13-9
5.13.6 Level of Significance Before Mitigation 5.13-9
5.13.7 Mitigation Measures 5.13-9
5.13.8 Level of Significance After Mitigation 5.13-10
5.13.9 References 5.13-10
5.14 UTILITIES AND SERVICE SYSTEMS 5.14-1
5.14.1 Wastewater Treatment and Collection 5.14-1
5.14.2 Water Supply and Distribution Systems 5.14-10
5.14.3 Storm Drainage Systems 5.14-25
5.14.4 Solid Waste 5.14-32
5.14.5 Other Utilities 5.14-37
5.14.6 References 5.14-42
6. SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS 6-1
7. ALTERNATIVES TO THE PROPOSED PROJECT 7-1
7.1 INTRODUCTION 7-1
7.1.1 Purpose and Scope 7-1
7.1.2 Project Objectives 7-2
7.2 ALTERNATIVES CONSIDERED AND REJECTED DURING THE SCOPING/PROJECT PLANNING PROCESS 7-3
7.2.1 Alternative Development Areas 7-3
7.3 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS 7-4
7.3.1 Alternatives Comparison 7-4
7.3.2 NO PROJECT/EXISTING GENERAL PLAN ALTERNATIVE 7-5
7.3.3 REDUCED INTENSITY ALTERNATIVE 7-10
7.3.4 ALTERNATIVE LAND USE PLAN 7-14
7.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE 7-18
7.5 REFERENCES 7-20
8. IMPACTS FOUND NOT TO BE SIGNIFICANT 8-1
8.1 AGRICULTURE AND FORESTRY RESOURCES 8-1

Table of Contents

Contents Page

8.2 BIOLOGICAL RESOURCES 8-2
8.3 ENERGY 8-5
8.4 GEOLOGY AND SOILS 8-10
8.5 MINERAL RESOURCES 8-13
8.6 REFERENCES 8-14
9. SIGNIFICANT IRREVERSIBLE CHANGES DUE TO THE PROPOSED PROJECT 9-1
10. GROWTH-INDUCING IMPACTS OF THE PROPOSED PROJECT 10-1
11. ORGANIZATIONS AND PERSONS CONSULTED 11-1
12. QUALIFICATIONS OF PERSONS PREPARING EIR 12-1
PLACEWORKS 12-1
IBI GROUP 12-2
MCKENNA ET AL. 12-2
13. BIBLIOGRAPHY 13-1

Table of Contents

Contents Page

APPENDICES

Appendix A Notice of Preparation (NOP) and NOP Comments
Appendix B Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont
Appendix C Air Quality/GHG Modeling
Appendix D Cultural Resources Reports
Appendix E Hazards – EDR Search
Appendix F Noise Modeling
Appendix G Service Provider Questionnaire Responses
Appendix H Traffic Impact Analysis
Appendix I Storm Water Area Study
Appendix J Water Area Study
Appendix K Sewer Area Study

Table of Contents

Contents Page

Figure 3-1 Regional Location....3-3
Figure 3-2 Local Vicinity....3-5
Figure 3-3 Aerial Photograph....3-7
Figure 3-4 Proposed Land Use Policy Map....3-11
Figure 3-5 Proposed Zoning Districts....3-13
Figure 3-6 Proposed Zoning Areas of Change....3-19
Figure 3-7 Pedestrian Network Path....3-21
Figure 3-8 Bicycle Network Path....3-23
Figure 4-1 Existing Land Uses....4-7
Figure 4-2 Community Plan Land Uses....4-13
Figure 4-3 Existing Zoning....4-15
Figure 5.1-1 Land Use Districts Map....5.1-5
Figure 5.6-1 Watersheds Map....5.6-9
Figure 5.6-2 Groundwater Subbasins Map....5.6-11
Figure 5.6-3 Storm Drains Onsite....5.6-13
Figure 5.7-1 County of Los Angeles Planning Areas....5.7-5
Figure 5.11-1 Potential Parkland Opportunity Types....5.11-9
Figure 5.12-1 Project Study Intersections....5.12-15
Figure 5.12-2 Project Study Roadway Segments....5.12-17
Figure 5.12-3 Project Trip Distribution....5.12-49
Figure 5.14-1 Sewer Tributary Areas....5.14-7
Figure 5.14-2 Water System Map and Areas of Impact....5.14-20
Figure 5.14-3 Storm Drain System Map and Areas of Impact....5.14-28

Table of Contents

Figure Page

Table 1-1 Connect Southwest LA Development Potential 1-9
Table 1-2 Buildout Statistical Summary 1-12
Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation 1-17
Table 2-1 Scoping Meeting Comments Summary 2-2
Table 2-2 NOP Written Comments Summary 2-2
Table 3-1 Connect Southwest LA Development Potential 3-17
Table 3-2 Proposed Project Design Features 3-25
Table 4-1 West Athens-Westmont Community Plan Area Buildout Projections 4-12
Table 5.2-1 Ambient Air Quality Standards for Criteria Pollutants 5.2-2
Table 5.2-2 Attainment Status of Criteria Pollutants in the South Coast Air Basin 5.2-12
Table 5.2-3 Ambient Air Quality Monitoring Summary 5.2-13
Table 5.2-4 Existing Specific Plan Maximum Daily Operational Phase Criteria Air Pollutant Emissions 5.2-14
Table 5.2-5 SCAQMD Significance Thresholds 5.2-16
Table 5.2-6 SCAQMD Localized Significance Thresholds 5.2-17
Table 5.2-7 SCAQMD Toxic Air Contaminants Incremental Risk Thresholds 5.2-18
Table 5.2-8 Construction Activities, Phasing and Equipment 5.2-21
Table 5.2-9 Estimate of Regional Construction Emissions in the Specific Plan 5.2-26
Table 5.2-10 Maximum Daily Specific Plan Operational Phase Regional Emissions 5.2-27
Table 5.4-1 GHG Emissions and Their Relative Global Warming Potential Compared to CO_2 ..... 5.4-3
Table 5.4-2 Summary of GHG Emissions Risks to California 5.4-5
Table 5.4-3 2017 Climate Change Scoping Plan Emissions Reductions Gap to Achieve the 2030 GHG Target 5.4-11
Table 5.4-4 2017 Climate Change Scoping Plan Emissions Change by Sector to Achieve the 2030 Target 5.4-11
Table 5.4-5 Existing Specific Plan GHG Emissions 5.4-18
Table 5.4-6 2030 GHG Reduction Targets 5.4-19
Table 5.4-7 Connect Southwest LA Specific Plan GHG Emissions Inventory 5.4-24
Table 5.4-8 SCAG 2016 RTP/SCS Transportation-Land Use Consistency 5.4-27
Table 5.4-9 Consistency with the Unincorporated Los Angeles County Community Climate Action Plan 5.4-32
Table 5.5-1 Environmental Database Listings, EDR 5.5-6
Table 5.6-1 Pollutants in Receiving Water Bodies Listed on Section 303(d) List 5.6-6
Table 5.6-2 Impervious Areas Onsite: Existing, Proposed, and Net Change 5.6-17
Table 5.7-1 Los Angeles County General Plan Consistency Analysis 5.7-7

Table of Contents

Table | Page

Table 5.7-2	West Athens-Westmont Community Plan Goals Consistency Analysis	5.7-21
Table 5.7-3	SCAG 2016-2040 RTP/SCS Goals Consistency Analysis	5.7-24
Table 5.8-1	Noise Perceptibility	5.8-2
Table 5.8-2	Typical Noise Levels	5.8-3
Table 5.8-3	Human Reaction to Typical Vibration Levels	5.8-7
Table 5.8-4	Normally Compatible Community Sound Levels	5.8-9
Table 5.8-5	Community Noise and Land Use Compatibility	5.8-11
Table 5.8-10	City of Los Angeles Ambient Noise Criteria	5.8-15
Table 5.8-11	Groundborne Vibration Criteria: Human Annoyance	5.8-17
Table 5.8-12	Groundborne Vibration Criteria: Architectural Damage	5.8-17
Table 5.8-13	Transit Noise Analysis (L_{dn})	5.8-18
Table 5.8-14	Existing (2017) Traffic Noise Levels (dBA L_{dn})	5.8-19
Table 5.8-15	Construction Equipment Noise Emission Levels	5.8-23
Table 5.8-17	Vibration Levels for Typical Construction Equipment	5.8-28
Table 5.9-1	Population Estimates and Forecasts	5.9-3
Table 5.9-2	Housing Estimates and Forecasts	5.9-3
Table 5.9-3	Quantified Objectives, Los Angeles County Housing Element 2014-2021	5.9-4
Table 5.9-4	Employment Estimates and Forecasts	5.9-5
Table 5.9-5	Jobs-Housing Balance	5.9-6
Table 5.9-6	Jobs-Housing Balance in the Specific Plan Area	5.9-8
Table 5.9-7	Project Impacts on Jobs-Housing Balance	5.9-8
Table 5.10-1	Fire Stations Serving the Project Site	5.10-2
Table 5.10-2	LASD South Los Angeles Station Response Times	5.10-6
Table 5.10-3	LAUSD Schools Serving the Project Site: Enrollments and Capacities, 2016-2017	5.10-9
Table 5.10-4	Estimated Project Student Generation	5.10-10
Table 5.10-5	LAUSD School Capacities at Project Buildout	5.10-11
Table 5.11-1	West Athens/Westmont PPA 19 Parkland Obligation for Residential Subdivisions	5.11-3
Table 5.11-2	County Parks within 5-Miles of the Project Site	5.11-6
Table 5.11-3	Metro Planning Area Existing County Parkland, Year 2010	5.11-7
Table 5.11-4	Potential Parkland Opportunities in West Athens-Westmont	5.11-11
Table 5.12-1	Intersection Level of Service (LOS) Criteria	5.12-3
Table 5.12-2	Signalized Intersections Level of Service Criteria	5.12-4
Table 5.12-3	CMP Level of Service	5.12-5
Table 5.12-4	Basic Freeway Segments Level of Service Definition (HCM 2010)	5.12-6
Table 5.12-5	Existing Year (2017) No Project Roadway Segments Level of Service Analysis	5.12-19

Table of Contents

Figure Page

Table 5.12-6 Existing Year (2017) No Project Intersection LOS 5.12-25
Table 5.12-7 Existing Year (2017) No Project CMP Monitoring Station Analysis 5.12-29
Table 5.12-8 Existing Year (2017) Freeway Main Line Analysis 5.12-30
Table 5.12-9 Existing Year (2017) No Project Freeway On-Ramp Queue Analysis 5.12-33
Table 5.12-10 Existing Year (2017) No Project Freeway Off-Ramp Queue Analysis 5.12-34
Table 5.12-11 Existing Year (2017) Vehicle Miles Traveled 5.12-35
Table 5.12-12 County of Los Angeles Significant Impact Threshold Criteria 5.12-36
Table 5.12-13 Project Trip Generation 5.12-39
Table 5.12-14 Existing Year (2017) With Project Intersection LOS 5.12-41
Table 15.12-15 Future Year (2035) With Project Intersection LOS 5.12-53
Table 5.12-16 Existing Year (2017) With Project Roadway Segment Level of Service Analysis 5.12-63
Table 5.12-17 Future Year (2035) No Project Roadway Segment Level of Service Analysis 5.12-66
Table 5.12-18 Future Year (2035) With Project Roadway Segment Level of Service Analysis 5.12-69
Table 5.12-19 Existing Year (2017) Freeway Main Line Analysis 5.12-73
Table 5.12-20 Future Year (2035) Freeway Main Line Analysis 5.12-75
Table 5.12-21 2017 CMP Monitoring Stations Analysis 5.12-81
Table 5.12-22 Future Year (2035) CMP Monitoring Stations Analysis 5.12-82
Table 5.12-23 VMT Summary Table 5.12-85
Table 5.14-1 Projected Wastewater Generation 5.14-4
Table 5.14-3 Historical Groundwater Pumping Volume 5.14-13
Table 5.14-4 Normal Year Supply and Demand 5.14-14
Table 5.14-5 Single Dry Year Supply and Demand 5.14-16
Table 5.14-6 Multiple Dry Year Supply and Demand 5.14-16
Table 5.14-7 Impervious Areas Onsite: Existing, Proposed, and Net Change 5.14-31
Table 5.14-8 Solid Waste Disposal and Recovery Facilities Serving West Athens-Westmont 5.14-34
Table 5.14-9 Existing Solid Waste Generation Onsite 5.14-34
Table 5.14-10 Project-Generated Solid Waste 5.14-36
Table 5.14-11 County of Los Angeles, Estimated Net Increase in Solid Waste Generation 5.14-37
Table 7-1 Buildout Statistical Summary 7-5
Table 7-2 Summary of Proposed Project and Alternatives Impacts 7-18
Table 7-3 Ability to Meet Project Objectives 7-19

ABBREVIATIONS AND ACRONYMS

AAQS	ambient air quality standards
AB	Assembly Bill
ACM	asbestos-containing materials
afy	acre-feet per year
AQMP	air quality management plan
AR4	*Fourth Assessment Report: Climate Change 2007* (Intergovernmental Panel on Climate Change)
BAU	business as usual
bgs	below ground surface
BMP	best management practices
CalARP	California Accidental Release Prevention Program
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CCAP	Community Climate Action Plan
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFC	California Fire Code
CFR	Code of Federal Regulations
CGP	Construction General Permit
CGS	California Geologic Survey
CMA	congestion management agency
CMP	congestion management program
CNEL	community noise equivalent level
CO	carbon monoxide
CO_2e	carbon dioxide equivalent
CUP	conditional use permit

Abbreviations and Acronyms

CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DEIR	draft environmental impact report
DPM	diesel particulate matter
DPW	Los Angeles County Department of Public Works
DRP	Los Angeles County Department of Regional Planning
DTSC	Department of Toxic Substances Control
du/ac	dwelling unit per acre
DWR	Department of Water Resources
EIR	environmental impact report
EPA	United States Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
FAA	Federal Aviation Administration
FAR	floor area ratio
FEIR	final environmental impact report
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
GHG	greenhouse gases
gpcd	gallons per capita per day
gpd	gallons per day
gpm	gallons per minute
GSWC	Golden State Water Company
gWh	gigawatt hour
GWP	global warming potential
HCD	Housing and Community Development Department (CA)
HCM	Highway Capacity Manual
HVAC	heating, ventilating, and air conditioning system
ICU	intersection capacity utilization
IPCC	Intergovernmental Panel on Climate Change
JWPCP	joint water pollution control plant
kWh	kilowatt hour

Abbreviations and Acronyms

L_{dn}	day-night noise level
L_{eq}	equivalent continuous noise level
LACoFD	Los Angeles County Fire Department
LACPL	Los Angeles County Public Library
LACSD	Sanitation Districts of Los Angeles County
LADOT	Los Angeles (City) Department of Transportation
LARWQCB	Los Angeles Regional Water Quality Control Board
LASC	Los Angeles Southwest College
LASD	Los Angeles County Sheriff's Department
LAUSD	Los Angeles Unified School District
LBP	lead-based paint
LCFS	low-carbon fuel standard
LID	low impact development
LLAD	landscaping and lighting district
LOS	level of service
LST	localized significance thresholds
LUST	leaking underground storage tank
MATES	Multiple Air Toxics Exposure Study
MBTA	Migratory Bird Treaty Act
Metro	Metropolitan Transportation Authority of Los Angeles County
mgd	million gallons per day
MLD	most likely descendant
MMT	million metric tons
MPO	metropolitan planning organization
MRZ	mineral recovery zone
MT	metric ton
MWD	Metropolitan Water District of Southern California
NAHC	Native American Heritage Commission
NEV	neighborhood electric vehicle
NO_X	nitrogen oxides
NOP	Notice of Preparation (of an EIR)
NPDES	National Pollution Discharge Elimination System
O_3	ozone

Abbreviations and Acronyms

OEHHA	Office of Environmental Health Hazard Assessment
OPR	Governor's Office of Planning and Research
PCB	polychlorinated biphenyls
PM	particulate matter
PPA	park planning area
ppd	pounds per day
PPV	peak particle velocity
RCRA	Resource Conservation and Recovery Act
RHNA	regional housing needs assessment
RMS	root mean square
RPS	renewable portfolio standard
RTP/SCS	regional transportation plan / sustainable communities strategy
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCGC	Southern California Gas Company
SDWA	Safe Drinking Water Act
SoCAB	South Coast Air Basin
SO_X	sulfur oxides
SP	service population
SRA	source receptor area
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TCR	tribal cultural resource
TOD	transit-oriented district
tpd	tons per day
TTCP	traditional tribal cultural places
USFWS	United States Fish and Wildlife Service
UWMP	urban water management plan

Abbreviations and Acronyms

V/C	volume-to-capacity ratio
VCP	vitrified clay pipe
VdB	velocity decibels
VMT	vehicle miles traveled
VOC	volatile organic compound
ZE/NZE	zero emissions / near-zero emissions

Abbreviations and Acronyms

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1. Executive Summary

1.1 INTRODUCTION

This draft environmental impact report (DEIR) addresses the environmental effects associated with the implementation of the proposed Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont project (from herein referred to as "proposed project" or "Connect Southwest LA project"). The California Environmental Quality Act (CEQA) requires that local government agencies consider the environmental consequences before taking action on projects over which they have discretionary approval authority. An environmental impact report (EIR) analyzes potential environmental consequences in order to inform the public and support informed decisions by local and state governmental agency decision makers. This document focuses on impacts determined to be potentially significant in the Notice of Preparation completed for this project (see Appendix A).

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

Data for this DEIR derive from onsite field observations, discussions with affected agencies, analysis of adopted plans and policies, review of available studies, reports, data and similar literature, and specialized environmental assessments (aesthetics, air quality, biological resources, cultural resources, hazards and hazardous materials, land use, noise, population and housing, public services, recreation, transportation and traffic, tribal cultural resources, and utilities and service systems).

1.2 ENVIRONMENTAL PROCEDURES

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

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

6. Enhance public participation in the planning process.

An EIR is the most comprehensive form of environmental documentation in CEQA and the CEQA Guidelines; it is intended to provide an objective, factually supported analysis and full disclosure of the environmental consequences of a proposed project with the potential to result in significant, adverse environmental impacts.

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

1.2.1 EIR Format

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

Chapter 2. Introduction: Describes the purpose of this EIR, background on the project, the notice of preparation, the use of incorporation by reference, and Final EIR certification.

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

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

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

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

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

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

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

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

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

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

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

Appendices: The appendices for this document (in PDF format on a CD attached to the front cover) comprise these supporting documents:

- Appendix A: Notice of Preparation (NOP) and NOP Comments
- Appendix B: Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont
- Appendix C: Air Quality/GHG Modeling
- Appendix D1: Cultural Resources Assessment
- Appendix D2: SB18/AB 52 Consultation Documentation
- Appendix E: Hazards – EDR Search
- Appendix F: Noise Modeling
- Appendix G: Service Provider Questionnaire Responses
- Appendix H: Traffic Impact Analysis
- Appendix I: Storm Water Area Study
- Appendix J: Water Area Study
- Appendix K: Sewer Area Study

1.2.2 Type and Purpose of This DEIR

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

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

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

- Provide a more exhaustive consideration of impacts and alternatives than would be practical in an individual EIR;
- Focus on cumulative impacts that might be slighted in a case-by-case analysis;
- Avoid continual reconsideration of recurring policy issues;
- Consider broad policy alternatives and programmatic mitigation measures at an early stage when the agency has greater flexibility to deal with them;
- Reduce paperwork by encouraging the reuse of data (through tiering). (Guidelines § 15168[h])

1.3 PROJECT LOCATION

Regional Location

The proposed Connect Southwest LA project is located in the unincorporated communities of West Athens and Westmont of Los Angeles County. Based on the County's 2035 General Plan, West Athens and

Westmont are located in the southwestern portion of the Metro Planning Area, which is the geographic center of Los Angeles County. Surrounding cities include Los Angeles to the north and east, Gardena to the south, Hawthorne to the west and southwest, and Inglewood to the west and northwest.

Project Site

The Specific Plan area is 658 acres and encompasses portions of the West Athens and Westmont communities. The project area is bounded generally by Lohengrin Street/West 110th Street to the north; West 120th Street/West 121st Street to the south; Vermont Avenue to the east; and Lohengrin Street/Imperial Highway/South Wilton Place/Western Avenue to the west. Regional access to the project site is from Interstate 105 (I-105, the "Century Freeway" or "Glen Anderson Freeway") via ramps at South Vermont Avenue. I-105 runs east-west through the Specific Plan area and divides it into northern and southern portions.

The majority of the Specific Plan area's existing uses to the north and south of I-105 are single-family residences; the majority of multifamily residences are in the northeastern and eastern portions of the Specific Plan area. Commercial uses are located primarily along Imperial Highway, Vermont Avenue, and Western Avenue. Institutional uses include the Los Angeles Southwest College (LASC), the Los Angeles County Sheriff's Station, St. Francis Xavier Cabrini Catholic School and Church, West Athens Elementary School, and Southside Christian Baptist Church. Additionally, the Metro Green Line runs along the median of I-105 for the majority of its route, which extends from the City of Norwalk to the City of Redondo Beach. The Metro Green Line Vermont station platform sits at freeway level and is under the Vermont Avenue overpass.

1.4 PROJECT SUMMARY

The Los Angeles County 2035 General Plan (General Plan) provides policy framework for the implementation of smart growth development to create healthy, livable, and equitable communities. The County identified 11 transit-oriented districts (TODs) for future specific plan development in order to address each community's needs and priorities with regard to land use, mobility, housing, infrastructure, open spaces, and market conditions. Each of the TOD specific plans offers the potential opportunity to leverage the community's assets, connect uses and activities, and attract future investment to create more engaging and vibrant places. The Connect Southwest LA project is one of the 11 TOD specific plans outlined in the General Plan.

The proposed project would require approval of the following entitlements by the Los Angeles County Board of Supervisors:

- General Plan Amendment – To amend the existing land use designations in the Specific Plan area to Residential 9 (H9), Residential 18 (H18), Residential 30 (H30), General Commercial (CG), Mixed Use (MU), and Public and Semi-Public (P).
- Zoning Ordinance – To rezone the existing zoning districts in the Specific Plan area to Single-Family Residence (R-1), Residential Planned Development (RPD), Two-Family Residence (R-2), Limited

Multiple Residence (R-3), Mixed Use 1 (MXD-1), Mixed Use 2 (MXD-2), Neighborhood Commercial (C-2), Civic Center (CC), Public-Institutional (IT), and Buffer Strip (B-1).

- Specific Plan – To adopt the Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont.

1.4.1.1 GENERAL PLAN AMENDMENT

The current land use designations onsite are based on the West Athens-Westmont Community Plan, adopted in 1990 and amended in 2003. The proposed land use designations are defined below and based on Table 6.2, *General Plan Land Use Legend*, from the Los Angeles County General Plan (2035).

- Residential 9 (H9): Single-family residences with permitted density of 0-9 dwelling units per net acre (du/net ac).
- Residential 18 (H18): Single family residences and two family residences with permitted density of 0-18 du/net ac.
- Residential 30 (H30): Single family residences, two family residences, and multifamily residences with permitted density of 0-30 du/net ac.
- General Commercial (CG): Local-serving commercial uses, including retail, restaurants, and personal and professional services; single family and multifamily residences; and residential and commercial mixed uses. Permitted density for Residential is 0-50 du/net ac; Maximum floor-area-ratio (FAR) for Non-Residential is 1.0; and permitted density and maximum FAR for Mixed-Use are 0-50 du/net ac and 1.0 FAR.
- Mixed Use (MU): Pedestrian-friendly and community-serving commercial uses that encourage walking, bicycling, and transit use; residential and commercial mixed uses; and multifamily residences. Permitted density for Residential is 0-150 du/net ac; Maximum floor-area-ratio (FAR) for Non-Residential is 3.0; and permitted density and maximum FAR for Mixed-Use are 0-150 du/net ac and 3.0 FAR.
- Public and Semi-Public (P): Public and semi-public facilities and community-serving uses, including public buildings and campuses, schools, hospitals, cemeteries, and fairgrounds; airports and other major transportation facilities. Permitted density for Residential varies; maximum FAR for Non-Residential is 3.0 FAR.

1.4.1.2 ZONING ORDINANCE

The proposed zoning districts for the Specific Plan area based on the Los Angeles County Code of Ordinances, Section 22. Each zoning district is described in Section 3.3.1.3 in Chapter 3, *Project Description*.

1.4.1.3 SPECIFIC PLAN

The Specific Plan sets out a vision to capture the West Athens-Westmont communities' key values and vision for transit oriented development in the area between Los Angeles Southwest College and Metro's Vermont/Athens Green Line Station. The Specific Plan consists of the following sections.

1. **Introduction.** Establishes the purpose and context for the Specific Plan, provides an overview of the planning process, and the Specific Plan's relationship to other relevant plans and programs.

2. **Vision, Goals and Policies.** Outlines the vision for the West Athens-Westmont community and the overarching goals and objectives for achieving the vision articulated in the Specific Plan.

3. **Land Use and Urban Design Framework.** Develops the recommendations for sub-area districts within the plan and includes conceptual plans for opportunity areas for infill development and revitalization.

4. **Regulating Code.** Permitted land uses, regulations, and development standards for each of the Specific Plan Zones are laid out. This section includes regulations for building height, density, parking, site configuration, building design, open space and landscaping requirements, and other design standards.

5. **Design Guidelines.** Design guidelines will promote aesthetically pleasing and viable, site-compatible development that supports the vision and guiding principles of the Specific Plan.

6. **Mobility.** Provides a summary of the proposed mobility and circulation plan for the Specific Plan area, including the vehicular, pedestrian, bicycle, transit and parking networks.

7. **Infrastructure.** Addresses the critical infrastructure requirements associated with the future development in the Specific Plan area, including water, sewer, stormwater, solid waste, and public services.

8. **Economic Development Strategy.** Highlights opportunities for economic development in the Specific Plan area and the associated community benefits.

9. **Implementation and Administration.** Provides specific implementation and funding strategies for realizing the goals of the Specific Plan as well as describing review and approvals.

Proposed Zoning Districts

The project site encompasses 658 acres; however, approximately 185 acres of the Specific Plan area is non-parceled right-of-way, including roadways, utility easements, and drainage. The Specific Plan would designate the following zoning districts for the remaining 473 acres of developable project area.

Single-Family Residence Zone

The Single-Family Residence (R-1) zone encompasses 167 acres and is intended to preserve the scale and form of the area's existing single-family residential neighborhoods. The R-1 zone provides primarily for

single-family detached homes, up to 9 dwelling units per acre. This designation also permits living suites under specific conditions and in specific locations.

Residential Planned Development Zone

The Residential Planned Development (RPD) zone is 7 acres and is established to promote residential amenities beyond those expected under conventional single-family development, to achieve greater flexibility in design, to encourage well-planned neighborhoods through creative and imaginative planning as a unit, and to provide for appropriate use of land that is sufficiently unique in its physical characteristics or other circumstances to warrant special methods of development. The minimum required lot size is 5,000 square feet for a single-family house and 5 acres for a development project. The density would be determined by zoning requirements for the district and the CUP approved by the Regional Planning Commission.

Two-Family Residence Zone

The Two-Family Residence (R-2) zone covers 80 acres and provides opportunities for developments with multiple units, up to 18 dwelling units per acre. The development standards for this designation promote a variety of attached housing types, including duplexes, courtyard housing, and townhouses.

Limited Multiple Residence Zone

The Limited Multiple Residence (R-3) zone encompasses 18 acres and accommodates developments of higher-density multiple units, either apartments or condominiums, up to 30 dwelling units per acre. The intent is to promote desirable higher density residential close to transit and other services. The development standards for this designation promote a variety of product types. This designation is also intended to encourage the development of affordable and workforce housing to serve the needs of the West Athens-Westmont community, especially LASC.

Mixed Use 1 Zone

The Mixed Use 1 (MXD-1) zone consists of 27 acres and promotes development of a mix of commercial, office, and residential, with an emphasis on neighborhood-serving uses. The MXD-1 zone provides for a range of small- to medium-scale retail or mixed-use developments and multifamily residential uses up to 30 dwelling units per acre. Developments would have private/public open space components and strong bicycle and pedestrian connections to the Vermont/Athens Station, LASC campus, and the rest of the community.

Mixed Use 2 Zone

The Mixed Use 2 (MXD-2) zone covers 23 acres and is intended to be developed over time as a transit-supportive environment to provide a higher-intensity mix of retail, office, restaurant uses, and residential development in a compact, walkable setting. This designation encourages a range of multifamily housing products in a mixed-use configuration and up to 60 dwelling units per acre. Similar to the MXD-1 zone, the development standards and design requirements for the MXD-2 zone will address private/public open space components and bicycle and pedestrian connections to the Vermont/Athens Station and LASC campus.

Neighborhood Commercial Zone

The Neighborhood Commercial (C-2) zone encompasses 11 aces and is established to serve the local retail and service needs of the residents, employees, and students in West Athens-Westmont. This zone is for small-scale retail service developments and restaurants that serve the daily needs of adjacent neighborhoods.

Civic Center Zone

The Civic Center (CC) zone is 22 acres and is intended to allow opportunities for appropriate noncivic uses—including commercial, multifamily residential uses, and public open space—in civic use areas along Imperial Highway. The CC zone allows multifamily residential uses as an incentive for the development of affordable housing. Over time, the CC zone will integrate the existing civic uses and the multifamily residential areas to the east into a walkable district that is connected to the nearby Vermont/Athens Station and provides housing options in proximity to both employment uses and transit.

Public-Institutional Zone

The Public-Institutional (IT) zone covers 83 acres and provides for established public uses, including schools, parks, and other public uses. This designation is intended to promote the use of publicly owned land for the purposes of community open space, recreation, sense of identity, and safe connections to destinations.

Buffer Strip Zone

The Buffer Strip (B-1) zone covers 35 acres and provides a buffer from the I-105 freeway. Allowed uses in this zone include passive recreation, landscaping, and parking lots. Buildings or permanent structures are not permitted under this category.

Development Potential Summary

Based on the proposed zoning districts and development standards, the proposed project would permit development of up to 4,518 residential units and approximately 3.5 million square feet of nonresidential land uses in the unincorporated communities of West Athens and Westmont.

Table 1-1 Connect Southwest LA Development Potential

Proposed Zoning District	Acres	Percent of Total	Residential Units	Nonresidential Building Area, Square Feet
Proposed Project				
Residential				
Single-Family Residence Zone	167	35.3	1,278	—
Residential Planned Development Zone	80	16.8	1,432	—
Two-Family Residence Zone	18	3.9	478	—
Limited Multiple Residence Zone	7	1.4	67	—
Nonresidential				
Mixed Use 1 Zone	27	5.7	536	574,580
Mixed Use 2 Zone	23	4.9	559	1,217,935
Neighborhood Commercial Zone	11	2.3	—	164,363

1. Executive Summary

Table 1-1 Connect Southwest LA Development Potential

Proposed Zoning District	Acres	Percent of Total	Residential Units	Nonresidential Building Area, Square Feet
Public-Institutional Zone	83	17.5	—	786,925
Civic Center Zone	22	4.7	168	731,244
Buffer Strip Zone	35	7.4	—	—
Total	473	100%	4,518 units	3,475,047 SF
Existing Conditions				
Existing Conditions	473	—	3,457	1,784,409
Net Increase/(Decrease)	0	—	1,061	1,690,638
Percent Net Increase	0%	—	30.7%	94.7%

The areas anticipated to experience the largest change in terms of development potential are the proposed mixed use zones near the transit station and near the Imperial Highway/Western Avenue intersection. LASC would be rezoned more appropriately from Light Agricultural to Public/Institutional and the County facilities to the east of LASC would also be rezoned more appropriately from Commercial to Civic Center. Upzoning (increasing permitted density) is also anticipated throughout the Specific Plan area.

Los Angeles Southwest College

It should be noted that the LASC is within the proposed project boundary but is not part of the project. Development of the LASC is guided by the Los Angeles Southwest College Master Plan, prepared in 2003 and updated in 2008 and 2010. The plan provides for the development of new and updated academic, student support, and athletic facilities as well as landscape and pedestrian improvements. The plan also provides for the demolition of several academic buildings due to the presence of hazardous earthquake fault lines traversing the campus. The college has completed all proposed construction projects to date, and LASC is currently in the process of updating the Master Plan, which will undergo a separate environmental review process. Buildout of the LASC is analyzed as part of background cumulative growth in this DEIR.

Mobility

A key component of the Specific Plan is the transformation of the current circulation network, which largely supports vehicular travel, to a network that places a higher priority on the principles of complete streets and multimodal design to better accommodate walking, biking and transit.

Street Network

Much of the street network within the Specific Plan area would remain the same in order to support new development and growth; however, some streetscape improvements are proposed along key arterials, including improved landscaping, wider sidewalks, reduced vehicle travel lane widths, pedestrian and bicyclist amenities (e.g., street lights, benches, signage), and buffered bike lanes. These improvements are intended to transform the existing auto-oriented streetscape into a more sustainable multimodal design.

Pedestrian Circulation

Although sidewalks exist along major corridors within the Specific Plan area, most sidewalks are narrow and do not support high levels of pedestrian activity. The Specific Plan proposes a sidewalk hierarchy to establish a physical framework for sidewalk design and support various levels of pedestrian activity. Pedestrian-crossing design strategies include curb extensions, curb ramps, crossing signage, safety islands, and marked crosswalks. Pedestrian amenities are also proposed, such as street trees, seating, street lights, and public art.

Bicycle Circulation

The existing bicycle network within the Specific Plan area provides limited accessibility and connectivity, particularly to the Vermont/Athens Green Line Station. The Specific Plan proposes to add approximately 11 miles of bikeways to the existing network and a multiuse path from LASC to Vermont Avenue that would be designed as a Class I bike path (completely separated right-of way designated exclusively for bicyclist and pedestrians, with cross-traffic minimized). Bicycle infrastructure amenities are also recommended, including bicycle parking, crossing signals, and wayfinding signage. Additionally, safe routes to school—as suggested by the County of Los Angeles Public Works Department—are identified in the Specific Plan for West Athens Elementary School.

Transit Circulation

The Specific Plan area has access to an extensive network of public transportation, including several local bus routes operated by Metro and the City of Gardena. Additionally, the Metro Green Line provides light rail services connecting the South Bay, Harbor Gateway, and Norwalk communities. The Specific Plan proposes widening the sidewalk along the Vermont/Athens Green Line Station corridor along Vermont Avenue, reducing the width of the travel lanes, adding buffered bike lanes, and introducing additional wayfinding to the station to improve visibility and encourage walking, biking, and transit use. Additional transit amenities can include shelters, benches, lighting, transit information, bicycle racks, and public art.

1.5 SUMMARY OF PROJECT ALTERNATIVES

The following project alternatives were determined to represent a reasonable range of alternatives which have the potential to feasibly attain most of the basic objectives of the project but which may avoid or substantially lessen any of the significant effects of the project.

- No Project/Existing General Plan Alternative
- Reduced Intensity Alternative
- Alternative Land Use Plan

Table 1-2 identifies information regarding dwelling unit, population, and employment projections and provides the jobs-to-housing ratio for each of the alternatives.

1. Executive Summary

Table 1-2 Buildout Statistical Summary

	Proposed Project	No Project/Existing General Plan Alternative	Reduced Intensity Alternative	Alternative Land Use Plan
Dwelling Units	4,518 (1,278 SFR; 3,240 MFR)	3,457 (1,448 SFR; 2,009 MFR)	3,614 (1,022 SFR; 2,592 MFR)	5,873 (1,661 SFR; 4,212 MFR)
Population[1]	14,362	14,377	11,125	18,078
Nonresidential SF	3,475,047	1,784,409	2,453,533[2]	2,453,533[2]
Employment	5,214	2,265	3,681	3,681
Jobs-to-Housing Ratio	1.15	0.66	1.02	1.16

Notes: SFR = single-family residences; MFR = multifamily residences

[1] Population projections are based on an occupancy rate of 98.6% and 3.46 persons per household (PPH) for SFR and an occupancy rate of 96.3% and 3.06 PPH for MFR. The No Project/Existing General Plan Alternative would increase population because more single-family residences are proposed than multifamily residences when compared to the proposed project.

[2] Total nonresidential SF by land use for the Reduced Intensity Alternative and Alternative Land Use Plan consists of 402,206 SF Mixed Use 1; 852,555 SF Mixed Use 2; 115,054 SF Neighborhood Commercial; 550,848 SF Public/Institutional; and 511,871 SF Civic Center.

1.5.1 No Project/Existing General Plan Alternative

The No Project/Existing General Plan Alternative assumes that Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont would not be adopted and the current General Plan designations of the project area would remain. Pursuant to CEQA Guidelines Section 15126.6(e)(3)(A), where a project is the revision of an existing regulatory plan, the "no project" alternative assumes continuation into the future of the existing plan, policy, or operation. Therefore, this alternative assumes the following land use designations from the West Athens-Westmont Community Plan, adopted in 1990 and amended in 2003:

- Single-Family Residence (RD 2.3; 1 to 8 dwelling units per acre [du/ac]); 183 acres
- Two Family Residence (RD 3.1; 8 to 17 du/ac); 91 acres
- Medium Density Bonus (RD 3.2; 17 to 30 du/ac); 8 acres
- Senior Citizen-Density Bonus (SCD; 30 to 50 du/ac); 4 acres
- Regional Commercial (C.1); 21 acres
- Community Commercial (C.2); 36 acres
- Recreation/Open Space (OS.1); 1.6 acres
- Public/Quasi-Public Use (PL.1); 99 acres
- Transportation Corridor (TC); 25 acres

However, based on 2010 Census data, the population index for all of West Athens and Westmont showed a negative population trend. Therefore, it is assumed development in accordance with the existing General Plan would result in no new development or growth.

Ability to Reduce Environmental Impacts

The No Project/Existing General Plan Alternative would reduce impacts related to air quality, cultural resources, hazards and hazardous materials, noise, public services, recreation, transportation and traffic, tribal cultural resources, and utilities and service systems. Impacts would be similar for land use and planning and population and housing, and impacts would be greater for aesthetics, greenhouse gas emissions, and

hydrology and water quality. Significant and unavoidable impacts to air quality, noise, and transportation and traffic would be eliminated.

Ability to Achieve Project Objectives

No growth would occur under this alternative, and the Connect Southwest LA Specific Plan would not be adopted and implemented; thus, none of the project objectives would be achieved. This alternative would not promote uses in proximity to the transit station, along major streets, and at significant intersections (Objective No. 1); develop housing, shopping, and healthy food options near the Vermont Green Line Station and Los Angeles Southwest College (Objective No. 2); provide mobility improvements for pedestrians, bicyclists, and transit users (Objective No. 3); enhance public safety and reduce criminal activity through design and programmatic improvements (Objective No. 4); promote new and compatible development that respects and responds to the existing scale and density of adjacent neighborhoods (Objective No. 5); improve the Vermont/Athens Green Line Station (Objective No. 6); nor reduce VMT per capita within the project area (Objective No. 7).

1.5.2 Reduced Intensity Alternative

The Reduced Density Alternative was evaluated for its potential to reduce the proposed project's significant and unavoidable impacts related to construction and operational air quality, construction noise, and traffic. This alternative would include adopting the proposed Specific Plan and implementing its goals and policies, but would reduce proposed residential and nonresidential development by 20 and 30 percent, respectively, through implementation of a development cap.

As shown in Table 7-1, buildout of the Reduced Intensity Alternative would allow up to 3,614 dwelling units (1,022 single-family residences and 2,592 multifamily residences) and 2,453,533 square feet of nonresidential development. This alternative would introduce approximately 11,125 residents and generate 3,681 jobs, creating a jobs-housing ratio of 1.02.

Ability to Reduce Environmental Impacts

The Reduced Intensity Alternative would reduce impacts related to aesthetics, air quality, GHG emissions, hazards and hazardous materials, noise, public services, recreation, transportation and traffic, and utilities and service systems. Impacts to cultural resources, hydrology and water quality, land use and planning, population and housing, and tribal cultural resources would be similar. However, significant and unavoidable impacts related to air quality, construction noise, and traffic would remain.

This Reduced Intensity Alternative was chosen as the environmentally superior alternative.

Ability to Achieve Project Objectives

Since this alternative would still involve adopting the proposed Specific Plan, many of the project objectives related to promoting transit-oriented improvements can be achieved. This alternative would improve the public right-of-way by increasing mobility options for pedestrians and bicyclists (Objective No. 3); enhance public safety and reduce criminal activity through design and programmatic improvements (Objective No. 4);

and improve the Vermont/Athens Green Line Station to make it more inviting, comfortable, and safe to transit users (Objective No. 6).

This alternative would reduce residential and nonresidential development by 20 and 30 percent, respectively; therefore, some project objectives would be achieved but to a lesser degree. For example, this alternative would promote uses in proximity to the transit station, along major streets and significant intersections that benefit from the economic opportunities afforded by the presence of the Metro station, Los Angeles Southwest College, and public facilities (Objective No. 1), but the 30 percent reduction in development intensity may not provide as much economic opportunity as the proposed project. Similarly, this alternative would develop opportunities in the TOD that offer housing, shopping, and healthy food options to residents and visitors (Objective No. 2) and promote new development that is compatible with the existing scale and density of adjacent neighborhoods by accommodating growth near the station area and commercial nodes (Objective No. 5), but all to a lesser degree than the proposed project. Further, the reduction in residential and nonresidential development would reduce overall vehicle miles traveled (Objective No. 7), but would not reduce vehicle miles traveled per capita more than would the proposed project. It should also be noted that less development may result in less funding for the proposed improvements in the Specific Plan.

1.5.3 Alternative Land Use Plan

The Alternative Land Use Plan was evaluated for its potential to assist the County in providing more housing at higher densities in the subregion with the potential for affordable housing development. This would help the County meet its share of the regional housing need through Program 6 (Transit Oriented Districts Program) of the County of Los Angeles Housing Element and further encourage transit ridership and reducing VMT per capita.

This alternative would involve adopting the proposed Specific Plan and implementing its goals and policies, but would increase residential development by 30 percent and decrease nonresidential development by 30 percent. As detailed in Table 7-1, buildout of the Alternative Land Use Plan would allow up to 5,873 dwelling units (1,661 single-family residences and 4,212 multifamily residences) and 2,453,533 square feet of nonresidential development. This alternative would introduce approximately 18,078 residents and generate 3,681 jobs, creating a jobs-housing ratio of 1.16.

Ability to Reduce Environmental Impacts

This alternative would reduce impacts related to aesthetics but would increase impacts related to GHG emissions, population and housing, public services, recreation, and utilities and service systems. Impacts to air quality, cultural resources, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, transportation and traffic, and tribal cultural resources would be similar. Significant and unavoidable impacts related to air quality, GHG emissions, noise, and traffic would also remain.

Ability to Achieve Project Objectives

The Alternative Land Use Plan would be able to achieve most of the project objectives, but some to a lesser degree than the proposed project. Because the proposed Specific Plan would be adopted under this alternative, the proposed policies, development standards, and physical improvements in the Specific Plan

would help achieve the following goals: improve the public right-of-way and increase mobility options (Objective No. 3); enhance public safety and reduce criminal activity through design and programmatic improvements (Objective No. 4); and improve the Vermont/Athens Green Line Station to make it more inviting, comfortable, and safe to transit users (Objective No. 6).

This alternative would also be able to achieve the remaining project objectives, but to a lesser degree than the proposed project because it increases residential use and reduces nonresidential use by 30 percent. Compared to the proposed project, this land use mix would not fully take advantage of transit-oriented development benefits, such as reducing average daily trips and vehicle miles traveled per capita by providing housing near uses that provide services, entertainment, retail, and employment in a denser area.

Thus, this alternative would promote uses in proximity to the transit station and major roadways/intersections to benefit from the economic opportunities afforded by the Metro station, the Los Angeles Southwest College, and public facilities (Objective No. 1); develop opportunities that offer housing, shopping, and healthy food options particularly near the Metro Station and Los Angeles Southwest College (Objective No. 2); promote new development that is compatible with the existing scale and density of adjacent neighborhoods by allowing more growth near the station area and commercial nodes (Objective No. 5); and reduce vehicle miles traveled per capita per Assembly Bill 32 and Senate Bill 375 goals (Objective No. 7).

1.6 ISSUES TO BE RESOLVED

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

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

1.7 AREAS OF CONTROVERSY

In accordance with Section 15123(b)(2) of the CEQA Guidelines, the EIR summary must identify areas of controversy known to the lead agency, including issues raised by agencies and the public. Prior to preparation

of the DEIR, the Notice of Preparation (NOP) was distributed for comment from May 31, 2017, through July 5, 2017. A public scoping meeting was held on June 15, 2017 at the A.C. Bilbrew Library Community Meeting Room at 150 E. El Segundo Boulevard, Los Angeles, CA 90061. A summary of the NOP comment letters received during the public review period and testimony at the public scoping meeting are summarized in Tables 2-1 and 2-2 in Chapter 2, *Introduction*.

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

Table 1-3 summarizes the conclusions of the environmental analysis contained in this EIR. Impacts are identified as significant or less than significant, and mitigation measures are identified for all significant impacts. The level of significance after imposition of the mitigation measures is also presented.

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures		Level of Significance After Mitigation
5.1 AESTHETICS				
Impact 5.1-1: The proposed project would not adversely impact scenic vistas in the project area or damage scenic resources within a state scenic highway.	Less Than Significant	No mitigation measures are required.		Less Than Significant
Impact 5.1-2: The proposed project would not be visible from or obstruct views from a regional riding or hiking trail.	Less Than Significant	No mitigation measures are required.		Less Than Significant
Impact 5.1-3: The proposed project would not substantially degrade the existing character or quality of the Specific Plan area.	Less Than Significant	No mitigation measures are required.		Less Than Significant
Impact 5.1-4: The proposed project would generate additional light and glare in the project area.	Less Than Significant	No mitigation measures are required.		Less Than Significant
5.2 AIR QUALITY				
Impact 5.2-1: The proposed project would be inconsistent with the SCAQMD Air Quality Management Plan because criteria air pollutant emissions associated with the Specific Plan would exceed the SCAQMD regional significance threshold.	Potentially Significant	Mitigation Measure AQ-1 would also apply to this impact.		Significant and Unavoidable
Impact 5.2-2: Construction activities associated with buildout of the proposed project could exceed SCAQMD's regional significance thresholds.	Potentially Significant	AQ-1	Applicants for new development projects within the Connect Southwest LA project shall require the construction contractor to use equipment that meets the US Environmental Protection Agency (EPA) Tier 4 emissions standards for off-road diesel-powered construction equipment with more than 50 horsepower, unless it can be demonstrated to the County of Los Angeles that such equipment is not available. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 4 diesel emissions control strategy for a similarly sized engine, as defined by the California Air Resources Board's regulations. Prior to construction, the project engineer shall ensure that all demolition and	Significant and Unavoidable

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measures	Level of Significance After Mitigation
			grading plans clearly show the requirement for EPA Tier 4 or higher emissions standards for construction equipment over 50 horsepower. During construction, the construction contractor shall maintain a list of all operating equipment in use on the construction site for verification by the County of Los Angeles. The construction equipment list shall state the makes, models, and numbers of construction equipment onsite. Equipment shall be properly serviced and maintained in accordance with the manufacturer's recommendations. Construction contractors shall also ensure that all nonessential idling of construction equipment is restricted to five minutes or less in compliance with Section 2449 of the California Code of Regulations, Title 13, Article 4.8, Chapter 9.	
Impact 5.2-3: Implementation of the Connect Southwest LA project would generate emissions that would exceed SCAQMD's regional significance thresholds.	Potentially Significant	AQ-2	Prior to issuance of a building permit for new development projects within the Connect Southwest LA project, the property owner/developer shall show on the building plans that all major appliances (dishwashers, refrigerators, clothes washers, and dryers) to be provided/installed are Energy Star–certified appliances or appliances of equivalent energy efficiency. Installation of Energy Star or equivalent appliances shall be verified by the County of Los Angeles prior to issuance of a certificate of occupancy.	Significant and Unavoidable
		AQ-3	Prior to issuance of building permits for residential development projects within the Connect Southwest LA project, the property owner/developer shall indicate on the building plans that the feature below has been incorporated into the design of the building(s). Proper installation of these features shall be verified by the County of Los Angeles prior to issuance of a certificate of occupancy. ▪ For multifamily dwellings, electric vehicle charging shall be provided as specified in Section A4.106.8.2 (Residential Voluntary Measures) of the CALGreen Code.	
		AQ-4	Prior to issuance of building permits for nonresidential development projects within the Connect Southwest LA project, the property owner/developer shall indicate on the building plans that the features below have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the County of Los Angeles prior to issuance of a certificate of	

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		occupancy. ▪ Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided as specified in Section A5.106.5.1 (Nonresidential Voluntary Measures) of the CALGreen Code. ▪ Facilities shall be installed to support future electric vehicle charging at each nonresidential building with 30 or more parking spaces. Installation shall be consistent with Section A5.106.5.3 (Nonresidential Voluntary Measures) of the CALGreen Code.	
Impact 5.2-4: Construction of the proposed project could expose sensitive receptors to substantial pollutant concentrations.	Potentially Significant	Mitigation Measure AQ-1 would also apply to this impact. AQ-5 Prior to discretionary approval by the County of Los Angeles for development projects within the Specific Plan Area that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and are within 25 meters (82 feet) of a sensitive land use, the project applicant shall submit a construction-related air quality study that evaluates potential localized project construction-related air quality impacts to the County of Los Angele Department of Regional Planning for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (SCAQMD) methodology for assessing localized significance thresholds (LST) air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the SCAQMD-adopted thresholds of significance, the County of Los Angeles shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during construction activities. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the County and shall be verified by the County's Department of Regional Planning.	Significant and Unavoidable
Impact 5.2-5: Operation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.2-6: The proposed project would not create objectionable odors.	Less Than Significant	No mitigation measures are required.	Less Than Significant

1. Executive Summary

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measures	Level of Significance After Mitigation
5.3 CULTURAL RESOURCES				
Impact 5.3-1: Development of the project could impact an identified historic resource.	Potentially Significant	CUL-1	Prior to issuance of grading permits, future project applicants/developers of projects on improved properties with buildings and/or structures at least 45 years of age shall prepare the following: ▪ An intensive-level historical evaluation of the subject property. The evaluation shall be conducted in accordance with all applicable federal, state, and local guidelines for evaluating historical resources. Recommendations for preservation should be considered, if applicable, and ▪ A Phase I cultural resources investigation compliant with current standards and guidelines for proposed areas of development that includes demolition activities. The historical evaluation and Phase I investigation shall be submitted to the County of Los Angeles Department of Regional Planning for review and approval.	Less Than Significant
Impact 5.3-2: Development pursuant to the proposed Specific Plan could impact archaeological resources.	Potentially Significant	CUL-2	Prior to the issuance of any grading permit, future project applicants/ developers of previously unimproved sites or sites requiring excavation beyond six feet in depth shall provide written evidence to the County of Los Angles that a County-certified archaeologist has been retained to observe grading activities and salvage and catalogue archaeological resources as necessary. The archaeologist shall be present at the pregrade conference, shall establish procedures for archaeological 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 archaeological resources are found to be significant, the archaeological monitor shall determine appropriate actions, in cooperation with the project applicant/developer, for exploration and/or salvage. The archaeologist shall prepare a comprehensive report including appropriate records for the California Department of Parks and Recreation (Building, Structure, and Object Record; Archaeological Site Record; or District Record, as applicable).	Less Than Significant

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measures	Level of Significance After Mitigation
			If any resources are excavated, the project applicant/developer shall prepare excavated material to the point of identification. Future applicants/developers shall offer excavated finds for curatorial purposes to the County of Los Angeles, or its designee, on a first-refusal basis. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the County. The project applicant/developer shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisors and if such fee program is in effect at the time of presentation of the materials to the County or its designee, all in a manner meeting the approval of the County.	
Impact 5.3-3: The proposed project could destroy paleontological resources or a unique geologic feature.	Potentially Significant	CUL-3	Prior to issuance of grading permits, future project applicants/developers of previously unimproved sites or sites requiring excavation 15 feet or more below current ground surfaces shall retain a qualified paleontologist to monitor grading activities. Deep excavations may impact undisturbed deposits in older Quaternary alluvium, which is typically associated with fossils. The qualified paleontologist shall be present during the pregrading meeting to discuss paleontological sensitivity and to assess whether scientifically important fossils have the potential to be encountered. The paleontologist shall determine, based on consultation with the County, when monitoring of grading activities is needed based on the onsite soils and final grading plans. All paleontological work to assess and/or recover a potential resource at the project site shall be conducted under the direction of the qualified paleontologist and follow the standard protocols of the Natural History Museum of Los Angeles County. If any fossil remains are uncovered during earth-moving activities, all heavy equipment shall be diverted at least 50 feet from the fossil site until the monitor has had an opportunity to examine the remains and determines that earth moving can resume. The extent of land area that is prohibited from disturbance shall be at the discretion of the paleontological monitor. Samples of older Quaternary alluvium shall be collected as necessary for processing and shall be examined for very small vertebrate fossils. The paleontologist shall prepare a report of the results of any findings following accepted professional practice and submit the report for	Less Than Significant

1. Executive Summary

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		review by the County of Los Angeles Department of Regional Planning.	
Impact 5.3-4: Grading activities could potentially disturb human remains.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.4 GREENHOUSE GAS EMISSIONS			
Impact 5.4-1: Development of the proposed project would not result in a substantial increase of GHG emissions.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.4-2: The proposed project would not conflict with the plans adopted for the purpose of reducing GHG emissions.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.5 HAZARDS AND HAZARDOUS MATERIALS			
Impact 5.5-1: Project construction and operations would involve the transport, use, and/or disposal of hazardous materials.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.5-2: Demolition of existing buildings could expose construction workers to asbestos containing materials and/or lead-based paint.	Less Than Significant	No mitigation measures are required.	Less Than Significant

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measures	Level of Significance After Mitigation
Impact 5.5-3: The project site is on a list of hazardous materials sites and future development activities could result in exposure of persons to hazardous materials.	Potentially Significant	HAZ-1	Prior to issuance of grading permits for individual development projects pursuant to the Specific Plan, the project applicant shall prepare and submit a Phase I Environmental Site Assessment (ESA) to the County of Los Angeles to identify environmental conditions of the development site and determine whether contamination is present. The Phase I ESA shall be prepared by an Environmental Professional in accordance with the American Society for Testing and Materials (ASTM) Standard E 1527.13, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process." If recognized environmental conditions related to soils or groundwater are identified in the Phase I ESA, the project applicant shall have soil and soil gas sampling performed, as required, as a part of a Phase II ESA. If contamination is found at significant levels, the project applicant shall remediate all contaminated soils with the oversight and in accordance with state and local agency requirements, including the California Department of Toxic Substances Control, Regional Water Quality Control Board, and Los Angeles County Fire Department. All contaminated soils and/or material encountered shall be disposed of at a regulated site and in accordance with applicable laws and regulations prior to the completion of grading. Each Phase I ESA conducted for projects that involve demolition activities shall include an inspection for lead-based paint conducted by a licensed or certified lead inspector/assessor and a survey for asbestos-containing materials conducted by a California Certified Asbestos Consultant. Prior to the issuance of building permits, a report documenting the completion, results, and follow-up remediation on the recommendations, if any, shall be provided to the Los Angeles County Department of Regional Planning evidencing that all site remediation activities have been completed.	Less Than Significant
Impact 5.5-4: The project site is outside of the airport influence areas for public-use airports. There are no heliports within one mile of the project site. Specific Plan buildout would not cause airport-related hazards to persons onsite.	Less Than Significant	No mitigation measures are required.		Less Than Significant

1. Executive Summary

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.5-5: Project development could affect the implementation of an emergency responder or evacuation plan.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.5-6: Specific Plan buildout would not expose people or structures to wildfire hazards nor are the proposed land uses potentially dangerous fire hazards.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.6 HYDROLOGY AND WATER QUALITY			
Impact 5.6-1: Development pursuant to the proposed project would increase the amount of impervious surfaces on the site and would therefore increase surface water flows into drainage systems within the watershed.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.6-2: Development pursuant to the proposed project would not substantially increase impervious surfaces on the site and therefore would not impact groundwater recharge.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.6-3: The project site is not located within a 100-year flood hazard area.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.6-4: During the construction phase of the proposed project, there is the potential for short-term unquantifiable increases in pollutant concentrations from the site. After project development, the quality of storm runoff may be altered.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.6-5: The project site is not located within a dam inundation area.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.6-6: The site would not be subject to inundation by seiche, tsunami, or mudflow.	Less Than Significant	No mitigation measures are required.	Less Than Significant

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures		Level of Significance After Mitigation
5.7 LAND USE AND PLANNING				
Impact 5.7-1: Project implementation would not divide an established community.	Less Than Significant	No mitigation measures are required.		Less Than Significant
Impact 5.7-2: The Connect Southwest LA Specific Plan would not conflict with any applicable plans.	Less Than Significant	No mitigation measures are required.		Less Than Significant
Impact 5.7-3: The proposed project would not conflict with current County zoning for the project site.	Less Than Significant	No mitigation measures are required.		Less Than Significant
Impact 5.7-4: The proposed project would not conflict with the County's Hillside Management Area Ordinance or Significant Ecological Areas Ordinance.	Less Than Significant	No mitigation measures are required.		Less Than Significant
5.8 NOISE				
Impact 5.8-1: Construction activities would result in temporary noise increases in the vicinity of the proposed project.	Potentially Significant	N-1	Prior to the issuance of demolition, grading and/or construction permits, applicants for individual development projects within 500 feet of noise-sensitive receptors (e.g., residences, hospitals, schools) shall conduct a project-level construction noise analysis to evaluate potential impacts on sensitive receptors. The analysis shall be conducted once the final construction equipment list that will be used for demolition and grading activities is determined. The project-level noise analysis shall be prepared, reviewed, and approved by the County of Los Angeles, City of Los Angeles, and/or City of Hawthorne, as applicable. If the analysis determines that demolition and construction activities would result in an impact to identified noise-sensitive receptors, then specific measures to attenuate the noise impact shall be outlined in the analysis and reviewed and approved by the County. Specific measures may include, but are not limited to, the following best management practices: ▪ Post a construction site notice near the construction site access point or in an area that is clearly visible to the public. The notice shall include the following: job site address; permit number, name, and phone number of	Significant and Unavoidable

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		the contractor and owner; dates and duration of construction activities; construction hours allowed; and the County of Los Angeles and construction contractor phone numbers where noise complaints can be reported and logged. ▪ Consider the installation of temporary sound barriers for construction activities immediately adjacent to occupied noise-sensitive structures. ▪ Restrict haul routes and construction-related traffic to the least noise-sensitive times of the day. ▪ Reduce nonessential idling of construction equipment to no more than five minutes. ▪ Ensure that all construction equipment is monitored and properly maintained in accordance with the manufacturer's recommendations to minimize noise. ▪ Fit all construction equipment with properly-operating mufflers, air intake silencers, and engine shrouds, no less effective than as originally equipped by the manufacturer, to minimize noise emissions. ▪ If construction equipment is equipped with back-up alarm shut offs, switch off back-up alarms and replace with human spotters, as feasible. ▪ Stationary equipment (such as generators and air compressors) and equipment maintenance and staging areas shall be located as far from existing noise-sensitive land uses, as feasible. ▪ To the extent feasible, use acoustic enclosures, shields, or shrouds for stationary equipment such as compressors and pumps. ▪ Shut off generators when they are not needed. ▪ Coordinate deliveries to reduce the potential of trucks waiting to unload and idling for long periods of time. ▪ Grade surface irregularities on construction sites to prevent potholes from causing vehicular noise.	

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
		▪ Minimize the use of impact devices such as jackhammers, pavement breakers, and hoe rams. Where possible, use concrete crushers or pavement saws rather than hoe rams for tasks such as concrete or asphalt demolition and removal. The final noise-reduction measures to be implemented shall be determined by the project-level construction noise analysis. The final noise-reduction measures shall be included on all construction and building documents and/or construction management plans and submitted for verification to the County of Los Angeles; implemented by the construction contractor through the duration of the construction phase; and discussed at the pre-demolition, pre-grade, and/or preconstruction meetings.	

1. Executive Summary

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures		Level of Significance After Mitigation
Impact 5.8-2: Project implementation would result in long-term operation-related noise that would not exceed local standards.	Less Than Significant	No mitigation measures are required.		Less Than Significant
Impact 5.8-3: The project would create short-term groundborne vibration and groundborne noise.	Potentially Significant	N-2	Prior to issuance of grading and construction permits, applicants for individual development projects that involve vibration-intensive construction activities—such as pile drivers, jack hammers, and vibratory rollers—within 100 feet of off-site, vibration-sensitive receptors and/or structures,1 shall prepare and submit to the County of Los Angeles an acoustical study to evaluate potential construction-related vibration damage impacts. The vibration assessment shall be prepared by a qualified acoustical engineer and be based on the Los Angeles County vibration perception threshold and the Federal Transit Administration (FTA) vibration-induced architectural damage criterion. If the acoustical study determines a potential exceedance of the applicable thresholds, measures shall be identified that ensure vibration levels are reduced to below the thresholds. Measures to reduce vibration levels can include use of less-vibration-intensive equipment (e.g., drilled piles and static rollers) and/or construction techniques (e.g., nonexplosive rock blasting and use of hand tools) and preparation of a preconstruction survey report to assess the preconstruction, existing conditions of the potentially affected sensitive receptor or structure. Identified measures shall be included on all construction and building documents and submitted for verification to the County.	Less Than Significant
Impact 5.8-4: The proximity of the project site to an airport or airstrip would result in exposure of future resident and/or workers to airport-related noise.	Less Than Significant	No mitigation measures are required.		Less Than Significant
5.9 POPULATION AND HOUSING				
Impact 5.9-1: The proposed project would introduce approximately 3,204 additional	Less Than Significant	No mitigation measures are required.		Less Than Significant

[1] Vibration-sensitive receptors would include, for example, residences, schools, medical facilities, and houses of worship. Vibration-sensitive structures would include, for example, historical buildings, audio/video recording studios,

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
residents and 2,949 additional workers into the Specific Plan area.			
Impact 5.9-2: Implementation of the Specific Plan would not result in displacing substantial numbers of people or housing.	Less Than Significant	No mitigation measures are required.	Less Than Significant
5.10 PUBLIC SERVICES			
FIRE PROTECTION AND EMERGENCY SERVICES			
Impact 5.10-1: The proposed project would introduce new residents, workers, and structures into the Los Angeles County Fire Department's service boundaries, thereby increasing demands on fire protection facilities and personnel.	Less Than Significant	No mitigation measures are required.	Less Than Significant
POLICE PROTECTION			
Impact 5.10-2: The proposed project would introduce new residents, workers, and structures into the Los Angeles County Sheriff's Department service boundaries, thereby increasing demands on police protection facilities and personnel.	Less Than Significant	No mitigation measures are required.	Less Than Significant
SCHOOL SERVICES			
Impact 5.10-3: The proposed project would introduce 488 additional students into area schools of the Los Angeles Unified School District.	Less Than Significant	No mitigation measures are required.	Less Than Significant
LIBRARY SERVICES			
Impact 5.10-4: The proposed project would not substantially increase demand for services at local libraries maintained by the Los Angeles County Public Library.	Less Than Significant	No mitigation measures are required.	Less Than Significant

1. Executive Summary

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures		Level of Significance After Mitigation
5.11 RECREATION				
Impact 5.11-1: The proposed project would allow development of up to 1,061 additional residential units and 3,204 additional residents that would increase the use of existing park and recreational facilities.	Less Than Significant	No mitigation measures are required.		Less Than Significant
Impact 5.11-2: Project implementation would not result in environmental impacts to provide new and/or expanded recreational facilities.	Less Than Significant	No mitigation measures are required.		Less Than Significant
Impact 5.11-3: Development in accordance with the proposed project would not interfere with regional open space connectivity.	Less Than Significant	No mitigation measures are required.		Less Than Significant
5.12 TRANSPORTATION/TRAFFIC				
Impact 5.12-1: The project would result in a significant increase in intersection and roadway levels of service.	Potentially Significant	T-1	Prior to issuance of building permits for any project forecast to generate 100 or more peak hour trips—as determined by the Los Angeles County Department of Public Works, Traffic and Lighting Division—the property owner/developer shall submit to the County a traffic study to identify when the improvements identified Chapter 9, Mitigation Measures, of the West Athens-Westmont Specific Plan EIR Traffic Impact Study (IBI Group, September 2017; Appendix H of this DEIR) shall be designed and constructed. a) The traffic study will specify the timing, funding, construction, and fair-share responsibilities for all traffic improvements necessary to maintain satisfactory levels of service within the Specific Plan area and surrounding jurisdictions, as defined by the County's General Plan and Traffic Impact Analysis Guidelines, Metro's CMP Program, and based on the thresholds of significance, performance standards, and methodologies in this DEIR. b) The property applicant shall construct, bond for, or enter into a funding agreement for necessary circulation system improvements, as determined by the Los Angeles County Department of Public Works, Traffic and Lighting Division. At minimum, fair-share calculations shall include intersection improvements, rights-of-way, and construction costs, unless	Significant and Unavoidable

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures		Level of Significance After Mitigation
			alternative funding sources have been identified to help pay for the improvement.	
Impact 5.12-2: The proposed project would not result in a significant increase in peak hour roadway segments level of service.	No Impact	No mitigation measures are required.		No Impact
Impact 5.12-3: The project would result in a significant increase in freeway main-line level of service.	Potentially Significant	T-3	The County of Los Angeles shall continue to secure the funding needed to implement the future planned improvements within the Specific Plan area. A variety of funding sources shall be explored, such as Metro's CMP Fee Program, Metro Call for Project funds, and federal and state grant opportunities. If the CMP fee program is not adopted by Metro and the County of Los Angeles, other funding sources for regional transportation needs, including Caltrans facilities, in the Specific Plan area shall be pursued—such as a potential Connect Southwest LA Specific Plan Impact Fee Program, development agreements for large projects, and/or mitigation agreements between future applicants and Caltrans for projects that impact Caltrans facilities.	Significant and Unavoidable
		T-4	The County shall work with Caltrans as Caltrans prepares plans to add additional lanes or complete other improvements to various freeways within and adjacent to unincorporated areas. This includes adding or extending mixed flow general purpose lanes, adding or extending existing HOV lanes, adding express lanes (high occupancy toll lanes), incorporating truck climbing lanes, improving interchanges, and other freeway-related improvements.	
		T-5	Future traffic engineering firms retained to prepare traffic impact studies are required to consult with Caltrans when a development proposal meets the requirements of statewide, regional, or area-wide significance per CEQA Guidelines Section 15206(b). When preparing traffic impact studies, the most up-to-date Guide for the Preparation of Traffic Impact Studies from Caltrans shall be followed. When the CEQA criteria of regional significance are not met, Caltrans recommends that project applicants consult with Caltrans.	
Impact 5.12-4: Project-related trip generation in combination with existing and proposed cumulative development would not exceed the	Less Than Significant	No mitigation measures are required.		Less Than Significant

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures		Level of Significance After Mitigation
capacity at freeway on-ramps.				
Impact 5.12-5: Project-related trip generation in combination with existing and proposed cumulative development would result in designated road and/or highways exceeding county congestion management agency service standards.	Less Than Significant	No mitigation measures are required.		Less Than Significant
Impact 5.12-6: The project would not affect air travel or result in substantial safety risks.	Less Than Significant	No mitigation measures are required.		Less Than Significant
Impact 5.12-7: Project development would not increase air traffic levels or require relocation of air traffic patterns.	Less Than Significant	No mitigation measures are required.		Less Than Significant
Impact 5.12-8: Project circulation improvements would not substantially increase hazards due to design features (e.g., sharp curves or dangerous intersections, etc.), potential conflicting uses, and emergency access.	Less Than Significant	No mitigation measures are required.		Less Than Significant
Impact 5.12-9: The proposed project complies with adopted policies, plans, and programs for alternative transportation.	No Impact	No mitigation measures are required.		No Impact
5.13 TRIBAL CULTURAL RESOURCES				
Impact 5.13-1: The proposed project may cause a substantial adverse change in the significance of a tribal cultural resource.	Potentially Significant	TCR-1	During project-level construction, should prehistoric or historic subsurface cultural resources be discovered and be determined to be significant, the archaeologist shall determine, in consultation with the County, and local Native American groups expressing interest (e.g., Gabrieleño Band of Mission Indians - Kizh Nation), appropriate avoidance measures or other appropriate mitigation. Per CEQA Guidelines Section 15126.4(b)(3), project redesign and preservation in place shall be the preferred means to avoid impacts to significant cultural resources. Methods of avoidance may include, but shall not be limited to, project re-route or redesign, project cancellation, or identification	Less Than Significant

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measures	Level of Significance After Mitigation
			of protection measures such as capping or fencing. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures in consultation with the County, which may include data recovery or other appropriate measures. All significant cultural materials recovered will be, as necessary and at the discretion of the consulting archaeologist and in consultation with local Native American groups expressing interest, subject to scientific analysis, professional museum curation, and documentation according to current professional standards.	
		TCR-2	If human remains are encountered, the County or its contractor shall halt work in the vicinity (within 100 feet) of the find and contact the Los Angeles County Coroner in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. If the County Coroner determines that the remains are Native American, the Native American Heritage Commission (NAHC) will be notified in accordance with Health and Safety Code Section 7050.5, subdivision (c), and PRC Section 5097.98. The NAHC will designate a most likely descendant (MLD) for the remains per PRC Section 5097.98. Until the landowner has conferred with the MLD, County shall 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.	
5.14 UTILITIES AND SERVICE SYSTEMS				
Impact 5.14-1: Buildout of the proposed project would generate up to 825,317 additional gallons of wastewater per day and would be adequately treated by the Sanitation Districts of Los Angeles County.	Potentially Significant	USS-1	Prior to the issuance of grading permits for individual development projects in accordance with Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont, the Los Angeles County Department of Public Works shall determine whether sewer improvements would be required as part of the individual proposed project. To assist in the determination, the Department of Public Works may require the project applicant/developer to submit a site-specific sewer flow monitoring study that includes a detailed analysis of the projected flow rates to determine if the potential for surcharge conditions would occur due to project	Less Than Significant

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation		Mitigation Measures	Level of Significance After Mitigation
			development. The sewer flow monitoring study may find that there is sufficient capacity for the areas of concern and that replacing and/or upsizing improvements are not necessary. The sewer flow monitoring study shall be submitted to the Department of Public Works for review and approval.	
Impact 5.14-2: Buildout of the proposed project would increase water demand and may require upsizing of water conveyance systems.	Potentially Significant	USS-2	Prior to the issuance of grading permits for individual development projects in accordance with Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont, the Los Angeles County Department of Public Works shall review the areas of concern illustrated in Figure 5.14-2, *Water System Map* and Areas of Impact, in particular the southwest corner of the Specific Plan area, bounded by Imperial Highway to the north and Western Avenue to the east, to determine whether water conveyance facility improvements would be required as part of the individual proposed project. The area of concern may require replacing the existing 8-inch pipe with a 12-inch pipe to reduce headloss in the pipe to less than 3.5 inches per 1,000-foot foot-long pipe run. To assist in the determination, the Department of Public Works may require the project applicant/developer to submit a site-specific water flow monitoring study to provide a more detailed analysis of the projected flow rates to determine if the potential for a headloss in exceedance of 3.5 feet per 1,000-foot foot-long pipe run would occur due to project development. The water flow monitoring study may indicate that there is sufficient capacity for the areas of concern and be able to conclude that replacing and/or upsizing improvements are not necessary. The water flow monitoring study shall be submitted to the Department of Public Works for review and approval.	Less Than Significant
Impact 5.14-3: Existing and future storm drainage systems would adequately serve the drainage requirements of the proposed project.	Less Than Significant	No mitigation measures are required.		Less Than Significant

Table 1-3 Summary of Environmental Impacts, Mitigation Measures and Levels of Significance After Mitigation

Environmental Impact	Level of Significance Before Mitigation	Mitigation Measures	Level of Significance After Mitigation
Impact 5.14-4: Existing landfills and resource recovery facilities would be able to accommodate project-generated solid waste and comply with related solid waste regulations.	Less Than Significant	No mitigation measures are required.	Less Than Significant
Impact 5.14-5: Existing electricity and natural gas facilities would be able to accommodate project-generated utility demands.	Less Than Significant	No mitigation measures are required.	Less Than Significant

1. Executive Summary

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2. Introduction

2.1 PURPOSE OF THE ENVIRONMENTAL IMPACT REPORT

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

The lead agency means "the public agency which has the principal responsibility for carrying out or approving a project which may have a significant effect upon the environment" (Guidelines § 21067). The County of Los Angeles has the principal responsibility for approval of the Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont project (proposed project). For this reason, the County of Los Angeles is the CEQA lead agency for this project.

The intent of the DEIR is to provide sufficient information on the potential environmental impacts of the proposed project to allow the County to make an informed decision regarding approval of the project. Specific discretionary actions to be reviewed by the County are described in Section 3.5, *Intended Uses of the EIR*.

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

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

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

2.2 NOTICE OF PREPARATION

The County of Los Angeles determined that an EIR would be required for this project and issued a Notice of Preparation (NOP) on May 17, 2017 (see Appendix A). A scoping meeting was held on Thursday, June 15, 2017, at the A. C. Bilbrew Library Community Meeting Room at 150 E. El Segundo Blvd., Los Angeles, CA 90061, to elicit comments on the scope of the DEIR. Table 2-1 summarizes the comments received during the scoping meeting and identifies the section(s) of this DEIR where the issues are addressed if they are considered environmental topics of concern under CEQA.

Table 2-1 Scoping Meeting Comments Summary

Summary of Comments	Issue Addressed In:
• Concern about earthquake fault running through the Specific Plan area; earthquake-related retrofits were needed at the Los Angeles Southwest College.	• Chapter 8, *Impacts Found Not to Be Significant* (Section 8.4(a))
• Requested the EIR analyze potential impacts to heliports.	• Section 5.5, *Hazards and Hazardous Materials* (Impact 5.5-4)
• Requested the EIR analyze potential impact to school services.	• Section 5.10, *Public Services* (Section 5.10.3)
• Requested the EIR address the existing oil wells, particularly along 120th Street.	• Section 5.5, *Hazards and Hazardous Materials* (all listed hazardous materials sites are detailed under Section 5.5.1.3)
• Suggested that the transit station design address links to shuttles and restrooms, and encompass public safety designs.	• Appendix B, *Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont* (Chapter 6, Mobility & Public Realm)
• Stated that the Specific Plan should address connections to the Los Angeles Southwest College from the Metro Green Line transit station.	• Appendix B, *Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont* (Section 6.5.3, Multi-Use Path to LASC)

In addition to the scoping meeting, the public was provided with a 30-day public review period to comment on the NOP—from May 31 to July 5, 2017. Table 2-2 compiles the comments received from commenting agencies/persons during the NOP process and identifies the section(s) of this DEIR where the issues are addressed. All NOP comments received during the public review period are in Appendix A.

Table 2-2 NOP Written Comments Summary

Commenter	Date	Summary of Comments	Issue Addressed In:
California Governor's Office of Planning and Research (OPR) Scott Morgan, Director, State Clearinghouse	5/17/17	• Confirms receipt of the NOP for the proposed project and notice to responsible agencies to transmit their comments on the scope and content of the NOP to the appropriate lead agency contact.	Not Applicable
Native American Heritage Commission Gayle Totton, M.A., PhD Associate Government Program Analyst	5/22/17	• Provides details on Senate Bill 18 (SB 18) and Assembly Bill 52 (AB 52) requirements. • Recommends lead agencies consult with all California Native American tribes traditionally and culturally affiliated with the project area per AB 52 and SB 18 requirements. • States that lead agencies should contact appropriate regional California Historical Research Information System Centers for an archaeological	Consultation under SB 18 and AB 52 was conducted; the results are described in: • Section 5.3, *Cultural Resources* • Section 5.13, *Tribal Cultural Resources*

Table 2-2 NOP Written Comments Summary

Commenter	Date	Summary of Comments	Issue Addressed In:
		records search of the project area; prepare a professional cultural resources assessment report; contact the NAHC for a Sacred Lands File search and Native American Tribal Consultation List. • Lead agencies should include mitigation to reduce impacts to potentially inadvertently discovered archaeological resources during project construction, including plans for the disposition of recovered cultural items and human remains.	
California Department of Transportation (Caltrans), District 7 Dianna Watson, Branch Chief	6/13/17	• States that SB 743 mandates that all CEQA review of transportation impacts utilize vehicle miles traveled (VMT) as the primary metric, but that the County may use the level of service (LOS) metric until OPR completes its CEQA Guideline to implement SB 743. • The proposed project should incorporate multimodal and complete streets transportation elements to promote alternatives to car use and better manage existing parking assets. • Recommends the traffic study include analysis of traffic impacts on pedestrians and bicyclists. • Caltrans supports implementation of complete streets and pedestrian safety measures, such as road diets and other traffic-calming measures. • Concern regarding project-related traffic and cumulative traffic impacts on Caltrans off-ramps and freeway main lines. • Expects the following to be included in the traffic study. – Analysis of project impacts on the following freeway segments. ▪ SB/NB I-110 on/off ramps from/to Century Boulevard ▪ SB/NB I-110 on/off ramps from/to El Segundo Boulevard ▪ WB/EB I-105 on/off ramps from/to Hoover Street ▪ WB/EB I-105 on/off ramps from/to Vermont Avenue ▪ WB/EB I-105 on/off ramps from/to Crenshaw Boulevard – Analyze the aforementioned freeway segments until the project trips reaches 50 trips on each direction of the freeway. – Analyze storage for left-turn pocket at on-ramps when available. – Off-ramp queuing analysis. – Traffic counts and freeway analysis should be a continuous analysis and not in part. – Project travel modeling should be consistent with other regional and local modeling forecasts and travel data.	Caltrans was consulted to determine the scope and methodology of the traffic study. • Section 5.12, *Transportation and Traffic* • Appendix H, *Traffic Impact Analysis*

2. Introduction

Table 2-2 NOP Written Comments Summary

Commenter	Date	Summary of Comments	Issue Addressed In:
		– Provide a Select Zone analysis, including AM/PM peak hour trip to freeways and ramps. – Utilize trip generation rates from the Institute of Transportation Engineer's Trip Generation Manual, 9th edition. – Analysis of average daily trips, AM and PM peak-hour volumes for existing and future conditions with and without the proposed project. – Analysis should include existing traffic, project-generated traffic, cumulative traffic from all specific approved developments in the area, and traffic growth other than from the project and specific developments. – Include appropriate mitigation measures and transit demand management strategies. • Encourages the traffic study to increase TDM from 10 percent to 15–20 percent. If feasible, increasing TDM to 40 percent would make the proposed project a legitimate TOD. • Fair share contribution toward pre-established or future improvements on the State Highway System is considered acceptable mitigation. • Concerned that the proposed project may not be economically sufficient, such that 50 to 60 percent of the population may still work outside the TOD area. • Auxiliary lane, weaving lane should be analyzed for any potential safety issues. • Other than increasing density, how else can the proposed project encourage walking and biking? Consider eliminating parking lots or reducing parking spaces, etc. • Recommends the lead agency work with neighboring cities to resolve cumulative significant traffic impacts on state facilities; a plan to work with neighboring cities should be included in the Specific Plan.	
South Coast Air Quality Management District (SCAQMD) Lijin Sun, J.D., Program Supervisor, CEQA IGR	6/27/17	• States that the lead agency should use SCAQMD's CEQA Air Quality Handbook and CalEEMod land use emissions software when preparing its air quality analysis. • The EIR should identify any potential adverse air quality impacts (construction and operation) that could occur from all phases of the project and all air pollutant sources related to the project. • The EIR should quantify criteria pollutant emissions and localized significance thresholds and compare the results to the regional and localized significant thresholds, respectively. • Air quality impacts from all phases (construction and operations) should be calculated. • A mobile health risk assessment is recommended if	• Section 5.2, *Air Quality* • Section 5.5, *Greenhouse Gas Emissions*

Table 2-2 NOP Written Comments Summary

Commenter	Date	Summary of Comments	Issue Addressed In:
		the proposed project generates or attracts substantial vehicular trips, especially heavy-duty diesel-fueled vehicles. • All feasible mitigation measures should be utilized for significant adverse air quality impacts. If impacts remain significant, project alternatives shall be considered and discussed to avoid or substantially lessen the air quality and health risk impacts. • If the proposed project requires a permit from SCAQMD, SCAQMD should be identified as a responsible agency for the proposed project.	
Los Angeles County Metropolitan Transportation Authority (Metro) Elizabeth Carvajal, Senior Manager, Transportation Planning	7/5/17	• Suggests the Specific Plan include language that informs future development activity within the Specific Plan area of Metro's notification procedures and considerations for projects in close proximity to Metro facilities and bus operations. • Encourages the provision of 12-foot-wide, or at a minimum 11-foot-wide, outside lanes for Metro buses to travel in. • Suggests the Specific Plan include policy language or guidance that notifies projects within 100 feet of a Metro facility that they will require Metro review and approval and compliance with Metro's Development Guidelines and Adjacent Construction Design Manual (provided as a letter attachment). • Recommends the Specific Plan include policies encouraging transit-supportive public realm improvements (e.g., wider sidewalks, bus shelters, seating, pedestrian-scaled lighting, landscaping, wayfinding signage, ADA-compliant street crossing elements). • Suggests the Specific Plan include policies supporting the first/last mile connection. • Encourages bicycle use through adequate short-term bicycling parking and secure, long-term bicycling parking for guests, employees, and residents of high-density residential, retail/commercial, or mixed-use developments. • Recommends the Specific Plan enhance convenient and safe connections for pedestrians, bicyclists, and transit users to/from destinations, such as the Vermont/Athens station.	• Section 5.12, *Transportation and Traffic* • Appendix B, *Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont* (Chapter 6, Mobility & Public Realm)
Southern California Association of Governments (SCAG) Ping Chang, Acting Manager, Compliance and Performance Monitoring	7/5/17	• States that the lead agency should analyze the proposed project's consistency with the 2016 Regional Transportation Plan /Sustainable Communities Strategies (RTP/SCS) goals. • Provides additional information regarding land use and transportation strategies available in the 2016 RTP/SCS that may be applicable to the proposed project. • Provides demographic and growth forecasts for the County of Los Angeles.	• Section 5.6, *Land Use and Planning*

Table 2-2 NOP Written Comments Summary

Commenter	Date	Summary of Comments	Issue Addressed In:
		• Recommends that the lead agency review the Final EIR for the 2016 RTP/SCS for guidance on mitigation measures, if required.	

Note: All comments are listed chronologically by the date received.

The NOP process helps determine the scope of the environmental issues to be addressed in the DEIR. Based on this process, certain environmental categories were identified as having the potential to result in significant impacts. Issues considered Potentially Significant are addressed in this DEIR, but issues identified as Less Than Significant or No Impact are not. Refer to Chapter 8, *Impacts Found Not to Be Significant*, in this DEIR for a discussion of how these initial determinations were made.

2.3 SCOPE OF THIS DEIR

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

The information in Chapter 3, *Project Description*, establishes the basis for analyzing future, project-related environmental impacts. However, further environmental review by the County may be required as more detailed information and plans are submitted on a project-by-project basis.

2.3.1 Impacts Considered Less Than Significant

During preparation of the NOP, the County determined that five environmental impact categories were not significantly affected by the proposed project. These categories are not discussed in detail in this DEIR.

- Agriculture and Forestry Resources
- Biological Resources
- Energy
- Geology and Soils
- Mineral Resources

2.3.2 Potentially Significant Adverse Impacts

The County determined that 13 environmental factors have potentially significant impacts if the proposed project is implemented.

- Aesthetics
- Air Quality

- Cultural Resources
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services
- Recreation
- Transportation and Traffic
- Tribal Cultural Resources
- Utilities and Service Systems

2.3.3 Unavoidable Significant Adverse Impacts

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

Air Quality

- **Impact 5.2-1:** The proposed project would be inconsistent with the South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP) because criteria air pollutant emissions associated with the Specific Plan would exceed the SCAQMD regional significance threshold.

  The Specific Plan policies and Regulatory Requirements RR AIR-1 through RR-AIR-4 would minimize criteria air pollutant emissions from construction and operation of the proposed project. Mitigation measures applied for Impact 5.2-2 and Impact 5.2-3 would reduce the proposed project's regional construction-related and operational-phase criteria air pollutant emissions to the extent feasible. However, due to the increase in criteria air pollutant emissions, the proposed project would continue to be inconsistent with the assumptions in the AQMP. Therefore, Impact 5.2-1 would remain ***significant and unavoidable***.

- **Impact 5.2-2:** Construction activities associated with buildout of the Specific Plan could exceed SCAQMD's regional significance thresholds.

2. Introduction

Criteria air pollutant emissions in exceedance of SCAQMD's regional significance thresholds would contribute to the nonattainment designations of the South Coast Air Basin (SoCAB), and contribute to known health effects from poor air quality—including worsening of bronchitis, asthma, and emphysema; a decrease in lung function; premature death of people with heart or lung disease; nonfatal heart attacks; irregular heartbeat; decreased lung function; and increased respiratory symptoms. Regulatory Requirement RR AIR-3 and RR AIR-4 would minimize criteria air pollutant emissions from construction equipment exhaust and fugitive dust through compliance with the California Air Resources Board (CARB) and SCAQMD rules. Mitigation Measure AQ-1 would reduce criteria air pollutants generated from project-related construction activities. Buildout of the proposed project would occur over a long period and construction time frames and equipment for individual site-specific projects are not available at this time. There is a potential for multiple developments to be constructed at any one time, resulting in significant construction-related emissions. Therefore, despite adherence to Mitigation Measure AQ-1, project-level and cumulative impacts under Impact 5.2-2 would remain ***significant and unavoidable***.

- **Impact 5.2-3:** Implementation of the Connect Southwest LA project would generate long-term emissions that would exceed SCAQMD's regional significance thresholds.

  Buildout of the proposed land use plan would generate additional vehicle trips and area sources of criteria air pollutant emissions that exceed SCAQMD's regional significance thresholds and would contribute to the nonattainment designations of the SoCAB and known health effects from poor air quality. Regulatory Requirements RR AIR-1 through RR AIR-2 would minimize criteria air pollutant emissions from transportation and energy use by requiring mandatory measures of CALGreen (i.e., providing bicycle parking, fuel-efficient, and carpool/vanpool parking spaces) as well as additional voluntary green building standards of CALGreen for nonresidential buildings 25,000 square feet and larger. Incorporation of Mitigation Measures AQ-2 through AQ-4 would reduce operation-related criteria air pollutants generated from stationary and mobile sources. Mitigation Measures AQ-3 and AQ-4 would encourage and accommodate use of alternative-fueled vehicles. However, despite adherence to Mitigation Measures AQ-2 through AQ-4, project-level and cumulative impacts identified under Impact 5.2-3 would remain ***significant and unavoidable*** due to the magnitude of land use development associated with the proposed project.

- **Impact 5.2-4:** Construction of the proposed project could expose sensitive receptors to substantial pollutant concentrations.

  Regulatory Requirements RR AIR-3 through RR AIR-4 would minimize criteria air pollutant emissions from construction equipment exhaust and fugitive dust through compliance with CARB and SCAQMD rules. Mitigation Measure AQ-1 (applied for Impact 5.2-2) would reduce the proposed project's regional construction emissions and therefore reduce the project's localized construction-related criteria air pollutant emissions to the extent feasible. However, because existing sensitive receptors may be close to project-related construction activities, construction emissions generated by individual development projects have the potential to exceed SCAQMD's localized significance thresholds. Mitigation Measure AQ-5 requires preparation of a construction air quality analysis for discretionary projects subject to

CEQA if they are within 25 meters of a sensitive use. However, because of the scale of development activity associated with buildout of the Specific Plan, it is not possible to determine whether the scale and phasing of individual development projects would result in the exceedance of the localized emissions thresholds and contribute to known health effects. Therefore, project-level and cumulative impacts under Impact 5.2-4 would remain ***significant and unavoidable***.

Noise

- **Impact 5.8-1:** Construction activities would result in temporary noise increases in the vicinity of the project.

  Mitigation Measure N-1 would ensure construction activities comply with Los Angeles County Code Section 12.08.430 that regulates construction noise levels. Mitigation Measure N-2 would require a project-level construction noise analysis for all projects within 500 feet of noise-sensitive receptors, and require implementation of noise-minimizing best management practices. These mitigation measures would reduce construction noise impacts associated with the proposed project to the extent feasible. However, feasible mitigation may not be effective at reducing construction-generated noise received at sensitive receptors to levels below the County Code thresholds throughout all periods of construction and at all receptors. Given the expected noise levels and the length of the construction activities, significant construction noise impacts would remain. Impact 5.8-1 would remain ***significant and unavoidable***.

Transportation and Traffic

- **Impact 5.12-1:** The proposed project is anticipated to create significant traffic impacts at 10 of the study intersections in the Existing Year (2017) With Project Scenario; and at 21 study intersections for the Future Year (2035) With Project scenario.

  Mitigation Measures T-1 through T-5 would require various improvements at study area intersections to mitigate project impacts. These include, but are not limited to, adding turn lanes, widening lanes, restriping lanes, expanding the Automated Traffic Surveillance and Control network, and improving traffic signal lights.

  Improvements to seven of the roadway intersections would require the acquisition of right-of-way—Century Boulevard at Van Ness Avenue, Imperial Highway at Crenshaw Boulevard, Imperial Highway at Western Avenue, Imperial Highway at Normandie Avenue, El Segundo at Crenshaw Boulevard, El Segundo Boulevard at Normandie Avenue, and Rosecrans Avenue at Crenshaw Boulevard. Right-of-way acquisition at these intersections is believed to be infeasible due to existing development of adjacent land. Therefore, project impacts to these seven roadway intersections are determined to be **significant and unavoidable**.

  Additionally, since the primary responsibility for approving and/or completing certain improvements outside of the Specific Plan area lies with agencies other than the County of Los Angeles (i.e., cities of Los Angeles, Inglewood, and Hawthorne), significant impacts may not be fully mitigated if the

improvements are not completed for reasons beyond the County's control. (The County cannot undertake or require improvements outside of the County's jurisdiction) Therefore, project impacts to intersections in the cities of Los Angeles, Inglewood, and Hawthorne are determined to be ***significant and unavoidable***.

- **Impact 5.12-3:** The proposed project is anticipated to create significant traffic impacts at five freeway main-line study locations in the Existing Year (2017) and Future Year (2035) With Project scenarios.

  State highway facilities in the study area are not in the jurisdiction of the County of Los Angeles. Rather, improvements to State highways are planned, funded, and constructed through a legislative and political process involving the state legislature; the California Transportation Commission; the California Business, Transportation, and Housing Agency; and Caltrans.

  Although potential impacts to the freeway main-line segments and ramps have been evaluated, implementation of improvements to Caltrans facilities is the primary responsibility of Caltrans. Caltrans recognizes that private development may fund fair-share improvements to impacts on the I-105 and I-110, but neither Caltrans nor the state has adopted a program that can ensure that locally contributed impact fees will be tied to improvements to freeway main lines, and only Caltrans has jurisdiction over main-line improvements. However, a number of programs are in place in Los Angeles County to improve and upgrade the regional transportation system—State Transportation Improvement Program, Caltrans Traffic Operations Strategies, State Highway Operation and Protection Program, and Metro's Measure M program. State and federal fuel taxes generate most of the funds used to pay for these programs. Funds expected to be available for transportation improvements are identified through a fund estimate prepared by Caltrans and adopted by the California Transportation Commission. These and other funds are deposited in the State Highway Account and allocated by the California Transportation Commission to specific project improvements in both the State Transportation Improvement Program and State Highway Operation and Protection Program. However, if these programs are not implemented by the agencies responsible for them, the project's freeway ramp and main-line impacts would remain ***significant and unavoidable***.

2.4 INCORPORATION BY REFERENCE

Some documents are incorporated by reference into this DEIR, consistent with Section 15150 of the CEQA Guidelines, and they are available for review at the County of Los Angeles, Department of Regional Planning, 320 West Temple Street, 13th Floor, Los Angeles, CA 90012.

- **Los Angeles County General Plan (2035):** The 2035 General Plan serves as the major blueprint for directing growth in Los Angeles County and regulates the existing land uses on the proposed project site. The General Plan divides the County into several planning areas—the communities of West Athens and Westmont are in the Metro Planning Area. The General Plan analyzes existing and future conditions in the Metro Planning Area, including physical, social, cultural, and environmental resources and opportunities. The General Plan also looks at trends, issues, and concerns that affect the region, includes County goals and objectives, and provides policies to guide development and change.

- **Los Angeles County Code of Ordinances:** The County Code is a set of laws governing the County and covers all aspects of County regulations, including zoning, permitted uses and standards, and various development requirements. Zoning district standards are also in the code. Where applicable, code sections are referenced throughout the DEIR.

2.5 FINAL EIR CERTIFICATION

This DEIR is being circulated for public review for 45 days. Interested agencies and members of the public are invited to provide written comments on the DEIR to the County address shown on the title page of this document. Upon completion of the 45-day review period, the County of Los Angeles will review all written comments received and prepare written responses for each. A Final EIR (FEIR) will incorporate the received comments, responses to the comments, and any changes to the DEIR that result from comments. The FEIR will be presented to the County of Los Angeles Board of Supervisors for potential certification as the environmental document for the project. All persons who comment on the DEIR will be notified of the availability of the FEIR and the date of the public hearing before the County.

The DEIR is available to the general public for review at various locations:

- County of Los Angeles Department of Regional Planning—320 West Temple Street, 13th Floor, Los Angeles, CA 90012
- Woodcrest Library—1340 W. 106th Street, Los Angeles, CA 90044
- A.C. Bilbrew Library—150 E. El Segundo Boulevard, Los Angeles, CA 90061
- County of Los Angeles Department of Regional Planning Website—http://planning.lacounty.gov/southwest

2.6 MITIGATION MONITORING

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

The Mitigation Monitoring Program for Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont will be completed in conjunction with the Final EIR, prior to consideration of the project by the County of Los Angeles Board of Supervisors.

2. Introduction

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3. Project Description

3.1 PROJECT LOCATION

3.1.1 Regional Location

The proposed Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont project (proposed project; Connect Southwest LA project) is located in the unincorporated communities of West Athens and Westmont of Los Angeles County. Based on the County's 2035 General Plan, West Athens and Westmont are located in the southwestern portion of the Metro Planning Area, which is the geographic center of Los Angeles County. Surrounding cities include Los Angeles to the north and east, Gardena to the south, Hawthorne to the west and southwest, and Inglewood to the west and northwest (see Figure 3-1, *Regional Location*).

3.1.2 Project Site

The Specific Plan area is 658 acres and encompasses portions of the West Athens and Westmont communities. The project area is bounded generally by Lohengrin Street/West 110th Street to the north; West 120th Street/West 121st Street to the south; Vermont Avenue to the east; and Lohengrin Street/Imperial Highway/South Wilton Place/Western Avenue to the west (see Figures 3-2, *Local Vicinity*, and 3-3, *Aerial Photograph*). Regional access to the project site is from Interstate 105 (I-105, the "Century Freeway" or "Glen Anderson Freeway") via ramps at South Vermont Avenue. I-105 runs east-west through the Specific Plan area and divides it into northern and southern portions.

The majority of the Specific Plan area's existing uses to the north and south of I-105 are single-family residences; the majority of multifamily residences are in the northeastern and eastern portions of the Specific Plan area. Commercial uses are located primarily along Imperial Highway, Vermont Avenue, and Western Avenue. Institutional uses include the Los Angeles Southwest College (LASC), the Los Angeles County Sheriff's Station, St. Francis Xavier Cabrini Catholic School and Church, West Athens Elementary School, and Southside Christian Baptist Church. Additionally, the Metro Green Line runs along the median of I-105 for the majority of its route, which extends from the City of Norwalk to the City of Redondo Beach. The Metro Green Line Vermont station platform sits at freeway level and is under the Vermont Avenue overpass.

3.2 STATEMENT OF OBJECTIVES

The following project objectives for the Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont project will aid decision makers in their review of the project and associated environmental impacts:

- Objective 1: Promote uses in proximity to the transit station, along major streets, and at significant intersections that benefit from the economic opportunities afforded by the presence of the Green Line and major educational and public facilities.
- Objective 2: Develop opportunities, particularly at the Vermont Green Line Station and Los Angeles Southwest College that offer housing, shopping, and healthy food options for residents and visitors.
- Objective 3: Improve the public right-of-way to increase mobility options for pedestrians and bicyclists. New sidewalks and bike facilities should create safe and secure connections to destinations that are integrated into the transit system.
- Objective 4: Enhance public safety and reduce criminal activity through design and programmatic improvements.
- Objective 5: Promote new development that respects and responds to the existing scale and density of adjacent neighborhoods by accommodating growth near the station area and commercial nodes.
- Objective 6: Improve the Vermont/Athens Green Line Station to make it more inviting, comfortable, and safe to transit users.
- Objective 7: Reduce vehicle miles traveled per capita within the project area to be consistent with the Assembly Bill 32 and Senate Bill 375 goals.

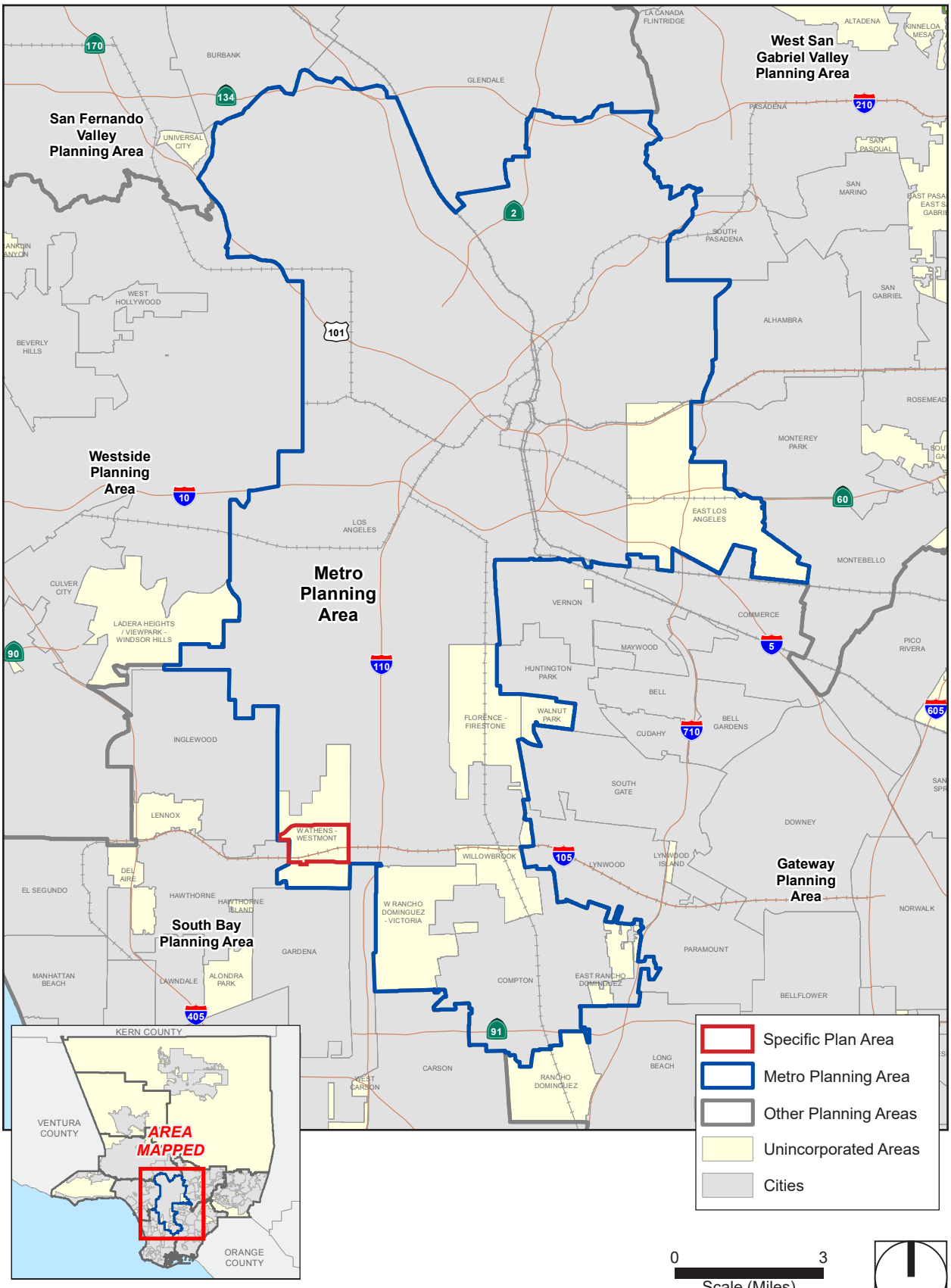
3.3 PROJECT CHARACTERISTICS

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

3.3.1 Description of the Project

The Los Angeles County 2035 General Plan (General Plan) provides policy framework for the implementation of smart growth development to create healthy, livable, and equitable communities. The County identified 11 transit-oriented districts (TODs) for future specific plan development in order to address each community's needs and priorities with regard to land use, mobility, housing, infrastructure, open spaces, and market conditions. Each of the TOD specific plans offers the potential opportunity to leverage the community's assets, connect uses and activities, and attract future investment to create more engaging and vibrant places. The Connect Southwest LA project is one of the 11 TOD specific plans outlined in the General Plan.

Figure 3-1 - Regional Location
3. Project Description



Source: Los Angeles County DRP, 2017

3. Project Description

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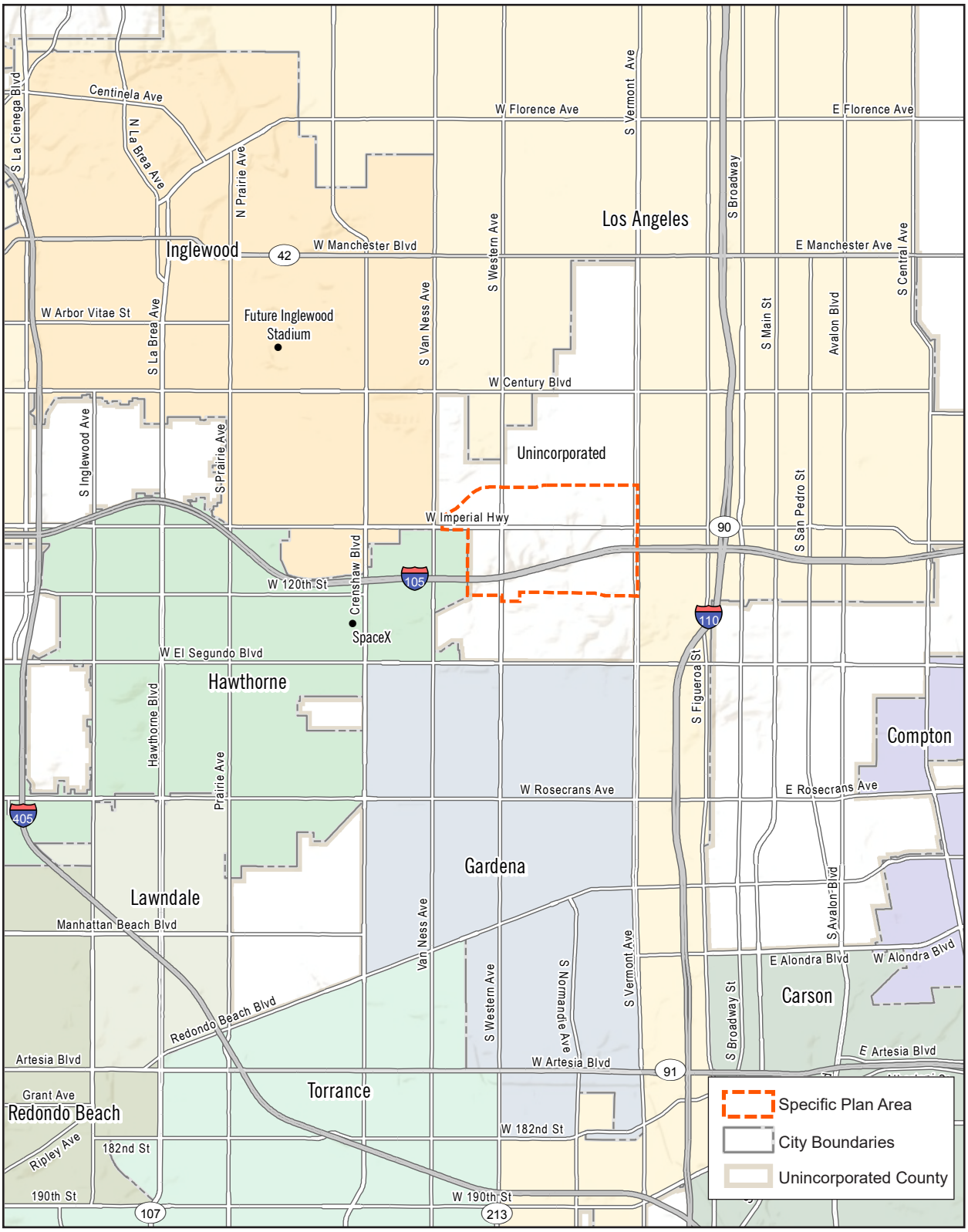
Figure 3-2 - Local Vicinity
3. Project Description



Source: Los Angeles County DRP, 2017

3. Project Description

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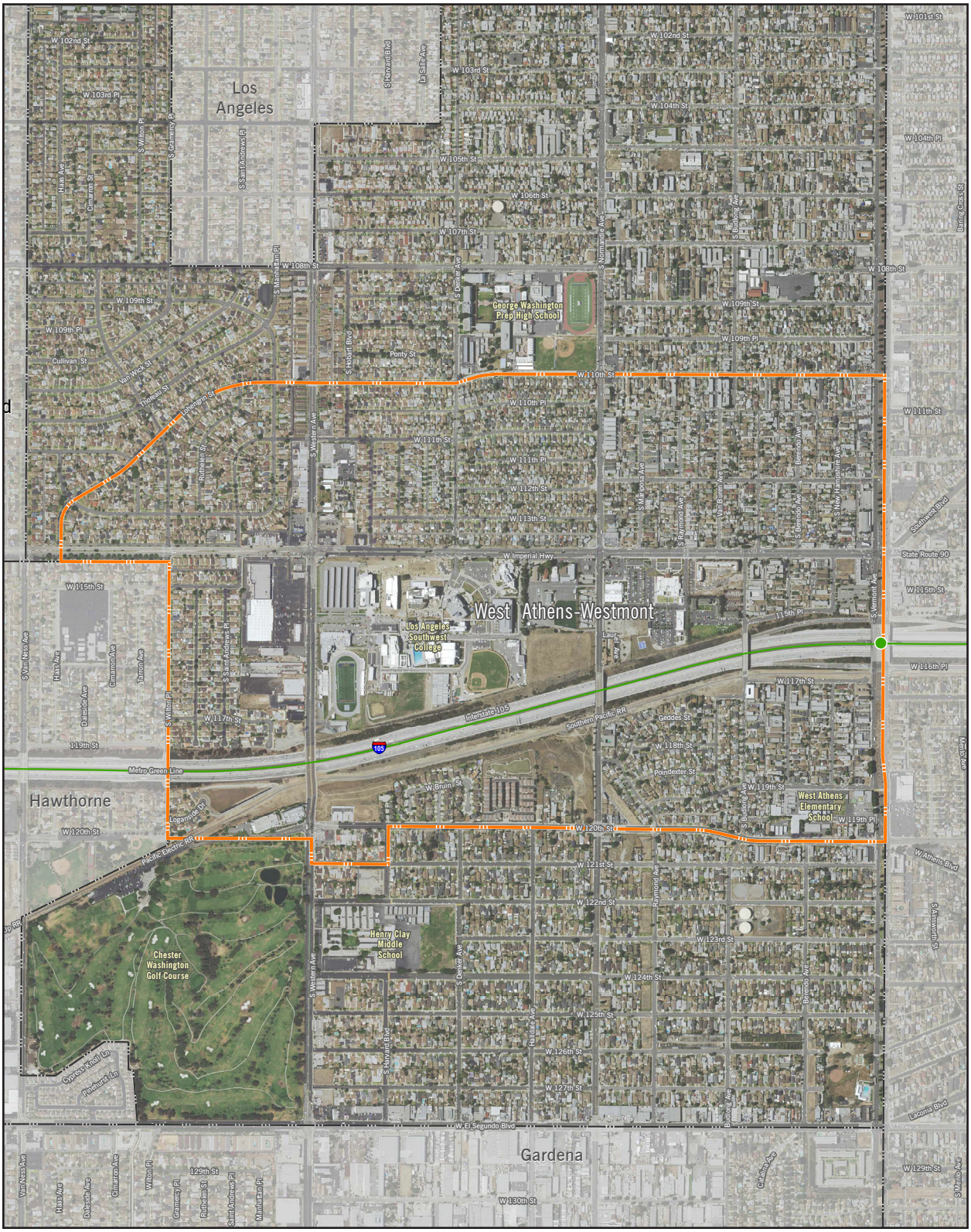
Figure 3-3 - Aerial Photograph
3. Project Description



Source: Los Angeles County DRP, 2017

3. Project Description

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The proposed project would require approval of the following entitlements by the Los Angeles County Board of Supervisors:

- General Plan Amendment – To amend the existing land use designations in the Specific Plan area to Residential 9 (H9), Residential 18 (H18), Residential 30 (H30), General Commercial (CG), Mixed Use (MU), and Public and Semi-Public (P).

- Zoning Ordinance – To rezone the existing zoning districts in the Specific Plan area to Single-Family Residence (R-1), Residential Planned Development (RPD), Two-Family Residence (R-2), Limited Multiple Residence (R-3), Mixed Use 1 (MXD-1), Mixed Use 2 (MXD-2), Neighborhood Commercial (C-2), Civic Center (CC), Public-Institutional (IT), and Buffer Strip (B-1).

- Specific Plan – To adopt the Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont.

3.3.1.1 GENERAL PLAN AMENDMENT

The current land use designations onsite are based on the West Athens-Westmont Community Plan, adopted in 1990 and amended in 2003. Figure 3-4, *Proposed Land Use Policy Map*, illustrates the proposed land use designations within the Specific Plan area. The proposed land use designations are defined below and based on Table 6.2, *General Plan Land Use Legend*, from the Los Angeles County General Plan (2035).

- Residential 9 (H9): Single-family residences with permitted density of 0-9 dwelling units per net acre (du/net ac).

- Residential 18 (H18): Single family residences and two family residences with permitted density of 0-18 du/net ac.

- Residential 30 (H30): Single family residences, two family residences, and multifamily residences with permitted density of 0-30 du/net ac.

- General Commercial (CG): Local-serving commercial uses, including retail, restaurants, and personal and professional services; single family and multifamily residences; and residential and commercial mixed uses. Permitted density for Residential is 0-50 du/net ac; Maximum floor-area-ratio (FAR) for Non-Residential is 1.0; and permitted density and maximum FAR for Mixed-Use are 0-50 du/net ac and 1.0 FAR.

- Mixed Use (MU): Pedestrian-friendly and community-serving commercial uses that encourage walking, bicycling, and transit use; residential and commercial mixed uses; and multifamily residences. Permitted density for Residential is 0-150 du/net ac; Maximum floor-area-ratio (FAR) for Non-Residential is 3.0; and permitted density and maximum FAR for Mixed-Use are 0-150 du/net ac and 3.0 FAR.

- Public and Semi-Public (P): Public and semi-public facilities and community-serving uses, including public buildings and campuses, schools, hospitals, cemeteries, and fairgrounds; airports and other major transportation facilities. Permitted density for Residential varies; maximum FAR for Non-Residential is 3.0 FAR.

3.3.1.2 ZONING ORDINANCE

Figure 3-5, *Proposed Zoning Districts*, illustrates the proposed zoning districts for the Specific Plan area based on the Los Angeles County Code of Ordinances, Section 22. Each zoning district is described under Section 3.3.1.3.

3.3.1.3 SPECIFIC PLAN

The Specific Plan sets out a vision to capture the West Athens-Westmont communities' key values and vision for transit oriented development in the area between Los Angeles Southwest College and Metro's Vermont/Athens Green Line Station (see Appendix B for the full Specific Plan). The Specific Plan consists of the following sections.

1. **Introduction.** Establishes the purpose and context for the Specific Plan, provides an overview of the planning process, and the Specific Plan's relationship to other relevant plans and programs.

2. **Vision, Goals and Policies.** Outlines the vision for the West Athens-Westmont community and the overarching goals and objectives for achieving the vision articulated in the Specific Plan.

3. **Land Use and Urban Design Framework.** Develops the recommendations for sub-area districts within the plan and includes conceptual plans for opportunity areas for infill development and revitalization.

4. **Regulating Code.** Permitted land uses, regulations, and development standards for each of the Specific Plan Zones are laid out. This section includes regulations for building height, density, parking, site configuration, building design, open space and landscaping requirements, and other design standards.

5. **Design Guidelines.** Design guidelines will promote aesthetically pleasing and viable, site-compatible development that supports the vision and guiding principles of the Specific Plan.

6. **Mobility.** Provides a summary of the proposed mobility and circulation plan for the Specific Plan area, including the vehicular, pedestrian, bicycle, transit and parking networks.

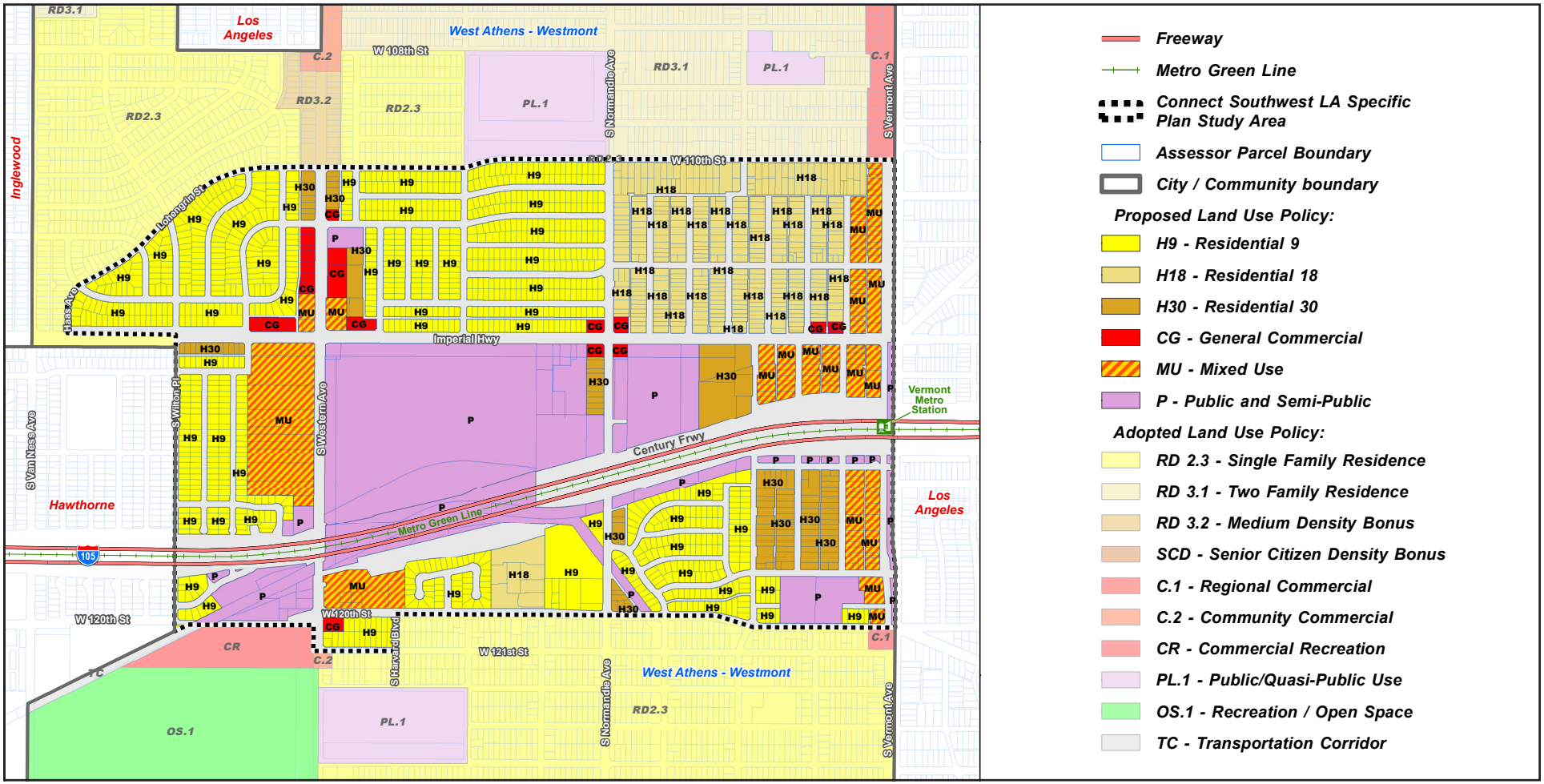
7. **Infrastructure.** Addresses the critical infrastructure requirements associated with the future development in the Specific Plan area, including water, sewer, stormwater, solid waste, and public services.

8. **Economic Development Strategy.** Highlights opportunities for economic development in the Specific Plan area and the associated community benefits.

9. **Implementation and Administration.** Provides specific implementation and funding strategies for realizing the goals of the Specific Plan as well as describing review and approvals.

Figure 3-4 - Proposed Land Use Policy Map

3. Project Description



Source: Los Angeles County DRP, 2017

3. Project Description

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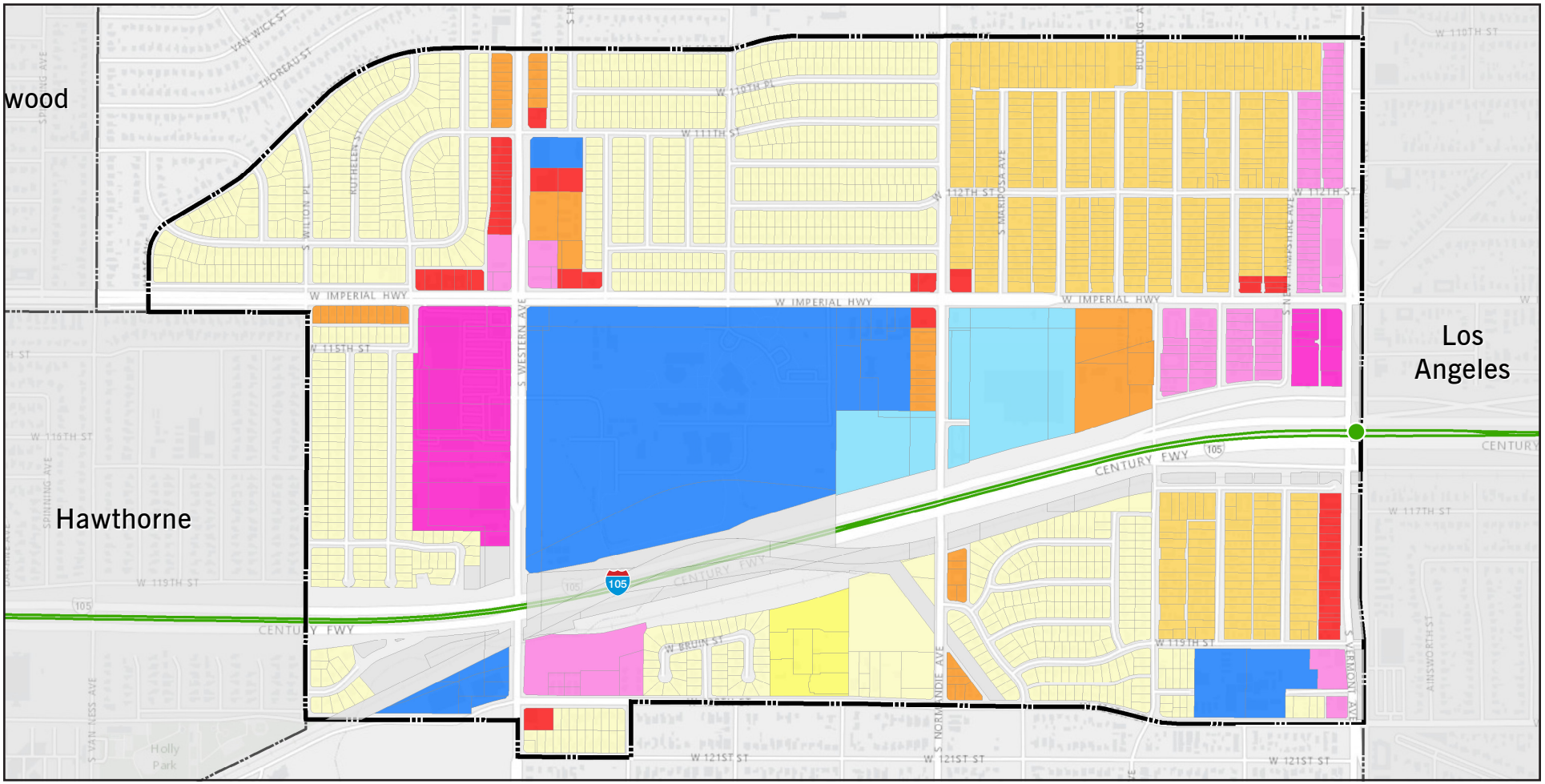
Figure 3-5 - Proposed Zoning Districts

3. Project Description



Source: Los Angeles County DRP, 2017

3. Project Description

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Proposed Zoning Districts

The project site encompasses 658 acres; however, approximately 185 acres of the Specific Plan area is nonparceled right-of-way, including roadways, utility easements, and drainage. As shown on Figure 3-4, Proposed Zoning Districts, the Specific Plan would designate the following zoning districts for the remaining 473 acres of developable project area.

Single-Family Residence Zone

The Single-Family Residence (R-1) zone encompasses 167 acres and is intended to preserve the scale and form of the area's existing single-family residential neighborhoods. The R-1 zone provides primarily for single-family detached homes, up to 9 dwelling units per acre. This designation also permits living suites under specific conditions and in specific locations.

Residential Planned Development Zone

The Residential Planned Development (RPD) zone is 7 acres and is established to promote residential amenities beyond those expected under conventional single-family development, to achieve greater flexibility in design, to encourage well-planned neighborhoods through creative and imaginative planning as a unit, and to provide for appropriate use of land that is sufficiently unique in its physical characteristics or other circumstances to warrant special methods of development. The minimum required lot size is 5,000 square feet for a single-family house and 5 acres for a development project. The density would be determined by zoning requirements for the district and the CUP approved by the Regional Planning Commission.

Two-Family Residence Zone

The Two-Family Residence (R-2) zone covers 80 acres and provides opportunities for developments with multiple units, up to 18 dwelling units per acre. The development standards for this designation promote a variety of attached housing types, including duplexes, courtyard housing, and townhouses.

Limited Multiple Residence Zone

The Limited Multiple Residence (R-3) zone encompasses 18 acres and accommodates developments of higher-density multiple units, either apartments or condominiums, up to 30 dwelling units per acre. The intent is to promote desirable higher density residential close to transit and other services. The development standards for this designation promote a variety of product types. This designation is also intended to encourage the development of affordable and workforce housing to serve the needs of the West Athens-Westmont community, especially LASC.

Mixed Use 1 Zone

The Mixed Use 1 (MXD-1) zone consists of 27 acres and promotes development of a mix of commercial, office, and residential, with an emphasis on neighborhood-serving uses. The MXD-1 zone provides for a range of small- to medium-scale retail or mixed-use developments and multifamily residential uses up to 30

dwelling units per acre. Developments would have private/public open space components and strong bicycle and pedestrian connections to the Vermont/Athens Station, LASC campus, and the rest of the community.

Mixed Use 2 Zone

The Mixed Use 2 (MXD-2) zone covers 23 acres and is intended to be developed over time as a transit-supportive environment to provide a higher-intensity mix of retail, office, restaurant uses, and residential development in a compact, walkable setting. This designation encourages a range of multifamily housing products in a mixed-use configuration and up to 60 dwelling units per acre. Similar to the MXD-1 zone, the development standards and design requirements for the MXD-2 zone will address private/public open space components and bicycle and pedestrian connections to the Vermont/Athens Station and LASC campus.

Neighborhood Commercial Zone

The Neighborhood Commercial (C-2) zone encompasses 11 aces and is established to serve the local retail and service needs of the residents, employees, and students in West Athens-Westmont. This zone is for small-scale retail service developments and restaurants that serve the daily needs of adjacent neighborhoods.

Civic Center Zone

The Civic Center (CC) zone is 22 acres and is intended to allow opportunities for appropriate non-civic uses—including commercial, multifamily residential uses, and public open space—in civic use areas along Imperial Highway. The CC zone allows multifamily residential uses as an incentive for the development of affordable housing. Over time, the CC zone will integrate the existing civic uses and the multifamily residential areas to the east into a walkable district that is connected to the nearby Vermont/Athens Station and provides housing options in proximity to both employment uses and transit.

Public-Institutional Zone

The Public-Institutional (IT) zone covers 83 acres and provides for established public uses, including schools, parks, and other public uses. This designation is intended to promote the use of publicly owned land for the purposes of community open space, recreation, sense of identity, and safe connections to destinations.

Buffer Strip Zone

The Buffer Strip (B-1) zone covers 35 acres and provides a buffer from the I-105 freeway. Allowed uses in this zone include passive recreation, landscaping, and parking lots. Buildings or permanent structures are not permitted under this category.

Development Potential Summary

Based on the proposed zoning districts and development standards, the proposed project would permit development of up to 4,518 residential units and approximately 3.5 million square feet of nonresidential land uses in the unincorporated communities of West Athens and Westmont.

Table 3-1 Connect Southwest LA Development Potential

Proposed Zoning District	Acres	Percent of Total	Residential Units	Nonresidential Building Area, Square Feet
Proposed Project				
Residential				
Single-Family Residence Zone	167	35.3	1,278	—
Residential Planned Development Zone	80	16.8	1,432	—
Two-Family Residence Zone	18	3.9	478	—
Limited Multiple Residence Zone	7	1.4	67	—
Nonresidential				
Mixed Use 1 Zone	27	5.7	536	574,580
Mixed Use 2 Zone	23	4.9	559	1,217,935
Neighborhood Commercial Zone	11	2.3	—	164,363
Public-Institutional Zone	83	17.5	—	786,925
Civic Center Zone	22	4.7	168	731,244
Buffer Strip Zone	35	7.4	—	—
Total	473	100%	4,518 units	3,475,047 SF
Existing Conditions				
Existing Conditions	473	—	3,457	1,784,409
Net Increase/(Decrease)	0	—	1,061	1,690,638
Percent Net Increase	0%	—	30.7%	94.7%

The major areas of change within the Specific Plan area are illustrated on Figure 3-6, *Proposed Zoning Areas of Change*. The areas anticipated to experience the largest change in terms of development potential are the proposed mixed use zones near the transit station and near the Imperial Highway/Western Avenue intersection. LASC would be rezoned more appropriately from Light Agricultural to Public/Institutional and the County facilities to the east of LASC would also be rezoned more appropriately from Commercial to Civic Center. Upzoning (increasing permitted density) is also anticipated throughout the Specific Plan area.

Los Angeles Southwest College

It should be noted that the LASC is within the proposed project boundary but is not part of the project. Development of the LASC is guided by the Los Angeles Southwest College Master Plan, prepared in 2003 and updated in 2008 and 2010. The plan provides for the development of new and updated academic, student support, and athletic facilities as well as landscape and pedestrian improvements. The plan also provides for the demolition of several academic buildings due to the presence of hazardous earthquake fault lines traversing the campus. The college has completed all proposed construction projects to date, and LASC is currently in the process of updating the Master Plan, which will undergo a separate environmental review process. Buildout of the LASC is analyzed as part of background cumulative growth in this DEIR.

3. Project Description

Mobility

A key component of the Specific Plan is the transformation of the current circulation network, which largely supports vehicular travel, to a network that places a higher priority on the principles of complete streets and multimodal design to better accommodate walking, biking and transit.

Street Network

Much of the street network within the Specific Plan area would remain the same in order to support new development and growth; however, some streetscape improvements are proposed along key arterials, including improved landscaping, wider sidewalks, reduced vehicle travel lane widths, pedestrian and bicyclist amenities (e.g., street lights, benches, signage), and buffered bike lanes. These improvements are intended to transform the existing auto-oriented streetscape into a more sustainable multimodal design.

Pedestrian Circulation

Although sidewalks exist along major corridors within the Specific Plan area, most sidewalks are narrow and do not support high levels of pedestrian activity. The Specific Plan proposes a sidewalk hierarchy to establish a physical framework for sidewalk design and support various levels of pedestrian activity (see Figure 3-7, *Pedestrian Network Path*). Pedestrian-crossing design strategies include curb extensions, curb ramps, crossing signage, safety islands, and marked crosswalks. Pedestrian amenities are also proposed, such as street trees, seating, street lights, and public art.

Bicycle Circulation

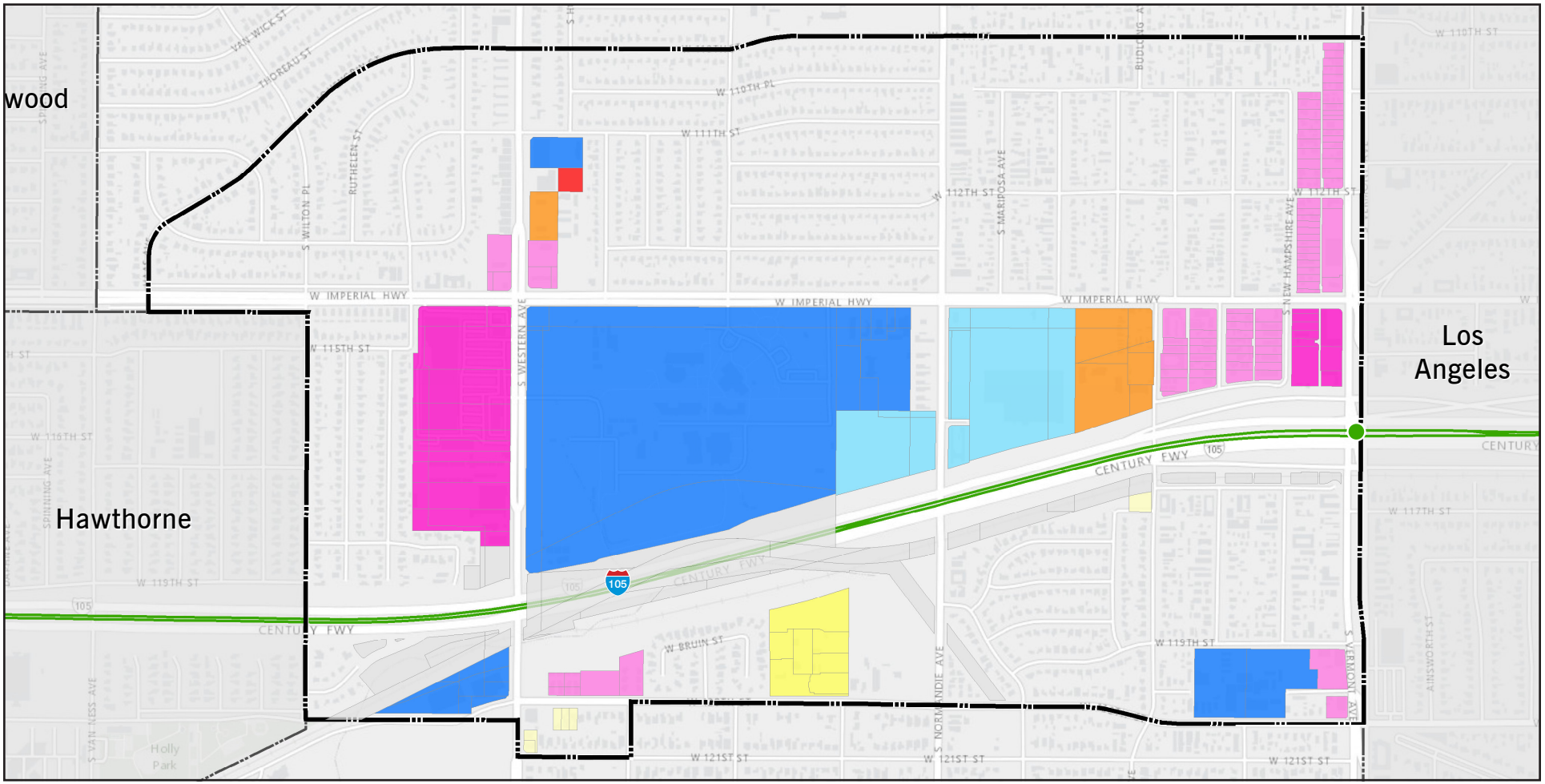
The existing bicycle network within the Specific Plan area provides limited accessibility and connectivity, particularly to the Vermont/Athens Green Line Station. The Specific Plan proposes to add approximately 11 miles of bikeways to the existing network and a multiuse path from LASC to Vermont Avenue (see Figure 3-8, *Bicycle Network Map*) that would be designed as a Class I bike path (completely separated right-of way designated exclusively for bicyclist and pedestrians, with cross-traffic minimized). Bicycle infrastructure amenities are also recommended, including bicycle parking, crossing signals, and wayfinding signage. Additionally, safe routes to school—as suggested by the County of Los Angeles Public Works Department—are identified in the Specific Plan for West Athens Elementary School.

Transit Circulation

The Specific Plan area has access to an extensive network of public transportation, including several local bus routes operated by Metro and the City of Gardena. Additionally, the Metro Green Line provides light rail services connecting the South Bay, Harbor Gateway, and Norwalk communities. The Specific Plan proposes widening the sidewalk along the Vermont/Athens Green Line Station corridor along Vermont Avenue, reducing the width of the travel lanes, adding buffered bike lanes, and introducing additional wayfinding to the station to improve visibility and encourage walking, biking, and transit use. Additional transit amenities can include shelters, benches, lighting, transit information, bicycle racks, and public art.

Figure 3-6 - Proposed Zoning Areas of Change

3. Project Description



Proposed Zoning

- Specific Plan Area
- City Boundaries
- Vermont/Athens Station
- Metro Green Line
- R-1 - Single Family Residence
- RPD - 5000 - 10U - Residential Planned Development
- R-2 - Two-Family Residence
- R-3 - Limited Density Multiple Residence
- MXD-1 - Mixed Use 1
- MXD-2 - Mixed Use 2
- C-2 - Neighborhood Commercial
- CC - Civic Center
- IT - Public/Institutional
- B-1 - Buffer Strip

0 1,000
Scale (Feet)

Source: Los Angeles County DRP, 2017

3. Project Description

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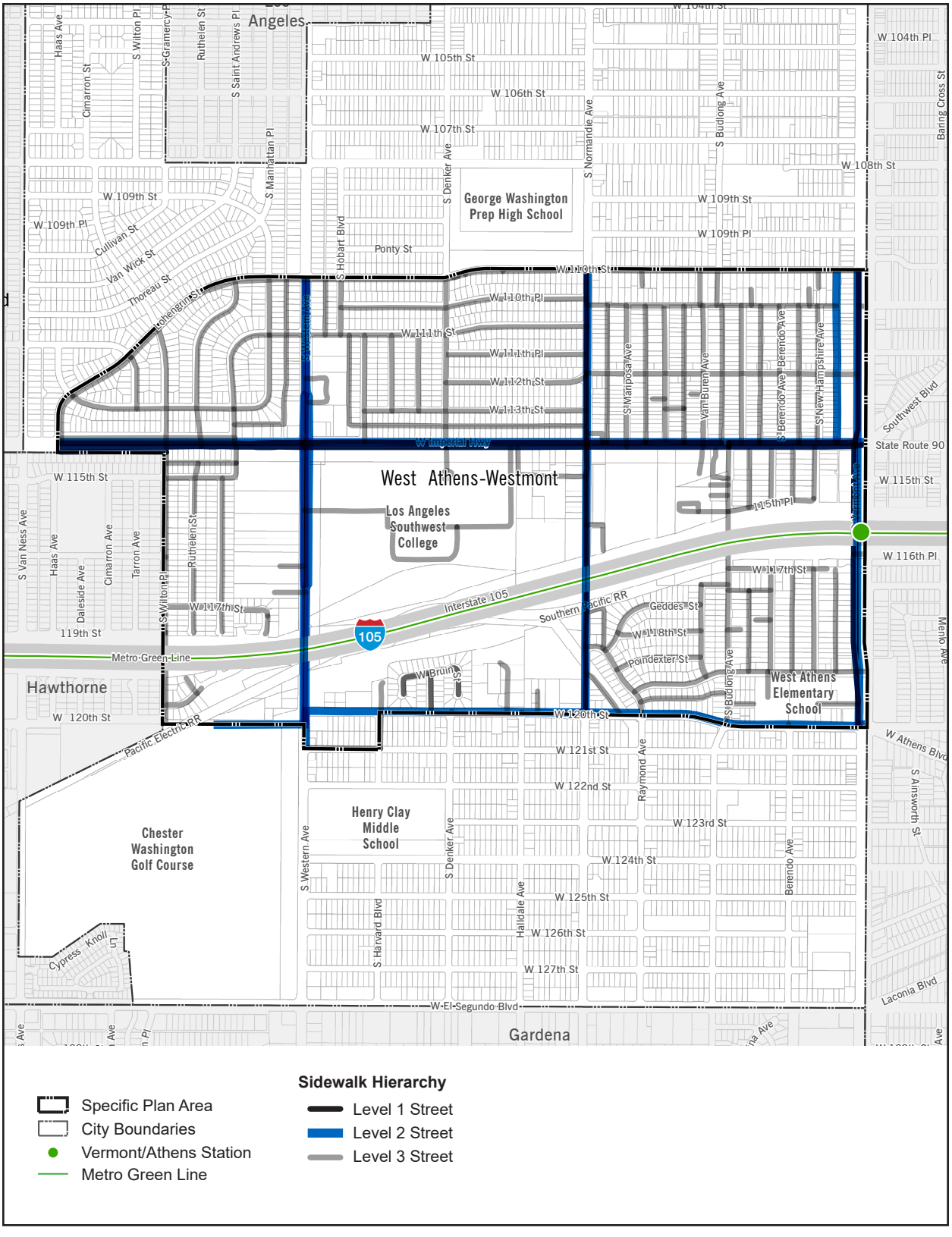
Figure 3-7 - Pedestrian Network Path

3. Project Description



Source: Los Angeles County DRP, 2017

3. Project Description

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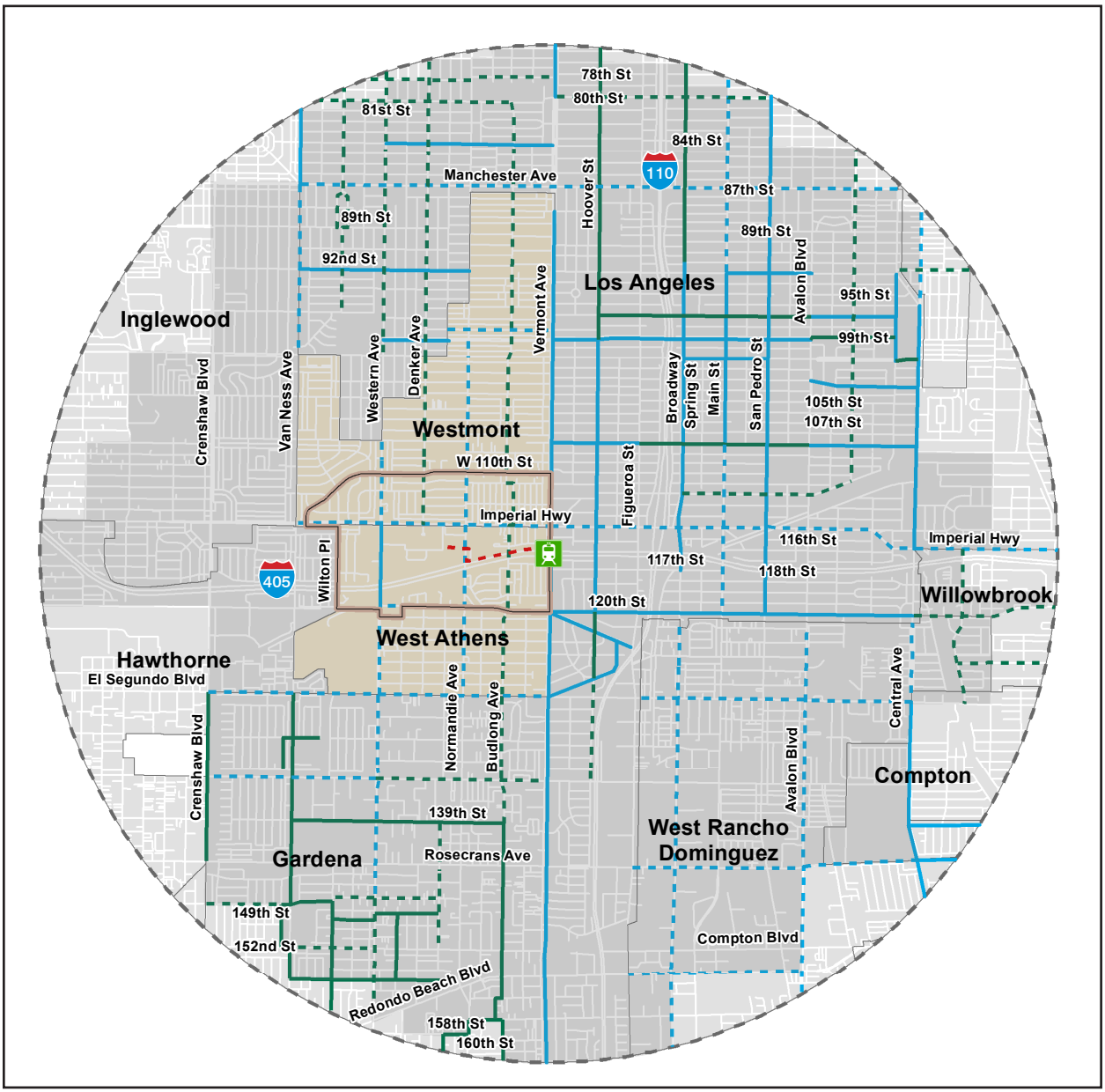
Figure 3-8 - Bicycle Network Path
3. Project Description



Note: There are no Class I Bikeways within a 3-mile radius of the study area.

Green Line Station
Specific Plan Boundary
3-Mile Buffer
3-Mile Bike Shed

Existing Bikeways
Class I
Class II
Class III

Proposed Bikeways
Class I
Class II
Class III

0 1
Scale (Mile)

Source: Los Angeles County DRP, 2017

3. Project Description

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Project Design Features

Table 3-2 lists the project design features (PDFs) that would reduce environmental impacts associated with the proposed project. These PDFs are analyzed as part of the project throughout this DEIR.

Table 3-2 Proposed Project Design Features

Chapter 2: Vision, Goals, and Policies
Goal 1 – A Mix of Land Uses
Policy 1.1: Encourage the adaptive reuse of buildings and appropriately scaled infill, mixed-use development in the planning area.
Policy 1.2: Accommodate a variety of housing types to meet the needs of current and future residents. Provide for the development of a neighborhood commercial center that serves as a destination for LASC students, while accommodating residents and other stakeholders that live, work, and gather in the community.
Policy 1.3: Focus new development and mixed use projects in areas adjacent to the Vermont/Athens Green Line Station and at the intersection of Imperial Highway and Western Avenue, as those areas have been identified as strategic opportunity areas.
Policy 1.5: Support land uses and infrastructure improvements that can reduce the need for parking and promote alternative modes of transportation, such as transit, walking, or biking.
Goal 2 – Affordable Housing Options
Policy 2.4: Streamline the process for residents to occupy second units or Accessory Dwelling Units as a means of creating new, safe housing units while respecting the look and scale of the single family neighborhoods.
Goal 3 – A Diverse Economy
Policy 3.1: Encourage employment-generating uses where possible by continuing to allow commercial uses along the major corridors.
Policy 3.3: Require that the street frontages of commercial uses are located and designed to foster active pedestrian activity supporting their economic activity.
Policy 3.4: Work with LASC to offer job-training, continuing education courses, recreational opportunities and programs for local residents.
Goal 4 – A Variety of Mobility Options
Policy 4.1: Develop a balanced, integrated, multi-modal transportation system that is efficient and safe with frequent service connecting to destinations, employment centers, and residential areas.
Policy 4.2: Provide a variety of transportation choices that promote accessible alternatives to the automobile including walking, bicycling, and taking transit.
Policy 4.3: Design streetscapes that are attractive and inviting by incorporating sufficient lighting, street trees/shade, landscaping, benches, and other amenities that are pleasant, offer visual stimulation, and promote activity for all users.
Policy 4.4: Design sustainable and energy-efficient streetscapes with low-impact development strategies including sustainable stormwater practices, permeable paved surfaces, drought-tolerant plant species, and solar lighting fixtures.
Policy 4.5: Support walking and biking as First and Last Mile solutions to transit by providing amenities such as bicycle parking, bike racks, street lights, seating, and wayfinding maps and signage.
Policy 4.6: Provide a safe and comfortable pedestrian network linking the transit station with LASC, commercial centers, county facilities, and residential neighborhoods.
Policy 4.7: Implement parking policies that encourage travel by public transit and other sustainable modes of transportation, such as priced parking, parking time limits, or prohibited on-street parking.
Goal 5 – A Safe and Healthy Community
Policy 5.1: Incorporate more lighting and visibility along streets and pedestrian ways.
Policy 5.2: Implement traffic calming features along main corridors to improve pedestrian safety.
Policy 5.3: Support safer routes to schools and parks through increased signage, lighting, landscaping, and pedestrian connections around schools.
Policy 5.4: Locate transit stops in areas that are active and visible to maximize personal security and safety of waiting transit riders.
Goal 6 – Quality Parks, Open Space, and Public Space Infrastructure
Policy 6.1: Improve visibility and access to the Vermont Green Line Station through increased lighting, signage, public art, and street furniture.
Policy 6.2: Redesign the west-side entrance of the Vermont/Athens Green Line Station with ample amenities and improve the comfort and safety of transit users.

Policy 6.3: Reallocate excess portions of right-of-way, such as wider than necessary vehicular travel lanes, to design sidewalks and bicycle facilities for the comfort and safety of all users.
Policy 6.4: Increase recreational opportunities for the community by creating neighborhood pocket parks and finding other creative uses for underutilized open space.
Chapter 3: Land Use and Urban Design Framework
Vermont Station District
▪ Upgrade the elevators, escalator and stairs to the Metro Blue and Green Line platforms
▪ Improve the west station entry to create a safer and more comfortable area for patrons
▪ Widen the sidewalk to allow a more prominent entrance into the station and to allow more streetscape amenities, benches, etc.
▪ Add new bus canopies along the bridge overpass for buses for a more comfortable passenger waiting area
▪ Improve lighting, landscaping and signage throughout area.
Civic Center District
▪ Facilitate the transition of the existing uses to higher intensity development in this area.
▪ Through lot consolidation and new development of a unified project, create a district with public institutional and non-civic uses, including commercial, residential, and public open space along Imperial Highway and Normandie.
▪ Encourage potential joint use housing development with a civic use, such as a recreation center or library
Western Avenue Commercial Corridor District
▪ Ensure infill commercial and mixed use development respect the existing neighborhood retail character of the district.
▪ Promote more pedestrian activity along Western Avenue and Imperial Highway as part of new development and adaptive reuse of existing buildings
▪ Through lot consolidation and development of a unified project at higher densities in the Food For Less shopping center create a mixed use district with new retail, residential, and employment opportunities for local residents and college students
Single-Family Residential District
▪ Preserve and enhance established single-family home and duplex communities
Multifamily Residential District
▪ Promote desirable transit-supportive densities close to transit and other services
▪ Promote a variety of housing types given the range of lot sizes and configurations.
▪ Encourage the development of affordable and workforce housing to serve the needs of the West Athens-Westmont communities, as well as Los Angeles Southwest College.
Chapter 4: Regulating Code
Existing Structures
▪ Adaptive reuse and renovations of existing buildings, open space areas, and other site improvements shall be aesthetically upgraded through architectural and landscape improvements. Such improvements may include, but are not limited to: o Upgraded treatments to building façades, including the use of plaster, brick, stone, and/or other approved materials. o Updated building facade painting. o Upgraded window types and window treatments o Upgraded roofing materials and roof overhangs o Decorative treatment of all exposed site walls with new materials. o Enhancement of the design and placement of private patios and balconies. o Upgraded appearance of entrances, including doorways, walkways, driveways, and decorative paving. o Extensive planting of trees and shrubs throughout the site, including parking areas and common open space areas. o Improved landscape design of front yards and common areas and/or along building perimeters and entries. o Improvements to common recreational areas including provision of shelters, lighting, and refurbishing of facilities. o Addition of pedestrian amenities including paths, benches, shade trees, trash receptacles, drinking fountains, lighting, and decorative paving. o Addition of bicycle facilities including bike racks/and storage areas. o Creation of project entryways through signage and landscape design, as applicable. o Creation of signage program for building identification and directional signs. o Upgraded and consistent signage, including tenant project identification, addressing, and directional signs. o Enhanced lighting scheme for building entrances, common areas, paths, and parking areas.

- Application of defensible space techniques in landscaping and lighting to deter criminal activity.

Site Development Regulations

- Sections 4.3.4 through 4.3.13 in the Specific Plan detailing development standards for each zoning district

Bike Parking and Related Facilities

- The minimum number of bicycle parking spaces for a particular use shall be provided in accordance with Table 4.21 of the Specific Plan.

Showers and changing facilities of a size and at a location deemed appropriate by the Director, shall be provided in all new commercial buildings with 75,000 or more square feet of gross floor area and shall, at a minimum, be accessible to employees.

- All bicycle parking spaces shall be:
  - Directly adjacent to a bicycle rack or within a secure, single bicycle locker and shall allow for convenient, unobstructed access to such bicycle rack or locker
  - Located so as to not block pedestrian entrances, walkways, or circulation patterns in or around nearby facilities or structures
- All bicycle racks shall be:
  - Located and installed to support an entire bicycle, including its frame and wheels, so that the frame and wheels can be locked without damage when using a customary, heavy-duty cable or u-shaped bicycle lock
  - Securely anchored to a permanent surface
  - Installed to allow bicycles to remain upright when locked, without the use of a kickstand
- All bicycle lockers shall be:
  - Of sufficient size to hold an entire bicycle
  - Securely anchored to a permanent surface
- Short-term bicycle parking spaces shall be:
  - Located to be visible from public areas such as public streets, store fronts, sidewalks and plazas, and to be convenient to the target users of the bicycle parking to the maximum extent feasible;
  - Installed as close to a structure's main entrance as feasible;
  - Separated with a barrier from areas where vehicles park, such as with a curb or wheel stop; and
  - Located in a well-luminated area.
- Long-term bicycle parking. Long-term bicycle parking shall be:
  - Located in a well-luminated, secure, and covered area;
  - Accessible to and from nearby public streets and sidewalks for the target users of the bicycle parking, who may or may not include the general public;
  - Located at surface levels near main pedestrian entrance(s) to nearby facilities or structures, or in the parking garages of such facilities or structures;
  - Accessible only to residents and owners, operators, and managers of a residential facility when the involved use is residential; and
  - Accessible only to employees, tenants, and owners of a commercial structure or facility when the involved use is commercial.

Sustainability and Resource Conservation

- Irrigation systems shall incorporate water conserving methods and water efficient technologies such as drip emitters, evapotranspiration controllers, and moisture sensors. Explore opportunities to reuse rain water and/or gray water for irrigation.
- Irrigation systems shall be designed to apply water slowly, allowing plants to be deep watered and reducing runoff. Low-volume irrigation drip systems should be used in all areas except turf irrigation and small ornamental planting. Each street tree should be watered by at least two deep watering bubblers separate from all other irrigation.
- Buildings and development projects within the Specific Plan area shall be designed and constructed using sustainable, energy efficient materials and incorporate strategies for the conservation of water, energy, and other natural resources.
- White or green roofs shall be used as much as possible, while the use of pavement, asphalt, and other heat producing surfaces should be minimized to reduce the heat island effect.
- Drainage should be directed to permeable areas to minimize discharge to the storm drain system. Use pervious or open grid paving for parking areas whenever possible to reduce the negative effects of storm water runoff and to facilitate groundwater recharge.
- Buildings and development projects shall be more energy efficient than required by local and state codes.
- Energy-efficient and natural lighting shall be used in buildings and new developments. Maximize daylighting and views through window placement and design.

Chapter 5: Design Guidelines

- Sections 5.2 through 5.4 in the Specific Plan detailing design guidelines for site design, building design, and public realm

Chapter 6: Mobility & Public Realm

3. Project Description

Mobility Strategies
▪ Strategy 1: Improve accessibility to transit through the provision of streetscape improvements, high quality bicycle and pedestrian infrastructure, wayfinding signage, and other enhancements consistent with Metro's First and Last Mile Strategic Plan. o Improve visibility and access to the Metro Green Line Station through increased lighting, signage, and improved pedestrian and bicycle infrastructure. o Design streetscapes that provide a comfortable buffer or sense of separation from vehicular traffic. o Reallocate excess portions of right-of-way, such as overly wide vehicular travel lanes, to design sidewalks and bicycle facilities that are comfortable and safe for people to enjoy. o Utilize wayfinding, signage, and other amenities that allow pedestrian, bicycle, and transit routes to be easily identifiable. o Design streetscapes that are attractive and inviting by incorporating sufficient lighting, street trees, landscaping, benches, and other amenities that are pleasant, offer visual stimulation, and promote activity. o Support walking and biking as first – last mile solutions to transit through the provision of amenities such as bicycle parking, bike racks, street lights, seating, and wayfinding maps and signage.
▪ Strategy 2: Design streets to facilitate safe, accessible, connections between major destinations for multiple modes of transportation. o Implement complete streets designs that promote a multi-modal network of streets and prioritize safety. o Provide safe and comfortable pedestrian and bicycle connections between the Metro Green Line and the Los Angeles Southwest College (LASC). o Create safe, comfortable, and accessible transit waiting areas through the provision of transit amenities such as shelters, benches, shade structures, lighting, system maps, and transit timetables. o Incorporate streetscape improvements as well as bicycle and pedestrian facilities that support transit operations, such as bus pads, wider sidewalks, buffered bike lanes, bike racks, and traffic control devices that prioritize transit vehicles and facilitate pedestrian circulation. o Locate transit stops in areas that are active and visible to maximize personal security and safety of waiting transit riders. o Prioritize roadway improvement projects that improve access to transit and the Metro Green Line Station.
▪ Strategy 3: Develop and incorporate parking management strategies that encourage efficient use of parking resources and support programs that can reduce parking supply needed. o Implement parking policies that encourage travel by public transit and other sustainable modes of transportation, such as priced parking, parking time limits, or prohibited on-street parking. o Implement more accurate and flexible parking standards that reflect the parking demand for the area. o Support land uses and infrastructure improvements that can reduce the need for parking and promote alternative modes of transportation, such as transit, walking, or biking.
Pedestrian Circulation
▪ Implement the following design features to facilitate safe pedestrian crossing: marked crosswalks, pedestrian safety islands, curb extensions, and curb ramps
▪ Install the following pedestrian amenities: street trees, seating, street lights, and public art
Bicycle Circulation
▪ Add approximately 11 miles of bikeways to the existing bicycle network as shown on Figure 3-8, *Bicycle Network Path*
▪ Construct a multi-use path from LASC to Vermont Avenue
▪ Install the following bicycle amenities: bicycle parking, bike crossing signals, and bicycle wayfinding signage
Signage and Wayfinding
▪ Incorporating visually engaging elements (i.e., street trees, landscaping, or public art) at freeway crossings to make a friendlier street and pull active transportation users along the Vermont Avenue pathway
▪ Install special paving and bollards along curb edges to improve safety for pedestrians with visual impairments and provide a valuable cue separating the sidewalk from the roadway and vehicular traffic
Safe Routes to School
▪ Promote safer routes to school by implementing the following: o Appropriate levels of street lighting should be installed on both sides of wide streets. o Appropriate traffic controls, such as marked crosswalks, traffic signals, and warning signs or flashers should be utilized at pedestrian crossing locations. o Curb ramps with warning strips, such as truncated domes, should be provided at pedestrian street crossings to facilitate the safe crossings of pedestrians with mobility or vision impairments.
Transit Circulation
▪ Along the Vermont Green Line Station corridor, widen sidewalks, reduce width of the travel lanes, add buffered bike lanes, and introduce

additional wayfinding to the station to improve visibility and encourage walking, biking, and transit use.
▪ Install transit stop amenities, such as shelters, benches, lights, transit information, bicycle racks, and public art
Streetscape Improvements
▪ Along Imperial Highway, maintain existing sidewalk widths of 12 feet and add more street trees
▪ Along the overpass portion of Vermont Avenue, widen the existing sidewalk to 25 feet on the western side of the right of way and to 15 feet on the opposite side; construct 6-foot bike lanes on each side of the corridor along its entire length, with 2-foot striped buffers; reduce vehicular travel lanes on each side of the corridor to 10 feet while allowing 12 feet for shoulder bus lanes.
▪ South of the overpass portion of Vermont Avenue, widen the median and merge the existing parkway with the sidewalk on the eastern side of the corridor
▪ Along Normandie Avenue, improve landscaping along the length of the street by adding street trees between the sidewalks and parking areas on each side of the corridor to enhance the pedestrian environment
▪ Along Western Avenue, continue the buffered bike lanes that currently exist south of Imperial Highway onto the northern portion of Western Avenue, and reduce travel lane widths by two feet each while reducing the turn lane to 10 feet in width
▪ Along 120th Street, reduce travel lane width to one lane in each direction with a turn lane in the center. Five-foot bike lanes should be placed between the travel lanes and parking areas on each side of the corridor with striped buffers on each side for safety.
New Park Opportunities
▪ Construct an improved median on Vermont Avenue directly south of I-105
▪ Construct a small park north of Imperial Highway as shown on Figures 6.18 and 6.19 of the Specific Plan
Chapter 7: Infrastructure
▪ All new development projects that involve the construction of new roadways shall conform to the Green Infrastructure Guidelines as set forth by the Los Angeles County Department of Public Works
Permeable Surfaces
▪ Permeable surfaces should be incorporated whenever feasible to allow infiltration of rainfall and to reduce the total volume of runoff, replenish groundwater, and improve water quality
▪ Permeable sidewalks must adhere to existing Public Works standards for sidewalk design.
▪ Permeable access roads are not recommended for roadways with high volume of equipment trucks, as they can cause damage to permeable surfaces.
▪ Permeable pavement and underdrain systems for parking lots shall be directed toward LID-type best management practices if needed to achieve the required volume reduction.
▪ Permeable alleys are recommended for alleys that are less than 8 feet wide since they prevent access from heavy vehicles.
Vegetation and Landscaping
▪ Vegetated swales shall be designed in accordance with Chapter 3 of DPW's Best Management Practices Design and Maintenance Manual.
▪ Vegetated swales are recommended in areas where slope is between 1 and 6 percent.
▪ Plant species for vegetates swales shall be tolerant to both extreme wet and dry conditions. Refer to the vegetated swale plant list of DPW's Best Management Practices Design and Maintenance Manual.
▪ Vegetated swales should be greater than 100 linear feet in length and at least 12 inches in depth from the top of the sidewalk to the swale bottom.
▪ Bioretention facilities shall be designed in accordance with Chapter 5 of DPW's Best Management Practices Design and Maintenance Manual.
▪ Planting/tree box filter designs should typically incorporate a concrete vault filled with a bioretention soil mix and vegetation, and may contain an underdrain connected to an adjacent flood control conveyance.

3.4 INTENDED USES OF THE EIR

This Draft EIR (DEIR) examines the environmental impacts of the proposed project and addresses various actions by the County and others to adopt and implement the proposed project. It is the intent of this DEIR to evaluate the environmental impacts of the proposed project, thereby enabling the County of Los Angeles,

other responsible agencies, and interested parties to make informed decisions with respect to the requested entitlements. The anticipated approvals required for this project are:

Lead Agency	Action
County of Los Angeles	• Approval of a General Plan Amendment • Approval of a Zoning Ordinance • Certification of the Environmental Impact Report • Adoption of Findings of Fact and Statement of Overriding Considerations (if required) • Adoption of the Mitigation Monitoring Program • Adoption of the Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont
Responsible Agencies	**Action**
South Coast Air Quality Management District	• Issuance of construction permits
Caltrans	• Issuance of encroachment permits for roadways improvements
Los Angeles Regional Water Quality Control Board	• Issuance of a National Pollution Discharge Elimination System Permit (NPDES) for future construction activities

4. Environmental Setting

4.1 INTRODUCTION

This section provides a "description of the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published,...from both a local and a regional perspective" (Guidelines § 15125[a]), pursuant to provisions of the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The environmental setting provides the baseline physical conditions from which the lead agency will determine the significance of environmental impacts resulting from the proposed project.

4.2 REGIONAL ENVIRONMENTAL SETTING

4.2.1 Regional Location

The proposed project is located in the unincorporated communities of West Athens and Westmont of Los Angeles County. Based on Figure 5.1, *Planning Framework*, of the County's 2035 General Plan, West Athens and Westmont are located in the southwestern portion of the Metro Planning Area, which is the geographic center of Los Angeles County. Surrounding cities include Los Angeles to the north and east, Gardena to the south, Hawthorne to the west and southwest, and Inglewood to the west and northwest. Regional access to the project site is from Interstate 105 (I-105, the "Century Freeway" or "Glen Anderson Freeway") via ramps at South Vermont Avenue.

4.2.2 Regional Planning Considerations

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a federally recognized metropolitan planning organization (MPO) that represents the counties of Los Angeles, Orange, Ventura, Imperial, San Bernardino, and Riverside and their 190 cities, encompassing over 38,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs. As the Southern California region's MPO, SCAG cooperates with the South Coast Air Quality Management District, the California Department of Transportation, and other agencies in preparing regional planning documents.

Regional Transportation Plan/Sustainable Communities Strategy

On April 7, 2016, SCAG adopted the 2016-2040 RTP/SCS: A Plan for Mobility, Accessibility, Sustainability and a High Quality of Life, which places a greater emphasis than ever on sustainability and integrated

planning. The 2016-2040 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375 (SB 375), improve public health, and meet the National Ambient Air Quality Standards set by the federal Clean Air Act. The 2016-2040 RTP/SCS provides a blueprint for improving quality of life for residents by providing more choices for where they will live, work, and play and how they will move around (SCAG 2016). The project's consistency with the applicable 2016-2040 RTP/SCS policies is analyzed in detail in Sections 5.5, *Greenhouse Gas Emissions* (Table 5.5-8), and 5.7, *Land Use and Planning* (Table 5.7-3), of this DEIR.

High Quality Transit Areas

An HQTA is generally a walkable transit village or corridor that is within a half mile of a well-serviced transit stop or a transit corridor with a service frequency of 15 minutes or less during peak commute hours. The overall land use pattern of the 2016-2040 RTP/SCS focuses jobs and housing in the region's designated HQTAs. Given the project site's proximity to the Vermont/Athens Green Line station and corridor, the Specific Plan area is in an HQTA.

South Coast Air Quality Management District

The SCAQMD is responsible for monitoring air quality in the South Coast Air Basin and for planning, implementing, and enforcing programs designed to attain and maintain state and federal ambient air quality standards in the region. SCAQMD has jurisdiction over 10,743 square miles, including all of Los Angeles County except for Antelope Valley, which is in a different air basin. SCAQMD implements a wide range of programs and regulations that address point source pollution and mobile source emissions, and enforces air quality through inspections, fines, and educational training.

The air pollutants emitted into the ambient air by stationary and mobile sources are regulated by federal and state law. These regulated air pollutants are known as criteria air pollutants and are: carbon monoxide, volatile organic compounds (VOC), nitrogen oxides (NO_X), sulfur dioxide, coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead. VOC and NO_X are criteria pollutant precursors that form secondary criteria pollutants, such as ozone (O_3), through chemical and photochemical reactions in the atmosphere. Air basins are classified as attainment/nonattainment areas for particular pollutants, depending on whether they meet ambient air quality standards (AAQS) for that pollutant. The levels of ozone, particulate matter, and carbon monoxide in Los Angeles County continually exceed federal and state ambient air quality standards.

South Coast Air Basin Air Quality Management Plan

SCAQMD's most recent air quality management plan (AQMP) is the 2016 AQMP. The purpose of the 2016 AQMP is to set forth a comprehensive and integrated program that will lead the air basin into compliance with the federal 24-hour $PM_{2.5}$ air quality standard, and to provide an update to the basin's commitments to meeting the federal 8-hour ozone standards. It will also satisfy recent US Environmental Protection Agency requirements for a new attainment demonstration of the revoked 1-hour ozone standard and the vehicle miles traveled emissions offset.

Greenhouse Gas Emissions Reduction Legislation

Current State of California guidance and goals for reductions in greenhouse gas (GHG) emissions are generally embodied in Executive Order S-03-05; Assembly Bill 32 (AB 32), the Global Warming Solutions Act (2008); and SB 375, the Sustainable Communities and Climate Protection Act.

Executive Order S-3-05, signed June 1, 2005, set the following GHG reduction targets for the state:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in Executive Order S-3-05. Based on the GHG emissions inventory conducted for its 2008 Scoping Plan, the California Air Resources Board (CARB) approved a 2020 emissions limit of 427 million metric tons of carbon dioxide-equivalent ($MMTCO_2e$) for the state (CARB 2008). CARB is required to update the Scoping Plan every five years and completed the last update in 2016. In 2015, the governor signed Executive Order B-30-15 into law, establishing a GHG reduction target of 40 percent below 1990 levels for year 2030, which was later codified under Senate Bill 32 (SB 32) in 2016.

Executive Order B-30-15 and SB 32 required CARB to prepare another update to the Scoping Plan to address the 2030 target for the state. On January 20, 2017, CARB released the *Draft 2017 Climate Change Scoping Plan Update* with adoption hearings planned for June of 2017. The *Draft 2017 Climate Change Scoping Plan Update* includes the potential regulations and programs including strategies consistent with AB 197 requirements to achieve the 2030 target. The 2017 Scoping Plan establishes a new emissions limit for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030 (CARB 2017).

In 2008, SB 375 was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce vehicle miles traveled and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 17 regions in California managed by an MPO. SCAG's targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035 (CARB 2010). SB 375 requires CARB to periodically update the targets, no later than every 8 years.

Senate Bill 743

On September 27, 2013, Senate Bill (SB) 743 was signed into law. The legislature found that with the adoption of SB 375, the state had signaled its commitment to encourage land use and transportation planning decisions and investments that reduce vehicle miles traveled and thereby contribute to the reduction of greenhouse gas emissions, as required by AB 32.

SB 743 started a process that will likely change transportation impact analysis as part of CEQA compliance. Changes include the elimination of auto delay, LOS, and similar measures of vehicular capacity or traffic congestion as the basis for determining significant impacts in many parts of California (if not statewide). The new criteria "shall promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses" (Public Resources Code Section 21099(b)(1)). On January 20, 2016, the Governor's Office of Planning and Research (OPR) released revisions to its proposed Draft CEQA guidelines for the implementation of SB 743. Once the guidelines are prepared and certified, "automobile delay, as described solely by level of service of similar measures of vehicular capacity or traffic congestion, shall not be considered a significant impact on the environment" (Public Resources Code Section 21099(b)(2)). Certification and implementation of the guidelines are expected in the second half of 2017. Since OPR has not yet amended the CEQA Guidelines to implement this change, automobile delay is still considered a significant impact, and this DEIR utilizes the established LOS criteria.

Regional Water Quality Control Board

Under the Porter-Cologne Water Quality Act, California's water quality control law, the State Water Resources Control Board (SWRCB) has ultimate control over water quality policy and allocation of state water resources. The SWRCB, through its nine Regional Water Quality Control Boards, carries out the regulation, protection, and administration of water quality in each region. Each regional board is required to adopt a water quality control plan or basin plan. The Specific Plan area is located in the Los Angeles Water Quality Control Board Region 4, for which the water quality control plan was adopted in 1994. The basin plan gives direction on the beneficial uses of the state waters in the region; describes the water quality that must be maintained to support such uses; and provide programs, projects, and other actions necessary to achieve the standards in the basin plan. Waste discharge requirements for discharges to municipal storm drain systems in the Los Angeles Water Board Region are in Order No. R4-2012-0175 (MS4 Permit) issued by the Los Angeles Regional Water Quality Control Board in 2012.

Los Angeles County Metropolitan Transportation Authority

The Los Angeles Metropolitan Transit Authority (Metro) is Los Angeles County's designated congestion management agency. Metro is responsible for conformance monitoring and updating the Los Angeles County Congestion Management Program (CMP), a multimodal program. The most recent CMP was issued by Metro in 2010. The goals of the CMP are to link local land use decisions with their impacts on regional transportation and air quality and to develop a partnership among transportation decision makers on devising appropriate transportation solutions that include all modes of travel. To meet these goals, the CMP provides:

- Tracking and analysis to determine how the regional highway and transit systems are performing.
- Local analysis of the impacts of local land use decisions on regional transportation.
- Local implementation of Transportation Demand Management (TDM) design guidelines that ensure new development includes improvements supportive of transit and TDM.

- Tracking of new building activity throughout Los Angeles County (Metro 2010).

The proposed project's consistency with the CMP is provided in Section 5.12, *Transportation and Traffic*.

4.3 LOCAL ENVIRONMENTAL SETTING

4.3.1 Location and Land Use

Location

The Specific Plan area encompasses 658 acres, of which 473 acres are designated for land use development and the remaining acres for rights-of-way (i.e., roadways, utility easements, and drainage). The project site encompasses portions of the West Athens and Westmont communities and is bounded generally by Lohengrin Street/West 110th Street to the north, West 120th Street/West 121st Street to the south, Vermont Avenue to the east, and Lohengrin Street/Imperial Highway/South Wilton Place/Western Avenue to the west. I-105 runs east-west through the Specific Plan area and divides it into northern and southern portions.

Existing Land Uses

Existing land uses on the project site include 198 acres of single-family residential uses, 85 acres of institutional uses, 53 acres of commercial use, 46 acres of multifamily residential use, 36 acres of duplex/triplex residential use, 19 acres of occupied right-of-way, 17 acres of vacant land, and 15 acres of miscellaneous use (see Figure 4-1, *Existing Land Uses*).

Within the Specific Plan area, single-family residences encompass the majority of existing uses to the north and south of I-105, and the majority of multifamily residences are in the northeastern and eastern portions of the Specific Plan area. Commercial uses are located primarily along Imperial Highway, Vermont Avenue, and Western Avenue. Institutional uses include the Los Angeles Southwest College (LASC), the Los Angeles County Sheriff's Station, St. Francis Xavier Cabrini Catholic School and Church, West Athens Elementary School, and Southside Christian Baptist Church.

The Metro Green Line runs along the median of I-105 for the majority of its route, which extends from the City of Norwalk to the City of Redondo Beach. The Vermont/Athens Green Line station platform sits at freeway level and is under the Vermont Avenue overpass.

4.3.2 Scenic Features

The Specific Plan area has very little topographic variation and an average elevation of 203 feet above mean sea level. Its relative flatness provides no physical boundaries that indicate the neighborhood's edge; rather, the neighborhood continues in all visible directions. The project area is almost entirely built out and is characterized by a commercial corridor along Western Avenue and Vermont Avenue, the LASC campus in the center of the site, and residential neighborhoods to the north and south of I-105.

The most significant element that impacts the urban form and design character of the project area is the I-105 freeway corridor, which includes the median-aligned Metro Green Line. The east-west corridor traverses

the West Athens-Westmont community, dividing the Specific Plan area into north and south. The freeway is in a below-grade trench and is isolated from the surrounding neighborhoods by graded slopes and large berms. The Southern Pacific Railroad is a single-track, heavy-gauge rail line on the south side of I-105 and has at-grade crossings at Vermont Avenue, Budlong Avenue, and Normandie Avenue.

Additionally, five key land use districts are identified in the Specific Plan—Vermont Station Corridor, Civic Center, Western Avenue Commercial, Single Family Residential, and Multi-Family Residential.

Refer to Section 5.1, *Aesthetics*, for additional information regarding visual character and quality and an analysis of the project's aesthetic impacts.

4.3.3 Climate and Air Quality

The Los Angeles area has a Mediterranean-type climate, with dry, warm summers and mild, somewhat wet winters. Breezes from the Pacific Ocean tend to keep the coastal communities of the Los Angeles area cooler in summer and warmer in winter than those further inland. The Los Angeles Basin climate contributes to increased levels of ambient air pollutant concentrations. The average wind speed for Los Angeles is the lowest of the nation's 10 largest urban areas. The summertime maximum mixing height also averages the lowest in the United States, resulting in poor dispersal of pollutants vertically in the atmosphere.

The South Coast Air Quality Management District is responsible for ensuring that its air basin meets the attainment criteria of each pollutant. The South Coast Air Basin is designated nonattainment for O_3, $PM_{2.5}$, PM_{10}, and lead (Los Angeles County only) under the California and National AAQS and nonattainment for NO_2 under the California AAQS. An air quality analysis was performed for the project, and the results are discussed in Section 5.2, *Air Quality*. Project-related impacts from GHG emissions are discussed in Section 5.4, *Greenhouse Gas Emissions*.

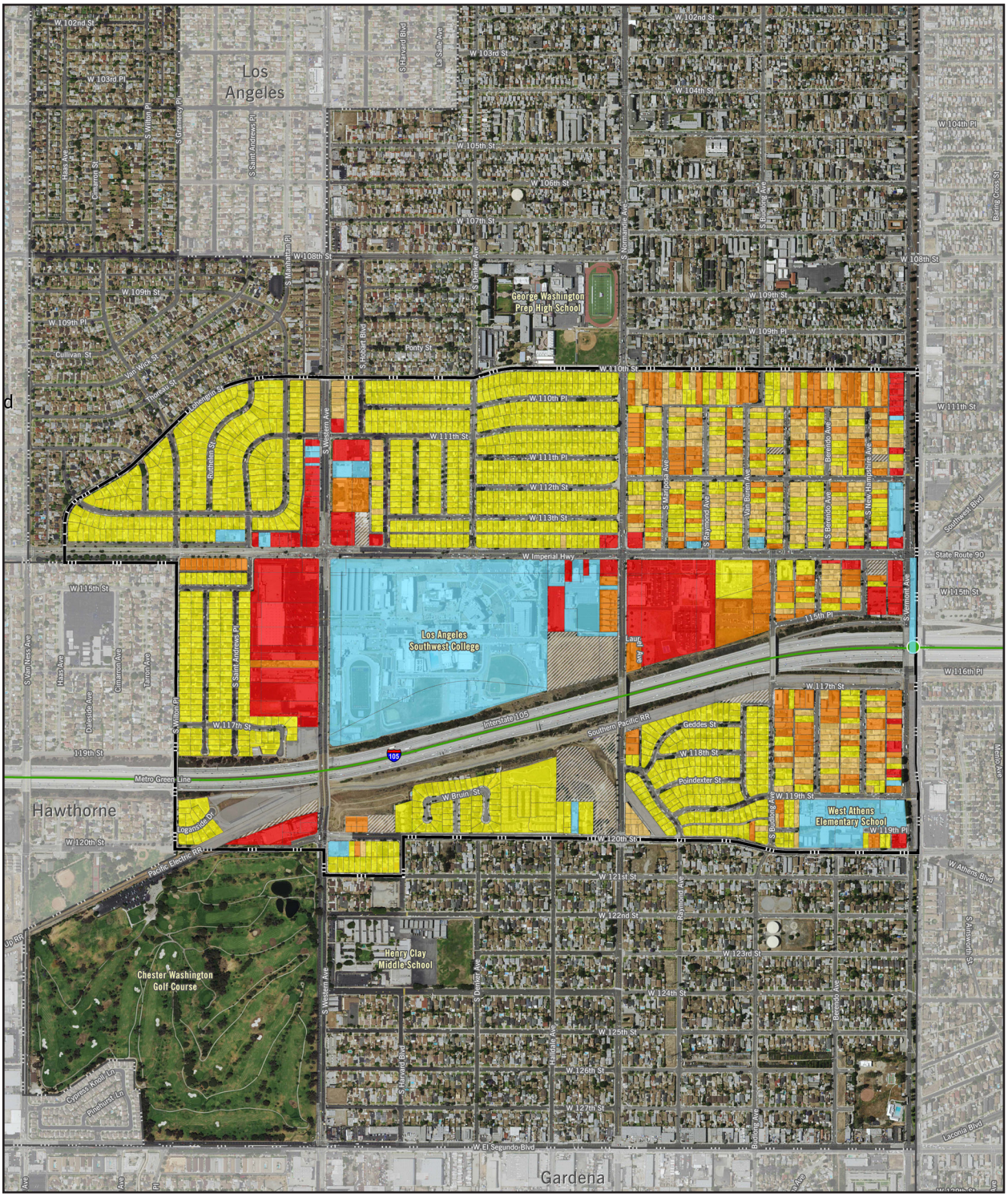
4.3.4 Cultural and Tribal Cultural Resources

The project site is located within the western extent of the Los Angeles Basin (Basin), which is part of the Peninsular Range Geomorphic Province of California. The Basin is a coastal plain extending from the Pacific Ocean on the south to the Santa Monica Mountains and Puente Hills on the north. The Basin is also described as consisting of thousands of meters of post-Jurassic sediment overlying crystalline basement rocks.

The project area is within the Southwestern Block of the Basin, of which the basement is the distinguishing feature. The basement rocks belong to the Catalina schist facies of the Franciscan Formation and are chiefly green chlorite and blue glaucophane schists.

The project area is associated with the traditional territory of the prehistoric and protohistoric Native American populations generally referred to as the Gabrieliño/Tongva. The Gabrieliño/Tongva society is identified by Late Prehistoric/Protohistoric ethnographic records and archaeological data as occupying Southern California in the Late Prehistoric.

Figure 4-1 - Existing Land Uses
4. Environmental Setting



- Vermont/Athens Station
- Metro Green Line
- Specific Plan Area
- City Boundaries

Existing Land Use

- Single-Family Residential
- 2-3 Units Residential
- Multifamily Residential (4+ Units)
- Commercial
- Industrial
- Institutional
- Miscellaneous
- Vacant

0 1,500
Scale (Feet)

Source: Los Angeles County DRP, 2016

4. Environmental Setting

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Tribal consultation required under Senate Bill 18 and Assembly Bill 52 was conducted as part of the project's environmental review. Refer to Sections 5.3, *Cultural Resources*, and 5.13, *Tribal Cultural Resources*, for additional information regarding existing cultural and tribal cultural resources and an analysis of the proposed project's impacts.

4.3.5 Hazards and Hazardous Materials

The project site is predominantly built out with urban uses that may involve the routine use, transport and disposal of hazardous materials, such as gas stations, industrial uses, auto repair shops, etc. Residences and commercial uses also regularly utilize hazardous materials for maintenance and operations. An environmental database search for the project site and surroundings was conducted to identify any potential hazardous materials sites. Project-related impacts from the identified potential hazards are analyzed in Section 5.5, *Hazards and Hazardous Materials*.

4.3.6 Noise

Community noise levels are measured in terms of the "A-weighted decibel." A-weighting is a frequency correction that correlates overall sound pressure levels to the frequency response of the human ear. The noise rating scale used in California for land use compatibility assessment is the Community Noise Equivalent Level, a time-weighted, 24-hour average noise level based on the A-weighted decibel.

Noise levels in the project area are influenced primarily by motor vehicle traffic along highways (i.e., I-105) and major arterial roadways (i.e., Vermont Avenue, Western Avenue, Imperial Highway, and Normandie Avenue). Existing operations (HVAC systems, truck deliveries, landscaping, maintenance, etc.) of LASC and commercial uses along Western Avenue and Vermont Avenue also add to the noise levels in the project area.

Refer to Section 5.8, *Noise*, for additional information regarding existing noise conditions and an analysis of project noise impacts.

4.3.7 Public Services and Utilities

The Specific Plan area is in the jurisdictional boundaries of the following public service and utility providers:

- **Police Protection:** Los Angeles County Sheriff's Department
- **Fire Protection**: Los Angeles County Fire Department
- **Schools**: Los Angeles Unified School District
- **Libraries**: County of Los Angeles Public Library
- **Parks**: Los Angeles County Department of Parks and Recreation
- **Water**: Golden State Water Company Southwest System
- **Sewers**: Los Angeles County Department of Public Works (sewer lines)
- **Wastewater Treatment**: Sanitation Districts of Los Angeles County
- **Storm Drainage**: Los Angeles County Department of Public Works and Caltrans

- **Solid Waste Collection**: Consolidated Disposal Services-Gardena (under exclusive contract with Los Angeles County Department of Public Works)
- **Landfills**: Sanitation Districts of Los Angeles County
- **Electricity**: Southern California Edison
- **Natural Gas**: Southern California Gas Company

Refer to Sections 5.10, *Public Services*, and 5.14, *Utilities and Service Systems*, for additional information regarding public services and utilities service systems and an analysis of project impacts on public services and utilities.

4.3.8 Transportation and Traffic

As described under Section 4.3.1, the existing street network in the project area includes major highways and roadways, including I-105, Vermont Avenue, Imperial Highway, Western Avenue, Normandie Avenue, and 120th Street.

The Specific Plan area is serviced by eight local bus routes operated by Metro and the City of Gardena. The Metro Green Line also operates within the project area along I-105 and provides light rail service connecting the South Bay, Harbor Gateway, and Norwalk communities.

Pedestrian sidewalks exist along major corridors within the Specific Plan area although they are mostly narrow and are not designed to support high levels of pedestrian activity. Additionally, the existing bicycle network is limited to one Class II bicycle lane running north and south along Vermont Avenue between 100th and 200th Street, and is approximately one mile in length.

Refer to Section 5.12, *Transportation and Traffic*, for additional information regarding transportation and mobility conditions and an analysis of project impacts on transportation and traffic.

4.3.9 General Plan and Zoning

General Plan

Los Angeles County General Plan land use designations for the project site are based on the West Athens-Westmont Community Plan, adopted in 1990 and amended in 2003. The community plan designates the following land uses in the proposed Specific Plan area (see Figure 4-2, *Community Plan Land Uses*):

- Single-Family Residence (RD 2.3; 1 to 8 dwelling units per acre [du/ac]); 183 acres
- Two Family Residence (RD 3.1; 8 to 17 du/ac); 91 acres
- Medium Density Bonus (RD 3.2; 17 to 30 du/ac); 8 acres
- Senior Citizen-Density Bonus (SCD; 30 to 50 du/ac); 4 acres
- Regional Commercial (C.1); 21 acres
- Community Commercial (C.2); 36 acres
- Recreation/Open Space (OS.1); 1.6 acres
- Public/Quasi-Public Use (PL.1); 99 acres

- Transportation Corridor (TC); 25 acres

Zoning

The Los Angeles County Code of Ordinances, Section 22, classifies the Specific Plan area by the following zones (see Figure 4-3, *Existing Zoning*):

- Light Agriculture (A-1); 93.7 acres
- Buffer Strip (B-1); 3 acres
- Restricted Business (C-1); 0.4 acre
- Neighborhood Business (C-2); 60.5 acres
- General Commercial (C-3); 7.3 acres
- Open Space (O-S); 0.3 acre
- Single-Family Residence (R-1); 186.9 acres
- Two-Family Residence (R-2); 91.8 acres
- Limited Density Multiple Residence (R-3-U); 18 acres
- Residential Planned Development (RPD); 6.9 acres

In addition, the Community Standards District, Title 22 Section 44, adds the West Athens-Westmont Community Standards District as a zoning overlay to the Specific Plan area. This zoning overlay establishes a means of implementing special development standards necessary to ensure achievement of the goals and policies of the West Athens-Westmont Community Plan.

4.4 ASSUMPTIONS REGARDING CUMULATIVE IMPACTS

Section 15130 of the CEQA Guidelines states that cumulative impacts shall be discussed where they are significant. It further states that this discussion shall reflect the level and severity of the impact and the likelihood of occurrence, but not in as great a level of detail as is necessary for the project alone. Section 15355 of the Guidelines defines cumulative impacts as "…two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Cumulative impacts represent the change caused by the incremental impact of a project when added to other proposed or committed projects in the vicinity.

The CEQA Guidelines (Section 15130 (b)(1)) state that the information used in an analysis of cumulative impacts should come from one of two sources, either:

A. A list of past, present and probable future projects producing related cumulative impacts, including, if necessary, those projects outside the control of the agency; or

B. A summary of projections contained in an adopted general plan or related planning document designed to evaluate regional or area-wide conditions.

4. Environmental Setting

For the most part, the cumulative impact analyses in this DEIR use Method B, using the projections in the County's recently updated General Plan or another long-range planning document, such as the Golden State Water Company Southwest District's 2015 Urban Water Management Plan for water supply and SCAG's 2016-2040 RTP/SCS for land use and planning impacts. Given the size of Los Angeles County, this cumulative impact analyses will use the growth projections for the West Athens-Westmont Community Plan in the Metro Planning Area as established in the County of Los Angeles 2035 General Plan. The data in Table 4-1 represents buildout projections for the West Athens-Westmont Community Plan area.

Table 4-1 West Athens-Westmont Community Plan Area Buildout Projections

	Acres	Dwelling Units	Population	Nonresidential SF	Employment
Commercial	155	0	0	6,047,000	8,456
Public & Open Space	278	0	0	4,773,000	1,813
Residential	1,057	11,185	40,539	0	625
TOTAL	1,489	11,185	40,539	10,820,000	10,894

Source: Los Angeles County 2035 General Plan.

Cumulative impact analyses are also based on the most appropriate geographic boundaries for the respective impact. For example, several potential cumulative impacts encompass regional boundaries (e.g., traffic, air quality, greenhouse gases) and are addressed in the context of various regional plans and defined significance thresholds. Following is a summary of the approach and extent of cumulative impacts, which are further detailed in each topical environmental section.

- **Aesthetics.** Cumulative impacts consider the potential for the project and related projects to impact scenic resources in the West Athens-Westmont Community Plan area.

- **Air Quality.** Air quality impacts are both regional impacts and localized impacts. For cumulative impacts, the analysis is based on the regional boundaries of the South Coast Air Basin.

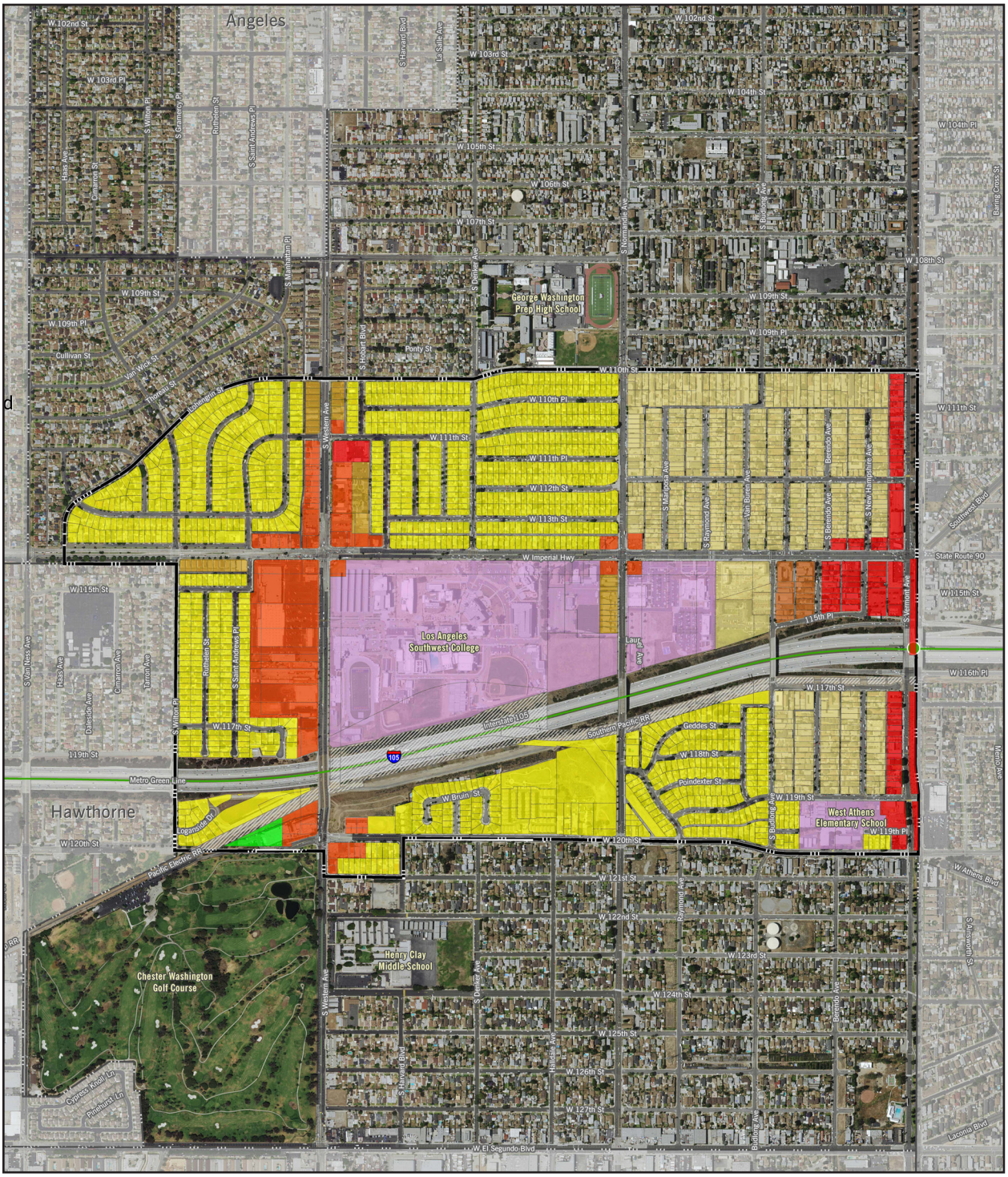
- **Cultural Resources.** Cumulative impacts consider the potential for the proposed project in conjunction with related development projects to result in compounded impacts on cultural resources in the area within a one-half-mile radius for historical, archaeological, and paleontological resources.

- **GHG Emissions.** GHG emissions impacts are not site-specific impacts but cumulative impacts. Therefore, the cumulative analysis in this DEIR analyzes the project's cumulative contribution to GHG emissions impact within the region.

- **Hazards and Hazardous Materials.** Hazards and hazards materials impacts are site specific and are limited to the Specific Plan area and immediate area.

- **Land Use and Planning.** Cumulative impacts are based on jurisdictional boundaries and related plans, including the County of Los Angeles General Plan and regional land use plans (e.g., SCAG's RTP/SCS).

Figure 4-2 - Community Plan Land Uses
4. Environmental Setting



Community Plan Land Use

- City Boundaries
- Specific Plan Area
- Vermont/Athens Station
- Metro Green Line
- RD 2.3 - Single Family Residence
- RD 3.1 - Two Family Residence
- RD 3.2 - Medium Density Bonus
- SCD - Senior Citizen Density Bonus
- C.1 - Regional Commercial
- C.2 - Community Commercial
- PL.1 - Public/Quasi-Public Use
- OS.1 - Recreation/Open Space
- TC - Transportation Corridor

0 1,500
Scale (Feet)

Source: Los Angeles County DRP, 2016

4. Environmental Setting

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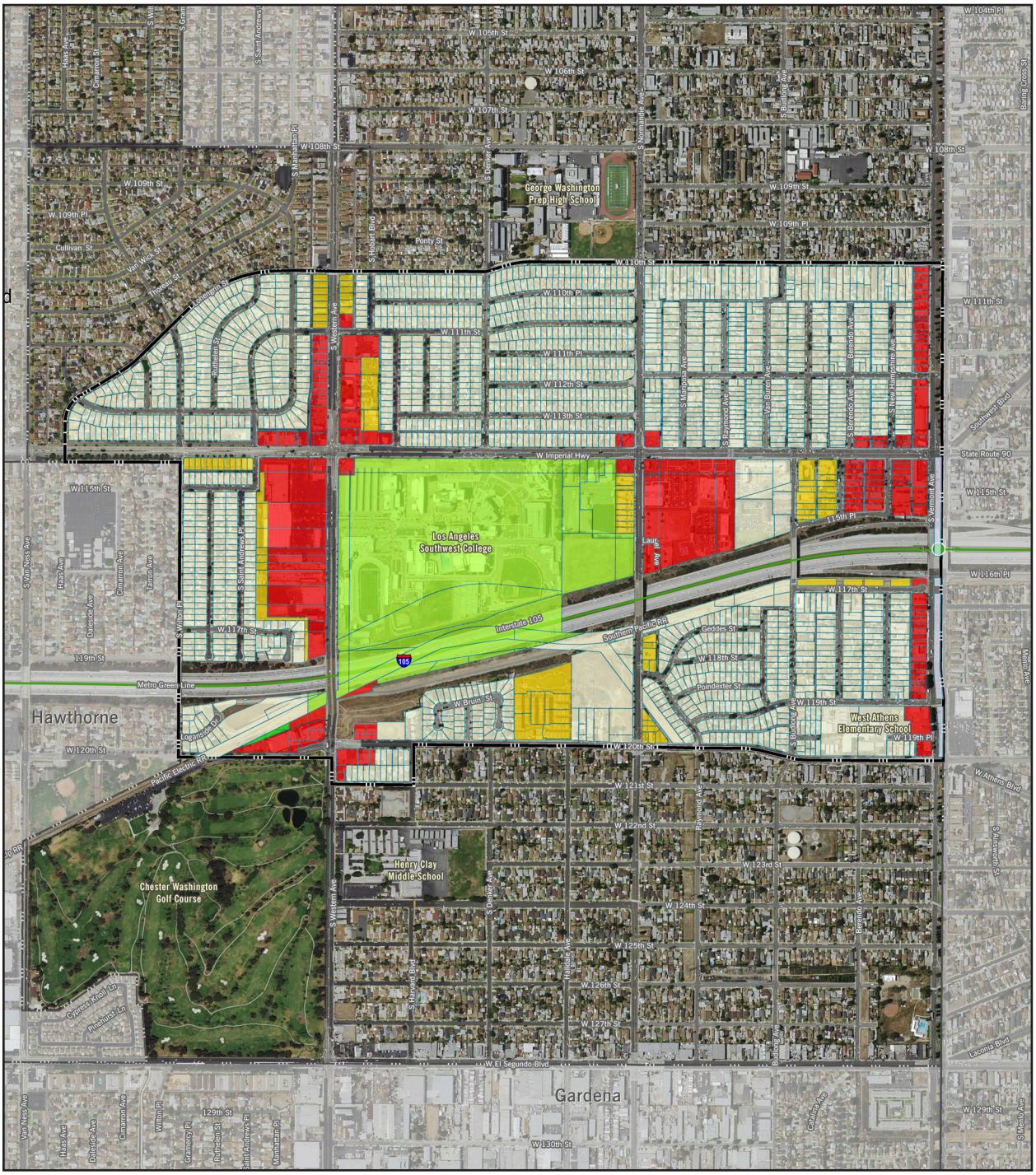
Figure 4-3 - Existing Zoning
4. Environmental Setting



City Boundaries
Specific Plan Area
Vermont/Athens Station
Metro Green Line

DRP Zone

- R-1 - Single Family Residence
- R-2 - Two Family Residence
- R-3 - ()U Limited Medium Density Residence
- RPD - Residential Planned Development
- A-1 - Light Agricultural
- C-1 - Restricted Business
- C-2 - Neighborhood Business
- C-3 - Community Commercial
- B-1 - Buffer Strip
- R-R - Resort and Recreation
- O-S - Open Space

0 1,500
Scale (Feet)

Source: Los Angeles County DRP, 2016

4. Environmental Setting

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- **Noise.** Cumulative noise impacts are based on the traffic study, which considers the regional growth based on local and regional projections.

- **Population and Housing.** Cumulative impacts are based on regional demographic patterns identified in regional plans (e.g., SCAG's RTP/SCS).

- **Public Services.** Cumulative impacts are based on potential related development within each service provider's boundaries—Los Angeles County Sheriff's Department, Los Angeles County Fire Department, Los Angeles Unified School District, and County of Los Angeles Public Library.

- **Recreation.** Cumulative impacts are assessed relative to Los Angeles County Parks and Recreation Department standards and are based on impacts within the Metro Planning Area and the West Athens-Westmont Community Plan area.

- **Transportation and Traffic.** The traffic study considers both project-specific and the project's cumulative contribution to traffic in the project study area. The analysis is based on a regional transportation demand model and incorporates regional growth projections identified by SCAG.

- **Tribal Resources.** Cumulative impacts related to tribal cultural resources are based on the local Native American tribes' tribal territories that they are traditionally and culturally affiliated with, which include, but are not limited to, cultural landscapes and regions, specific heritage sites, and other tribal cultural places.

- **Utilities and Service Systems.** Water supply and distribution systems would be contiguous with the Golden State Water Company Southwest System service area; wastewater collection would be contiguous with the Los Angeles County Department of Public Works/Caltrans service area; wastewater treatment would be contiguous with the Sanitation Districts of Los Angeles County service area; storm drainage systems would be contiguous with the Los Angeles County Department of Public Works service area; solid waste collection would be contiguous with the Consolidated Disposal Service-Gardena service area; landfill services would be contiguous with the Sanitation Districts of Los Angeles County service area; and natural gas and electricity services would be contiguous with the Southern California Gas Company and Southern California Edison service areas.

Please refer to Chapter 5, *Environmental Analysis*, of this DEIR for a discussion of the cumulative impacts associated with development and growth in West Athens-Westmont for each environmental resource area.

4.6 REFERENCES

California Air Resources Board (CARB). 2008, October. Climate Change Proposed Scoping Plan: A Framework for Change.

———. 2010, August. Proposed Regional Greenhouse Gas Emission Reduction Targets for Automobiles and Light Trucks Pursuant to Senate Bill 375. Staff Report.

4. Environmental Setting

———. 2017, January 20. The 2017 Climate Change Scoping Plan Update: The Proposed Strategy for Achieving California's 2030 Greenhouse Gas Target. https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf.

Southern California Association of Governments (SCAG). 2016 April 7. Regional Transportation Plan/Sustainable Communities Strategy. http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf.

5. Environmental Analysis

Chapter 5 examines the environmental setting of the proposed project, analyzes its effects and the significance of its impacts, and recommends mitigation measures to reduce or avoid impacts. This chapter has a separate section for each environmental issue area that was determined to need further study in the EIR. This scope was determined in the notice of preparation (NOP), which was published May 17, 2017, and through public and agency comments received during the NOP comment period from May 31, 2017, to July 5, 2017 (see Appendix A). Environmental issues and their corresponding sections are:

- 5.1 Aesthetics
- 5.2 Air Quality
- 5.3 Cultural Resources
- 5.4 Greenhouse Gas Emissions
- 5.5 Hazards and Hazardous Materials
- 5.6 Hydrology and Water Quality
- 5.7 Land Use and Planning
- 5.8 Noise
- 5.9 Population and Housing
- 5.10 Public Services
- 5.11 Recreation
- 5.12 Transportation and Traffic
- 5.13 Tribal Cultural Resources
- 5.14 Utilities and Service Systems

Sections 5.1 through 5.14 provide detailed discussions of the environmental setting, impacts associated with the proposed project, and mitigation measures designed to reduce significant impacts where required and when feasible. The residual impacts following the implementation of any mitigation measure are also discussed.

Chapter 8, *Impacts Found Not to Be Significant*, substantiates why some environmental topical sections and certain issues under an environmental topic would not be significantly affected by implementation of the project; these issues are not discussed further in this EIR.

Organization of Environmental Analysis

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

5. Environmental Analysis

- Environmental Setting
- Thresholds of Significance
- Plans, Programs and Policies
- Environmental Impacts
- Cumulative Impacts
- Existing Regulations and Standard Conditions
- Level of Significance Before Mitigation
- Mitigation Measures
- Level of Significance After Mitigation
- References

In addition, Chapter 1, *Executive Summary,* includes a table of all impacts by environmental issue.

Terminology Used in This Draft EIR

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

- **No impact.** The project would not change the environment.

- **Less than significant.** The project would not cause any substantial, adverse change in the environment.

- **Less than significant with mitigation incorporated.** The EIR includes mitigation measures that avoid substantial adverse impacts on the environment.

- **Significant and unavoidable.** The project would cause a substantial adverse effect on the environment, and no feasible mitigation measures are available to reduce the impact to a less than significant level.

5.1 AESTHETICS

This section of the Draft Environmental Impact Report (DEIR) describes the existing landform and aesthetic character of the project site and surrounding area and describes views of the project site from surrounding vantage points. It analyzes the potential aesthetic and visual impacts resulting from implementation of Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont.

5.1.1 Environmental Setting

5.1.1.1 RELEVANT PROGRAMS AND REGULATIONS

State

California Building Code

The California Building Code, Part 2 of Title 24 in the California Code of Regulations, is based on the International Building Code and combines three types of building standards from three different origins:

- Building standards that have been adopted by state agencies without change from building standards in the International Building Code.
- Building standards that have been adopted and adapted from the International Building Code to meet California conditions.
- Building standards, authorized by the California legislature, that constitute extensive additions not covered by the International Building Code that have been adopted to address particular California concerns.

The California Building Code includes standards for outdoor lighting that are intended to improve energy efficiency and reduce light pollution and glare by regulating light power and brightness, shielding, and sensor controls.

Local

Los Angeles County Code

The Los Angeles County Code identifies land use categories, development standards, and other general provisions that ensure consistency between the County's General Plan and proposed development projects. The following provisions from the County Code help minimize visual and light and glare impacts associated with new development projects and are relevant to the proposed project.

- **Title 22 (Zoning Ordinance).** This section describes the development standards that apply to each zone (e.g., height limits, setbacks, etc.).
  - Chapter 22.20 (Residential Zones) contains provisions that regulate the uses that are permitted in residential zones, as well as the development standards that apply in those zones.

- Chapter 22.48 (Yards, Highway Lines and Highways) contains provisions that pertain to the regulation of and development standards for highways and parkways.
- Chapter 22.44 (Supplemental Districts), Part 9 (Rural Outdoor Lighting District) allows for the establishment of rural outdoor lighting districts, which promote and maintain dark skies for the health and enjoyment of individuals and wildlife. The regulations in Chapter 22.44 are in addition to other provisions in the Zoning Ordinance that regulate light and glare.
- Chapter 22.44 (Supplemental Districts), Part 2 (Community Standards Districts), contains development regulations for a list of communities that form districts for this purpose. The development standards outlined in Part 2, which apply to these districts, supersede the countywide standards in the Zoning Ordinance.
- Chapter 22.52 (General Regulations) contains a number of general regulations, including Part 10 (Signs), which regulates the design, siting, and maintenance of all signs in the project area. These regulations are intended to provide standards for the protection of property values; visual aesthetics; and the public health, safety, and general welfare of citizens while still providing ample opportunities for businesses and the visual advertising industry to operate successfully and effectively.
- Section 22.56 (Conditional Use Permits, Variances, Nonconforming Uses, Temporary Uses and Director's Review), Part 1 (Conditional Use Permits), contains regulations that pertain to the County's review of conditional use permits (CUPs). This section establishes that the purpose of CUPs is to allow for special consideration where particular project characteristics exist relating to the project's size, technological process or type of equipment, or because of its location with reference to surroundings, street or highway width, traffic generation, or other demands on public services. Provisions in Section 22.56 ensure that development projects subject to review associated with a CUP are consistent with applicable development standards and therefore consistent with other developments held to those standards.

- **Healthy Design Ordinance (Ordinance 2013-0001).** The 2013 Healthy Design Ordinance amended portions of Titles 21 (Subdivisions) and 22 (Planning and Zoning) to establish certain uses, permit requirements, and development standards that encourage healthy lifestyles by promoting walking, biking, and other exercise, and by creating better access to healthy foods. The aspects of this ordinance that would most impact visual resources are the changes to the minimum width of sidewalks, requirements for bike parking, and altered permit requirements that require more detailed street-section designs on tentative plans in order to depict healthy design features such as landscaping, lighting, and street furniture.

5.1.1.2 EXISTING CONDITIONS

Visual Character

The community of West Athens-Westmont, including the Specific Plan area, is very urbanized and almost entirely built out. The Specific Plan area is characterized by commercial corridors along Western Avenue and

Vermont Avenue, the Los Angeles Southwest College campus in the center of the site, and residential neighborhoods to the north and south of Interstate 105 (I-105).

The most significant element that impacts the urban form and design character of the project area is the I-105 freeway corridor, including the median-aligned Metro Green Line. The east-west corridor traverses the West Athens-Westmont community in a below-grade trench, isolated from the surrounding neighborhoods by graded slopes and large berms. Additionally, the Southern Pacific Railroad, a single-track, heavy-gauge rail line, is on the south side of I-105 and has at-grade crossings at Vermont Avenue, Budlong Avenue, and Normandie Avenue.

The following five key land use districts are identified in the Specific Plan based on each district's block character (e.g., block size/dimensions, parcel size, intersections, through streets), streetscape character (e.g., street and sidewalk width, number of travel lanes, curb cuts, street trees, parking availability), and development character (e.g., setbacks, building heights, building orientation) (see Figure 5.1-1, *Land Use Districts Map*).

Vermont Station Corridor.

The Vermont Station Corridor District encompasses the properties fronting Vermont Avenue from 110th Street to 120th Street, including the Vermont Green Line Station and a center-running median. Vermont Avenue acts as a major north-south transportation corridor through the project area. The street is 150 feet wide with three travel lanes, a Class II Bike Lane, and street parking in both directions. The street features a 60-foot-wide median that features mature trees in the segment north of the freeway. Sidewalks are approximately 5 feet wide, separated from the street by an 8-foot planting strip right-of-way.

The Vermont Green Line Station is at the intersection of Vermont Avenue and I-105, accessed via the station entrance on the Vermont Avenue overpass. The station platform in the freeway median exposes transit users to excessive noise and air pollution.

The average block along the corridor is approximately four acres. Five blocks are oriented in a linear fashion along Vermont Avenue in this district. The traditional block structure is interrupted by I-105 and the access ramps to/from Vermont Avenue. Parcels range from 0.15 acre to 0.75 acre. The west side of the corridor, north of Imperial Highway, is occupied by buildings that have a zero-foot setback from the street and an average of 75 percent street frontage, forming an uninterrupted street wall along its length. The properties at the Vermont Avenue/Imperial Highway intersection have variable building setbacks that accommodate vehicular access and surface parking between the building frontages and the street. Store signage and billboards add to the visual clutter of the intersection.

South of the Vermont Green Line Station, development transitions to deep rectangular parcels featuring properties with several buildings with varying setbacks, with few properties that accommodate vehicles.

Civic Center

The Civic Center District encompasses the properties on the south side of Imperial Highway between Western Avenue and Budlong Avenue. This district is occupied by institutional land uses that share similar

urban design characteristics. Imperial Highway is a wide arterial street with two travel lanes in each direction and turning lanes. Narrow sidewalks, approximately four feet in width, are adjacent to the roadway. An intermittent center median with sparse planting is the only traffic-calming measure in the district. A transit stop is on Imperial Highway at Denker Avenue and features several pedestrian amenities: a covered bus stop, street furniture, trash receptacles, and a tree canopy.

Los Angeles Southwest College (LASC) is on a 64-acre site in this district. Signage is prominent at the entrances, bold and large for vehicular traffic to view easily. The buildings are set back significantly from the street in the center of campus. The campus stands apart from the scale and aesthetic of the surrounding community. It is an institutional superblock that anchors the West Athens-Westmont community. The design of the campus supports pedestrian activity, with significant sidewalk connectivity between buildings and plazas that serve as gathering places. One transit stop is on the edge of the campus block at Denker and features several pedestrian amenities: a covered bus stop, street furniture, trash receptacles, and a tree canopy.

The seven-acre St. Francis Xavier Cabrini School is adjacent to LASC and composed of buildings that vary in scale and orientation. The Los Angeles County Probation Department and Sheriff's Department occupy three separate structures on multiple contiguous parcels totaling approximately 15 acres on the southeast corner of Normandie Avenue and Imperial Highway. These buildings are set back an average of 160 feet from Imperial Highway, separated by a surface parking lot that features well-landscaped parking medians. The buildings are oriented toward the surface parking lot. The buildings are single story with institutional façade stylings.

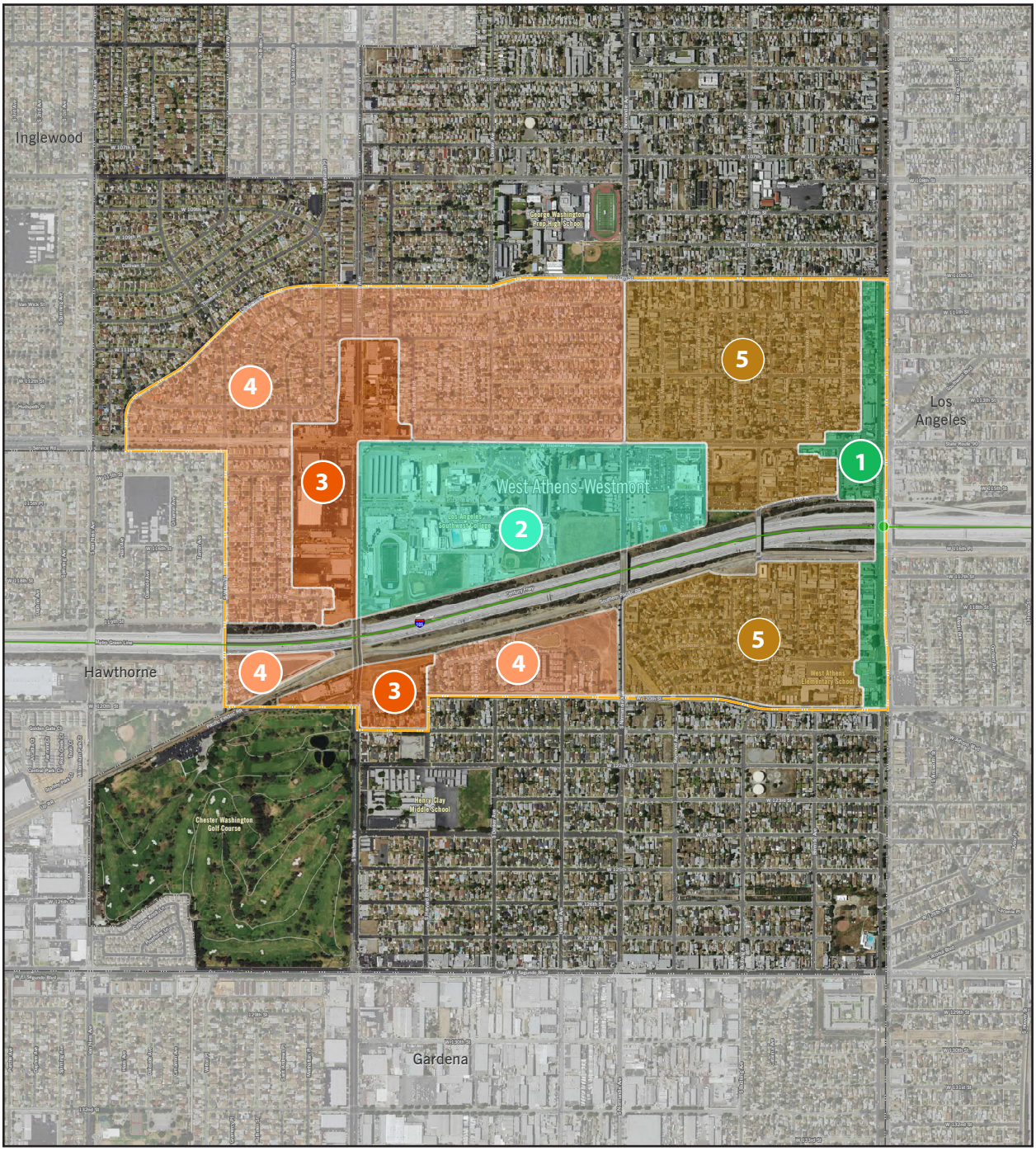
Western Avenue Commercial

The Western Avenue Commercial District is on the north and south side of I-105 along Western Avenue. The northern portion extends northerly to 111th Street. This area was identified by the General Plan as an opportunity area for a neighborhood center. Western Avenue is a wide arterial/collector street that averages 90 feet in width with four travel lanes, turning lanes, and intermittent center medians. The four- to five-foot-wide sidewalk is adjacent to the street and travel lanes. Signs and overhead utilities provide significant visual clutter. Limited sidewalk amenities include street lamps and street furniture near three bus stops.

Properties north of Imperial Highway on the west side of Western Avenue are typical of neighborhood commercial, with minimal setback from the sidewalk, creating an uninterrupted street wall between Imperial Highway and 111th Street. Properties south of Imperial Highway on the west side of Western Avenue are generally automobile oriented, with buildings set back an average of 60 feet from the roadway. Surface parking lots are between the building frontages and Western Avenue, and all the buildings face the parking lots. The buildings occupy a relatively low percentage of the street frontage and provide poor spatial definition to the public realm.

The southern portion of the Western Avenue Commercial District is south of I-105 and extends to the project area's southern extent at 121st Street. This small area includes the Department of Public Social Services building, vacant land along I-105, several apartment complexes, and single-family homes.

Figure 5.1-1 - Land Use Districts Map
5. Environmental Analysis



1 Vermont Station Corridor
2 Civic Center
3 Western Avenue Commercial
4 Single Family Residential
5 Multi-Family Residential

0 1/4
Scale (Miles)

Source: Los Angeles County DRP, 2017

5. Environmental Analysis
AESTHETICS

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Single-Family Residential

This district encompasses the residential neighborhoods north of I-105/west of Normandie Avenue and south of I-105/west of Budlong Avenue. These neighborhoods were largely developed between 1947 and 1955, apart from two gated subdivision developments to the north of 120th Street between Western and Normandie that were constructed in 1987 and 2012. Residential streets are approximately 30 feet wide, with one travel lane in each direction. Streets feel constrained where curbside parking is permitted on both sides of the street. Slight curves in residential streets give the sense that they are much longer because intersections are removed from view. Sidewalks are approximately 5 feet wide, separated from the curb by an 8-foot planting strip right-of-way, which is scattered with mature shade-producing trees and palm trees. Street lights and overhead power lines are also grounded in the street right-of-way, spaced 50 feet apart on average.

The older single-family homes are typical of postwar housing in Southern California—single-story, stucco-covered minimalist, traditional, or ranch-style homes with gable-styled pitched roofs. These homes were constructed as tract-housing developments, likely by various land-owning real estate developers. The predominant housing type is single-family homes, mostly single-story structures set back 15 feet from the right-of-way, oriented to the street, and accessed by a driveway. Many of these single-family homes have accessory units to the rear of the property, used for storage space or additional living space.

The two gated subdivisions differ significantly from the surrounding postwar neighborhood. College Park Estates, built in 1987, and Olive Glen, built in 2012, are both small, private housing developments with one- or two-story homes with ground-floor access that uniformly feature two-car garages fronting the street.

Multi-Family Residential

The Multi-Family Residential District encompasses residential neighborhoods north of I-105/east of Normandie Avenue and south of I-105/east of Budlong Avenue. These neighborhoods mainly consist of multifamily duplexes, triplexes, and apartment buildings built between 1920 and 1960. The primary residential streets are approximately 30 feet wide, with one travel lane in each direction and curbside parking along the majority of the streets. An alley network allows access to the rear of the properties, where the parking is located for many of the housing units. Sidewalks are approximately 5 feet wide, separated from the curb by an 8-foot planting strip right-of-way where street lights and overhead power lines are mounted. The street canopy is inconsistent throughout the neighborhood, with sporadic shade-producing trees and palm trees planted in the street right-of-way.

The multi-family homes and apartments vary significantly in size, orientation, setback, lot coverage, materials, and design. Most residences are separated from the public realm by a security fence, which vary in size and design material. The average front-yard setback is 12 feet, and side-yard setback averages 5 feet. Street-facing structures and side-yard-facing structures feature pedestrian walkways that link to the sidewalk, because the majority of on-site tenant parking is accessed via the alley network.

Visual Resources

Visual resources within the project area include I-105 and the LASC. Visual resources in the surrounding areas include I-110, the Chester Washington Golf Course, and Hawthorne Municipal Airport.

Landform

The project area is in the southwest portion of the Los Angeles Basin, which is part of the Peninsular Range Geomorphic Province of California. The basin is a coastal plain extending from the Pacific Ocean on the south to the Santa Monica Mountains and Puente Hills on the north. The project site has very little topographic variation and an average elevation of 203 feet above mean sea level. Overall, there is little change in elevation throughout the project site.

Scenic Vistas and Corridors

There are no scenic vistas or corridors in the project area. There are also no eligible or officially designated state scenic highways within the urban Metro Planning Area of Los Angeles County (Caltrans 2011).

Light and Glare

The project area is highly urbanized and has high levels of lighting. Existing sources of light and glare throughout the project site include building lights (interior and exterior), street lights, commercial signage, security lights, and parking-area lights. Commercial uses along Imperial Highway, Western Avenue, and Vermont Avenue have larger concentrations of light sources. In addition, the LASC campus has large sports fields that are sometimes lit during the evenings.

Nighttime light and glare also include the Metro Green Line Vermont station and vehicular traffic along the major roadways in the project site, including I-105, Imperial Highway, Vermont Avenue, and Western Avenue. Given the project site's location in a very urbanized, built-out environment, a significant amount of ambient lighting comes from surrounding communities and roadways as well.

5.1.2 Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, a project would normally have a significant effect on the environment if the project would:

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

AE-2 Be visible from or obstruct views from a regional riding or hiking trail.

AE-3 Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

AE-4 Substantially degrade the existing visual character or quality of the site and its surroundings because of height, bulk, pattern, scale, character, or other features.

AE-5 Create a new source of substantial shadows, light, or glare which would adversely affect day or nighttime views in the area.

5.1.3 Plans, Programs, and Policies

5.1.3.1 PROJECT DESIGN FEATURES

- Sections 4.3.4 through 4.3.13 in the Specific Plan detail development standards for each zoning district (e.g., setbacks, landscaping, building heights, and lot sizes).
- Sections 5.2 through 5.4 in the Specific Plan detail design guidelines for site design, building design, and public realm.

5.1.4 Environmental Impacts

Methodology

Aesthetic/Visual Character Analysis

The assessment of aesthetic impacts is subjective by nature. Aesthetics generally refer to the identification of visual resources and the quality of what can be seen as well as an overall visual impression of the environment. This analysis attempts to identify and objectively examine factors that contribute to the perception of aesthetic impacts. Potential aesthetic impacts can be evaluated by considering proposed building setbacks, scale, massing, typical construction materials, and landscaping features of the proposed project. However, there are no locally designated or defined standards or methodologies for the assessment of aesthetic impacts.

Light and Glare Analysis

Nighttime illumination and glare analysis addresses the effects of a project's exterior lighting on adjoining uses and areas. Light and glare impacts are determined by comparing the existing light sources with the proposed lighting plan or policies. If the project has the potential to generate spill light on adjacent sensitive receptors or generate glare for receptors in the vicinity of the site, mitigation measures can be provided to reduce potential impacts.

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.1-1: The proposed project would not adversely impact scenic vistas in the project area or damage scenic resources within a state scenic highway. [Thresholds AE-1 and AE-3]

Impact Analysis: The project site is in an urbanized area of Los Angeles and is surrounded by other urban communities and cities. The project area is almost entirely flat, and there are no scenic landforms or designated scenic resources. Therefore, development of the proposed project would not adversely impact any

scenic vistas in the project area. Additionally, there are no state scenic highways in the project area, and thus no scenic resources within state scenic highways would be impacted by the proposed development (Caltrans 2011).

Level of Significance before Mitigation: Based on the analysis above, Impact 5.1-1 would be less than significant.

Impact 5.1-2: The proposed project would not be visible from or obstruct views from a regional riding or hiking trail. [Threshold AE-2]

Impact Analysis: There are no regional riding or hiking trails in the project area or the community of West Athens-Westmont. The project site is in a very urbanized and built-out area. The closest regional riding or hiking trails are in the Kenneth Hahn State Recreation Area in the Baldwin Hills, approximately 6.5 miles northwest, or the Los Angeles River Trail, approximately 7.5 miles east along Interstate 710, that passes through South Gate, Paramount, and Long Beach (Los Angeles DPR 2017). Given these distances, the proposed project would not be visible from these regional riding and hiking trails. Thus, development in accordance with the proposed project would have no impact on the County's regional trails.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.1-2 would be less than significant.

Impact 5.1-3: The proposed project would not substantially degrade the existing character or quality of the Specific Plan area. [Threshold AE-4]

Impact Analysis: One of the guiding principles of the Specific Plan is to ensure compatible development, which entails that new development respect and respond to the existing scale, character, and density of the neighborhood by accommodating growth near the Metro Green Line Vermont station and the commercial nodes. By concentrating growth in the transit and commercial corridors, the Specific Plan would expand opportunities for compact development while being sensitive to the existing development character of the West Athens-Westmont community.

Section 5 of the Specific Plan includes design guidelines to create a distinct character for the project area, with a pedestrian emphasis that can cultivate a vital and active street life along major streets while creating an overall positive community aesthetic. As shown in Figure 5.1-1, *Land Use Districts Map*, the Specific Plan area is naturally distinguishable by five districts—the Vermont Station Corridor, Civic Center, Western Avenue Commercial, Single Family Residential, and Multi-Family Residential. For each land use district, the Specific Plan identifies opportunities for land use changes, urban design enhancements, and connectivity improvements that are appropriate to the scale, location, and character of each district.

Vermont Station Corridor District

Potential improvements of the Metro Green Line Vermont/Athens Station should provide better access and visibility from Vermont Avenue. Recommended improvements include upgrading the elevators, escalator, and stairs to the Metro Blue and Green Line platforms; widening the sidewalks to create a more prominent

entrance into the station; installing more streetscape amenities, benches, bus canopies, etc.; and improving lighting, landscaping, and transit signage.

Open spaces, such as pocket parks and urban plazas, could also be provided in this district. For example, a pocket park could be provided as a larger improved median along Vermont Avenue. The open space would increase pedestrian connectivity and provide a traffic-calming feature in the station area.

Development standards for the Vermont Station Corridor District are regulated by Neighborhood Commercial (C-2), Mixed Use 1 (MXD-1), and Mixed Use 2 (MXD-2) Zones.

- **C-2 Zone** development standards are generally consistent with Los Angeles County Code Chapter 22.20.030, C-2 Neighborhood Business Zone. Buildings would have a maximum floor area ratio (FAR) of 0.35, a maximum building height of 45 feet, and 10-foot building setbacks from roadways. A minimum of 20 percent of the lot must be landscaped with trees, ground cover, shrubbery, and flowers and can include pedestrian walkways, plazas, and outdoor dining areas. Sites with multiple buildings must be clustered to the extent possible to create shared outdoor spaces with direct pedestrian access between uses.

- **MXD-1 Zone** development standards encourage development of medium-density housing and daily retail and service commercial uses. Residences have minimum and maximum density requirement of 18 and 30 dwelling units per acre, respectively, and all nonresidential buildings have a minimum and maximum FAR of 1.0 and 1.5, respectively. Maximum building height is 45 feet (three stories). All new development adjacent to a major street (e.g., Vermont Avenue, Western Avenue, and Imperial Highway) has frontage-type requirements (e.g., shopfront, forecourt, terrace, stoop frontage). Facades and design features must be architecturally enhanced with arcades, window details, recessed entrances, balconies/porches, terraces, etc., to create distinction between units and provide "eyes" on the street. For residential development, 100 square feet of open space is required per dwelling unit in the form of common or private recreational-leisure areas. For nonresidential development, 500 square feet of open space is required for projects less than two acres, and 2,500 square feet of open space is required for projects greater than two acres.

- **MXD-2 Zone** development standards promote a transit-supportive environment through a higher intensity mix of retail, office, restaurant uses, and residential development in a compact walkable setting. Residences have minimum and maximum density requirements of 31 and 60 dwelling units per acre, respectively, and all nonresidential buildings have minimum and maximum FARs of 0.5 and 2.0, respectively. Maximum building height is 65 feet (four to five stories). Similar to the MXD-1 Zone, development along major roadways has required building frontage types and street-wall facades, and projecting design features are encouraged to help visually create distinction between units and create pedestrian-oriented detailing on wall, window, and entrance areas. The MXD-2 Zone has the same open space requirements as the MXD-1 Zone.

The proposed improvements along the Vermont Station Corridor District would enhance the urban design and connectivity of the corridor and, upon compliance with the development standards for the C-2, MXD-1 and MXD-2 Zones, would have less than significant aesthetic impacts.

Civic Center District

This district encompasses the LASC and underutilized land owned by the County. The district would be redeveloped into a more unified area with both public institutional and community-serving uses (i.e., commercial, office, and public open space) at the corner of Imperial Highway and Normandie Avenue (see Figure 3.4, *Conceptual Site Plan for the Civic Center*, of the Specific Plan). Redevelopment of the district would help integrate the existing civic uses and the multifamily residential areas to the east into a more walkable and cohesive pedestrian-oriented district that is well connected to the Vermont/Athens station to the east via a multiuse pathway. This would provide housing options, including workforce or senior housing, in proximity to both employment uses and transit.

The Civic Center District is zoned Public Institutional (IT) Zone and encompasses the LASC campus. The IT Zone is regulated by development standards tailored to its future uses, including community open space, recreation, and other public uses. All buildings have a maximum FAR of 3.0 and maximum building height of 80 feet (six stories).

Redevelopment of the Civic Center District into a more cohesive and pedestrian-oriented environment would enhance the public realm of the LASC and civic uses, thereby improving the visual quality and character of the district in comparison to existing conditions. Impacts would be less than significant.

Western Avenue Commercial District

The Western Avenue commercial corridor exhibits a development character similar to a neighborhood retail district. Infill commercial and mixed-use development would respect the existing character of the district. New development and adaptive reuse of existing buildings developed under the proposed development standards would promote more pedestrian activity along Western Avenue and Imperial Highway in this area (see Figure 3.5, *Conceptual Site Plan for the Western Avenue Commercial Corridor Focus Area*, of the Specific Plan). Through lot consolidation and development of a unified project at higher densities, this district has the potential to create a mixed-use area with new small-scale retail service developments and restaurants that serve the daily needs of local residents and college students.

Development standards for the Western Avenue Commercial District are regulated by C-2, MXD-1, and MXD-2 Zones, which are detailed above. The Los Angeles County Department of Social Services (south of I-105 near the Chester Washington Golf Course) and Ánimo South Los Angeles Charter High School (at 11100 South Western Avenue) are also in this district but are zoned Public/Institutional. No major changes would occur to these areas under the Specific Plan. Overall, development of the Western Avenue Commercial District in accordance with the development standards for the C-2, MXD-1, and MXD-2 Zones would maintain the existing character as a neighborhood retail district, enhanced with vibrant mixed-use areas tailored to serve local needs in a compact walkable neighborhood. Therefore, proposed improvements in the Western Avenue Commercial District would have less than significant impacts related to aesthetics.

Single Family Residential District

The existing single-family neighborhoods are established communities and would continue to consist of single-family homes and duplexes. The Specific Plan aims to preserve and enhance these uses. Adding additional living quarters as living suites or reducing the requirements for constructing second units would help increase the density of these areas around the Vermont/Athens station. New single-family attached houses (i.e., townhomes) would also be appropriate infill development in this district.

Development standards for single-family development would be generally consistent with County Code Chapter 22.20, R-1 Single Family Residence Zone, and would maintain the existing aesthetic character of the single-family residential neighborhoods. Lot sizes would be a minimum of 5,000 square feet with a maximum building height of 35 feet (two stories). Front yards would be landscaped and consistent with drought-tolerant landscaping requirements of the County Code, Title 31, Green Building Standards, Section 4.106.5. Utility and mechanical equipment would not be exposed to views from the street or would be screened from view.

A few parcels along Western Avenue and Imperial Highway in the western Specific Plan area are zoned Residential 3 (R-3) and would accommodate higher density residential units, such as apartments and condominiums (see Figure 3-5, *Proposed Zoning Districts*). These R-3 Zone areas encourage the development of affordable and workforce housing, especially associated with LASC. Development standards would be consistent with Chapter 22.20, R-3 Limited Density Multiple Residence Zone, in the County Code, with a minimum lot size of 5,000 square feet and maximum building height of 40 feet (three stories). In addition to the required drought-tolerant landscaping and front-yard landscaping, the R-3 Zone requires 200 square feet per dwelling unit of open space for common recreational-leisure areas, private areas, or a combination of both. Further, bicycle and pedestrian circulation facilities would provide connections to surrounding uses. Parking would not be allowed to occupy more than 30 percent of any linear street frontage, and parking structures would be architecturally integrated with the project design to be screened from street view.

A seven-acre area is zoned Residential Planned Development (RPD) in this district and is currently developed with the Olive Glen gated residential community, with two and three-story detached residences. Future redevelopment of the area, if it were to occur, would be developed consistent with Los Angeles County Code Chapter 22.20, Residential Planned Development Zone.

Overall, development in the Single Family Residential District in accordance with the Specific Plan would preserve the existing visual character of the established residential neighborhoods. Impacts would be less than significant.

Multi-Family Residential District

This district provides opportunities for development of housing with multiple units, either apartments or condominiums. The intent is to promote desirable transit-supportive densities close to transit and other services. The development standards promote a variety of housing types because of the range of lot sizes and configurations. This district is intended to encourage affordable and workforce housing for the communities and LASC.

Development standards for the Multi-Family Residential District remain generally consistent with County Code Chapter 22.20, R-2 Two-Family Residence Zone. Housing types in this district have a minimum lot size of 5,000 square feet and a maximum building height of 35 feet (two stories). Similar to the Single Family Residential District, front-yard landscaping is required in all areas except paved driveways and walkways and must be consistent with the County's drought-tolerant landscaping requirements. Screening elements must be integrated into building design to screen utility and mechanical equipment.

A small area along Imperial Highway near Vermont Avenue in the District is zoned MXD-1 and would be developed based on those standards. West Athens Elementary School is also in this district but is zoned Public/Institutional. No major changes would occur to the elementary school under the Specific Plan.

Thus, improvements to the Multi-Family Residential District to encourage a true transit-oriented environment near the Vermont Station Corridor would have a less than significant impact.

Conclusion

Overall, new development in accordance with the Specific Plan would contribute to creating a complete streets and multimodal community while respecting the scale and character of existing neighborhoods by providing appropriate height, mass, and setbacks and by limiting the general scale of development near existing residences. By adhering to the development standards and design guidelines in the proposed Specific Plan, development in accordance with the proposed project would not adversely impact the visual character and quality of the West Athens-Westmont community.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.1-3 would be less than significant.

Impact 5.1-4: The proposed project would generate additional light and glare in the project area. [Threshold AE-5]

Impact Analysis: Buildout of the proposed project would alter and intensify land uses and their related lighting sources throughout the Specific Plan area by introducing new building (interior and exterior), security, sign, street, and parking lights associated with the additional 1,061 residences and 1,690,638 square feet of nonresidential development. In addition, the Specific Plan encourages improving lighting, landscaping, and signage along the Vermont Avenue corridor near the Metro Green Line Vermont station; improving lighting and facilities in common recreational areas for pedestrians, bicyclists, and transit users; enhancing the lighting scheme for building entrances, common areas, paths, and parking areas; and applying defensible space techniques in landscaping and lighting to deter criminal activity. Buildout of residential and nonresidential development and implementation of the common area improvements would introduce new sources of light and glare in the project area.

However, the proposed Specific Plan includes development standards related to lighting and building materials that would reduce light and glare impacts generated by future development in accordance with the plan. For example, all glass in windows or entrances on the first two stories would be either clear or lightly tinted to maximize pedestrian visibility of building interiors from the sidewalk. Mirrored, highly reflective, or

densely tinted glass is prohibited in windows and entrances. More generally, when designing a project site and considering building placement and orientation, the Specific Plan states that the impact of shade and shadow and lighting should be considered and minimized, particularly when projects are adjacent to existing single-family residential uses.

Sections 5.2.6 (Outdoor Lighting) and 5.3.7 (Architectural Lighting) in the Specific Plan detail design guidelines related to minimizing light and glare impacts from new development:

- Light fixtures installed in the public right-of-way, in parking areas, along pedestrian or bicycle paths, and elsewhere in the interior of a building or development project should be pedestrian scaled and directed toward the ground to avoid light pollution and spillover to surrounding residential areas.
- Lighting in public open spaces should be motion activated when possible to limit unnecessary energy use.
- Lighting should not aim directly at the open sky or project off-site or onto adjacent uses.
- Internal and external storefront lighting should be designed for ground-floor retail and restaurant spaces to augment the pedestrian space.
- Blinking, flashing, and oscillating lights are prohibited. Use warm white light where possible, and colored lights should only be used if they are part of the architectural theme of commercial areas or establishments.
- Lighting fixtures should be compatible with the architectural style of surrounding buildings to reflect the character of the area.
- Lighting must be provided at intervals adequate for safety, while minimizing light spillage and glare onto adjacent uses and the night sky.
- Light fixtures should provide a warm light and use energy-efficient technology, such as solar-powered lighting.
- Natural light should be utilized as much as possible, to limit the use of and reliance on artificial light sources.
- Automatic timers should be programmed to maximize personal safety at night while conserving energy. They should be reset seasonally to match the flux of dusk/dawn.
- Parking structures should screen night lighting to avoid uplighting, spillover, and glare on nearby properties.

The County Code regulates the design, siting, and maintenance of signs. Section 22.52.8820(A) requires that no lighted sign or lighting device be placed or directed so as to permit the beams and illumination to be

directed or beamed upon a public street, highway, sidewalk, or adjacent premises so as to cause glare or reflection that may constitute a traffic hazard or nuisance.

Furthermore, future development projects under the Specific Plan would be required to comply with California's Building Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24, Part 6, of the California Code of Regulations), which outlines mandatory provisions for lighting control devices and luminaires. This would ensure new lighting sources are not only energy efficient, but regulated based on light power and brightness, shielding, and sensor-control standards. Compliance with these state provisions would be ensured through the County's development review process and building plan check process.

Overall, development in accordance with the Specific Plan would introduce new sources of light and glare. However, the community of West Athens-Westmont is highly urbanized and built out; new light and glare associated with the Specific Plan would be typical of the surrounding area and would not increase beyond what is expected for an urban, transit-oriented community. Adherence to the Specific Plan guidelines, County Code, and state building and energy codes would reduce project-generated lighting and glare impacts to less than significant levels.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.1-4 would be less than significant.

5.1.5 Cumulative Impacts

Aesthetic impacts are localized to the Specific Plan area and its immediate surroundings. Given that the project area is highly urbanized and almost entirely built out, implementation of the proposed project and any other future cumulative development that would be accommodated under the County's General Plan would likely not negatively impact the visual character of the project area or its surroundings. As with Specific Plan development, all future cumulative development projects under the County's General Plan would be required to adhere to development standards related to aesthetics, as outlined in the County Code. Therefore, the proposed project's contribution to cumulative visual character and quality impacts is considered less than significant.

In addition, due to the light and glare from existing residential, commercial, office, and institutional uses in the project area, the proposed project is not anticipated to add significant new sources of nighttime light and glare. Any new residential or nonresidential development near the project site would add new lighting sources, but would be primarily surrounded by other, existing uses with similar lighting sources. Further, the County Code details several lighting requirements related to parking areas, light and glare intrusion, and prohibited signs, and these would be applicable to future cumulative development projects. Therefore, light and glare impacts of future cumulative development projects would not combine with those of the proposed project to adversely impact existing or planned sensitive receptors. The proposed project's contribution to cumulative light and glare impacts is considered less than significant.

5.1.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, Impacts 5.1-1, 5.1-2, 5.1-3, and 5.1-4 would be less than significant.

5.1.7 Mitigation Measures

No mitigation measures are required.

5.1.8 Level of Significance After Mitigation

Impacts would be less than significant.

5.1.9 References

California Department of Transportation (Caltrans). 2011, September 9. California Scenic Highway Mapping System: Los Angeles County. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/.

Los Angeles County Department of Parks and Recreation (Los Angeles DPR). 2017. Trails Locator: List of Trails. https://trails.lacounty.gov/Trail/List.

5. Environmental Analysis
AESTHETICS

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5.2 AIR QUALITY

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont (proposed project; Connect Southwest LA project) to impact air quality. This evaluation is based on the methodology recommended by the South Coast Air Quality Management District (SCAQMD). The analysis in this section is based on buildout of the proposed project, as modeled using the California Emissions Estimator Model (CalEEMod) and trip generation and vehicle miles traveled (VMT) provided by IBI Group (see Appendix H to this DEIR). The criteria air pollutant emissions modeling for construction and operational phases are included in Appendix C of this DEIR.

5.2.1 Relevant Programs and Regulations

Ambient air quality standards (AAQS) have been adopted and are periodically updated at state and federal levels for criteria air pollutants. In addition, both the state and federal governments regulate the release of toxic air contaminants (TACs). The Specific Plan area is within the South Coast Air Basin (SoCAB). Land use is subject to the rules and regulations imposed by SCAQMD, the California AAQS adopted by the California Air Resources Board (CARB), and National AAQS adopted by the United States Environmental Protection Agency (EPA). Federal, state, regional, and local laws, regulations, plans, or guidelines that are potentially applicable to the proposed project are summarized below.

Federal and State Laws

Ambient Air Quality Standards

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

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

Both California and the federal government have established health-based AAQS for seven air pollutants, which are shown in Table 5.2-1, *Ambient Air Quality Standards for Criteria Pollutants*. These pollutants are ozone

(O_3), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), coarse inhalable particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead (Pb). In addition, the state has set standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

Table 5.2-1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources
Ozone (O_3)[3]	1 hour	0.09 ppm	*	Motor vehicles, paints, coatings, and solvents.
	8 hours	0.070 ppm	0.070 ppm	
Carbon Monoxide (CO)	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hours	9.0 ppm	9 ppm	
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm	0.053 ppm	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
	1 hour	0.18 ppm	0.100 ppm	
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	*	0.030 ppm	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	1 hour	0.25 ppm	0.075 ppm	
	24 hours	0.04 ppm	0.14 ppm[2]	
Respirable Coarse Particulate Matter (PM_{10})	Annual Arithmetic Mean	20 µg/m^3	*	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	50 µg/m^3	150 µg/m^3	
Respirable Fine Particulate Matter ($PM_{2.5}$)[4]	Annual Arithmetic Mean	12 µg/m^3	12 µg/m^3	Dust and fume-producing construction, industrial, and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	24 hours	*	35 µg/m^3	
Lead (Pb)	30-Day Average	1.5 µg/m^3	*	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.
	Calendar Quarter	*	1.5 µg/m^3	
	Rolling 3-Month Average	*	0.15 µg/m^3	
Sulfates (SO_4)[5]	24 hours	25 µg/m^3	*	Industrial processes.

Table 5.2-1 Ambient Air Quality Standards for Criteria Pollutants

Pollutant	Averaging Time	California Standard[1]	Federal Primary Standard[2]	Major Pollutant Sources
Visibility Reducing Particles	8 hours	ExCo =0.23/km visibility of 10≥ miles	*	Visibility-reducing particles consist of suspended particulate matter, which is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary greatly in shape, size and chemical composition, and can be made up of many different materials such as metals, soot, soil, dust, and salt.
Hydrogen Sulfide	1 hour	0.03 ppm	*	Hydrogen sulfide (H_2S) is a colorless gas with the odor of rotten eggs. It is formed during bacterial decomposition of sulfur-containing organic substances. Also, it can be present in sewer gas and some natural gas, and can be emitted as the result of geothermal energy exploitation.
Vinyl Chloride	24 hour	0.01 ppm	*	Vinyl chloride (chloroethene), a chlorinated hydrocarbon, is a colorless gas with a mild, sweet odor. Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites, due to microbial breakdown of chlorinated solvents.

Source: CARB 2016a.
Notes: ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter
* Standard has not been established for this pollutant/duration by this entity.
1 California standards for O_3, CO (except 8-hour Lake Tahoe), SO2 (1 and 24 hour), NO_2, and particulate matter (PM_{10}, $PM_{2.5}$, and visibility reducing particles) are values that are not to be exceeded. All others are not to be equaled or exceeded. California AAQS are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2 National standards (other than O_3, PM, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The O_3 standard is attained when the fourth-highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.
3 On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
4 On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were maintained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM_{10} standards (primary and secondary) of 150 $\mu g/m^3$ also were maintained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.
5 On June 2, 2010, a new 1-hour SO_2 standard was established, and the existing 24-hour and annual primary standards were revoked. The 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

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

- AB 1493: Pavley Fuel Efficiency Standards
- Title 20 California Code of Regulations (CCR): Appliance Energy Efficiency Standards
- Title 24, Part 6, CCR: Building Energy Efficiency Standards
- Title 24, Part 11, CCR: Green Building Standards Code

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

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

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

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

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

- **13 CCR Chapter 10 § 2485.** Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
- **13 CCR Chapter 10 § 2480.** Airborne Toxic Control Measure to Limit School Bus Idling and Idling at Schools
- **13 CCR § 2477 and Article 8.** Airborne Toxic Control Measure for In-Use Diesel-Fueled Transport Refrigeration Units (TRU) and TRU Generator Sets and Facilities Where TRUs Operate

Air Pollutants of Concern

Criteria Air Pollutants

The pollutants emitted into the ambient air by stationary and mobile sources are categorized as primary and/or secondary pollutants. Primary air pollutants are emitted directly from sources. Carbon monoxide (CO), volatile organic compounds (VOC), nitrogen oxides (NO_x), sulfur dioxide (SO_2), coarse inhalable

particulate matter (PM_{10}), fine inhalable particulate matter ($PM_{2.5}$), and lead (Pb) are primary air pollutants. Of these, CO, SO_2, NO_2, PM_{10}, and $PM_{2.5}$ are "criteria air pollutants," which means that AAQS have been established for them. VOC and NO_x are criteria pollutant precursors that form secondary criteria air pollutants through chemical and photochemical reactions in the atmosphere. Ozone (O_3) and nitrogen dioxide (NO_2) are the principal secondary pollutants.

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

- **Carbon Monoxide** is a colorless, odorless gas produced by incomplete combustion of carbon substances, such as gasoline or diesel fuel. CO is a primary criteria air pollutant. CO concentrations tend to be the highest during winter mornings with little to no wind, when surface-based inversions trap the pollutant at ground levels. The highest ambient CO concentrations are generally found near traffic-congested corridors and intersections. The primary adverse health effect associated with CO is interference with normal oxygen transfer to the blood, which may result in tissue oxygen deprivation (SCAQMD 2005; USEPA 2017). The SoCAB is designated in attainment of CO criteria levels under the California and National AAQS (CARB 2016b).

- **Volatile Organic Compounds** are composed primarily of hydrogen and carbon atoms. Internal combustion associated with motor vehicle usage is the major source of VOCs. Other sources include evaporative emissions from paints and solvents, asphalt paving, and household consumer products such as aerosols (SCAQMD 2005). There are no AAQS for VOCs. However, because they contribute to the formation of O_3, SCAQMD has established a significance threshold (see Section 5.2.3.1, *South Coast Air Quality Management District Thresholds*).

- **Nitrogen Oxides** are a by-product of fuel combustion and contribute to the formation of ground-level O_3, PM_{10}, and $PM_{2.5}$. The two major forms of NO_X are nitric oxide (NO) and nitrogen dioxide (NO_2). NO is a colorless, odorless gas formed from atmospheric nitrogen and oxygen when combustion takes place under high temperature and/or high pressure. The principal form of NO_X produced by combustion is NO, but NO reacts quickly with oxygen to form NO_2, creating the mixture of NO and NO_2 commonly called NO_X. NO_2 is an acute irritant and more injurious than NO in equal concentrations. At atmospheric concentrations, however, NO_2 is only potentially irritating. NO_2 absorbs blue light; the result is a brownish-red cast to the atmosphere and reduced visibility. NO_2 exposure concentrations near roadways are of particular concern for susceptible individuals, including asthmatics, children, and the elderly. Current scientific evidence links short-term NO_2 exposures, ranging from 30 minutes to 24 hours, with adverse respiratory effects, including airway inflammation in healthy people and increased respiratory symptoms in people with asthma. Also, studies show a connection between elevated short-term NO_2 concentrations and increased visits to emergency departments and hospital admissions for respiratory issues, especially asthma (SCAQMD 2005; USEPA 2017). The SoCAB is designated an attainment area for NO_2 under the National and California AAQS (CARB 2016b).

- **Sulfur Dioxide** is a colorless, pungent, irritating gas formed by the combustion of sulfurous fossil fuels. It enters the atmosphere as a result of burning high-sulfur-content fuel oils and coal and chemical

processes at plants and refineries. Gasoline and natural gas have very low sulfur content and do not release significant quantities of SO_2. When sulfur dioxide forms sulfates (SO_4) in the atmosphere, together these pollutants are referred to as sulfur oxides (SO_X). Thus, SO_2 is both a primary and secondary criteria air pollutant. At sufficiently high concentrations, SO_2 may irritate the upper respiratory tract. Current scientific evidence links short-term exposures to SO_2, ranging from 5 minutes to 24 hours, with an array of adverse respiratory effects, including bronchoconstriction and increased asthma symptoms. These effects are particularly adverse for asthmatics at elevated ventilation rates (e.g., while exercising or playing.) At lower concentrations and when combined with particulates, SO_2 may do greater harm by injuring lung tissue. Studies also show a connection between short-term exposure and increased visits to emergency facilities and hospital admissions for respiratory illnesses, particularly in at-risk populations such as children, the elderly, and asthmatics (SCAQMD 2005; USEPA 2017). The SoCAB is designated attainment for SO_2 under the California and National AAQS (CARB 2016b).

- **Suspended Particulate Matter** consists of finely divided solids or liquids such as soot, dust, aerosols, fumes, and mists. Two forms of fine particulates are now recognized and regulated. Inhalable coarse particles, or PM_{10}, include particulate matter with an aerodynamic diameter of 10 microns or less (i.e., ≤10 millionths of a meter or 0.0004 inch). Inhalable fine particles, or $PM_{2.5}$, have an aerodynamic diameter of 2.5 microns or less (i.e., ≤2.5 millionths of a meter or 0.0001 inch). Particulate discharge into the atmosphere results primarily from industrial, agricultural, construction, and transportation activities. Both PM_{10} and $PM_{2.5}$ may adversely affect the human respiratory system, especially in people who are naturally sensitive or susceptible to breathing problems. The EPA's scientific review concluded that $PM_{2.5}$, which penetrates deeply into the lungs, is more likely than PM_{10} to contribute to health effects and at far lower concentrations. These health effects include premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms (e.g., irritation of the airways, coughing, or difficulty breathing) (SCAQMD 2005). There has been emerging evidence that ultrafine particulates, which are even smaller particulates with an aerodynamic diameter of <0.1 microns or less (i.e., ≤0.1 millionths of a meter or <0.000004 inch), have human health implications, because ultrafine particulates' toxic components may initiate or facilitate biological processes that may lead to adverse effects to the heart, lungs, and other organs (SCAQMD 2013). However, the EPA or CARB has yet to adopt AAQS to regulate these particulates. Diesel particulate matter (DPM) is classified by CARB as a carcinogen (CARB 1998). Particulate matter can also cause environmental effects such as visibility impairment,[1] environmental damage,[2] and aesthetic damage[3] (SCAQMD 2005; USEPA 2017). The SoCAB is a nonattainment area for $PM_{2.5}$ under California and National AAQS and a nonattainment area for PM_{10} under the California AAQS (CARB 2016b).[4]

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

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

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

[4] CARB approved the SCAQMD's request to redesignate the SoCAB from serious nonattainment for PM_{10} to attainment for PM_{10} under the National AAQS on March 25, 2010, because the SoCAB did not violate federal 24-hour PM_{10} standards from 2004 to

- **Ozone** is commonly referred to as "smog" and is a gas that is formed when VOCs and NO_X, both by-products of internal combustion engine exhaust, undergo photochemical reactions in sunlight. O_3 is a secondary criteria air pollutant. O_3 concentrations are generally highest during the summer months when direct sunlight, light winds, and warm temperatures create favorable conditions for its formation. O_3 poses a health threat to those who already suffer from respiratory diseases as well as to healthy people. Breathing O_3 can trigger a variety of health problems, including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma. Ground-level O_3 also can reduce lung function and inflame the linings of the lungs. Repeated exposure may permanently scar lung tissue. O_3 also affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges, and wilderness areas. In particular, O_3 harms sensitive vegetation during the growing season (SCAQMD 2005; USEPA 2017). The SoCAB is designated extreme nonattainment under the California AAQS (1-hour and 8-hour) and National AAQS (8-hour) (CARB 2016b).

- **Lead** is a metal found naturally in the environment as well as in manufactured products. Once taken into the body, lead distributes throughout the body in the blood and accumulates in the bones. Depending on the level of exposure, lead can adversely affect the nervous system, kidney function, immune system, reproductive and developmental systems, and the cardiovascular system. Lead exposure also affects the oxygen-carrying capacity of the blood. The effects of lead most commonly encountered in current populations are neurological effects in children and cardiovascular effects in adults (e.g., high blood pressure and heart disease). Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning deficits, and lowered IQ (SCAQMD 2005; USEPA 2017). The major sources of lead emissions have historically been mobile and industrial sources. As a result of the EPA's regulatory efforts to remove lead from gasoline, emissions of lead from the transportation sector dramatically declined by 95 percent between 1980 and 1999, and levels of lead in the air decreased by 94 percent between 1980 and 1999. Today, the highest levels of lead in air are usually found near lead smelters. The major sources of lead emissions today are ore and metals processing and piston-engine aircraft operating on leaded aviation gasoline. However, in 2008 the EPA and CARB adopted stricter lead standards, and special monitoring sites immediately downwind of lead sources recorded very localized violations of the new state and federal standards.[5] As a result of these violations, the Los Angeles County portion of the SoCAB is designated nonattainment under the National AAQS for lead (SCAQMD 2012; CARB 2016b). Because emissions of lead are found only in projects that are permitted by SCAQMD, lead is not a pollutant of concern for the project.

Toxic Air Contaminants

By the last update to the TAC list in December 1999, CARB had designated 244 compounds as TACs (CARB 1999). Additionally, CARB has implemented control measures for a number of compounds that pose high

2007. The EPA approved the State of California's request to redesignate the South Coast PM_{10} nonattainment area to attainment of the PM_{10} National AAQS, effective on July 26, 2013.

[5] Source-oriented monitors record concentrations of lead at lead-related industrial facilities in the SoCAB, which include Exide Technologies in the City of Commerce; Quemetco, Inc., in the City of Industry; Trojan Battery Company in Santa Fe Springs; and Exide Technologies in Vernon. Monitoring conducted between 2004 through 2007 showed that the Trojan Battery Company and Exide Technologies exceed the federal standards (SCAQMD 2012).

risks and show potential for effective control. The majority of the estimated health risks from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines.

Diesel Particulate Matter

In 1998, CARB identified DPM as a TAC. Previously, the individual chemical compounds in diesel exhaust were considered TACs. Almost all diesel exhaust particles are 10 microns or less in diameter. Because of their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lungs.

Community Risk

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

Air Quality Management Planning

SCAQMD is the agency responsible for improving air quality in the SoCAB and assuring that the National and California AAQS are attained and maintained. SCAQMD is responsible for preparing the air quality management plan (AQMP) for the SoCAB in coordination with the Southern California Association of Governments (SCAG). Since 1979, a number of AQMPs have been prepared.

2016 AQMP

On March 3, 2017, SCAQMD adopted the 2016 AQMP as an update to the 2012 AQMP. The 2016 AQMP addresses strategies and measures to attain the following National AAQS:

- 2008 National 8-hour ozone standard by 2031,
- 2012 National annual $PM_{2.5}$ standard by 2025[6],
- 2006 National 24-hour $PM_{2.5}$ standard by 2019,
- 1997 National 8-hour ozone standard by 2023, and the
- 1979 National 1-hour ozone standard by year 2022.

[6] The 2016 AQMP requests a reclassification from moderate to serious non-attainment for the 2012 National $PM_{2.5}$ standard.

It is projected that total NO_X emissions in the SoCAB would need to be reduced to 150 tons per day (tpd) by year 2023 and to 100 tpd in year 2031 to meet the 1997 and 2008 federal 8-hour ozone standards. The strategy to meet the 1997 federal 8-hour ozone standard would also lead to attaining the 1979 federal 1-hour ozone standard by year 2022 (SCAQMD 2016a), which requires reducing NO_X emissions in the SoCAB to 250 tpd. This is approximately 45 percent additional reductions above existing regulations for the 2023 ozone standard and 55 percent additional reductions above existing regulations to meet the 2031 ozone standard.

Reducing NO_X emissions would also reduce $PM_{2.5}$ concentrations within the SoCAB. However, as the goal is to meet the 2012 federal annual $PM_{2.5}$ standard no later than year 2025, SCAQMD is seeking to reclassify the SoCAB from "moderate" to "serious" nonattainment under this federal standard. A "moderate" non-attainment would require meeting the 2012 federal standard by no later than 2021.

Overall, the 2016 AQMP is composed of stationary and mobile-source emission reductions from regulatory control measures, incentive-based programs, co-benefits from climate programs, mobile-source strategies, and reductions from federal sources such as aircrafts, locomotives, and ocean-going vessels. Strategies outlined in the 2016 AQMP would be implemented in collaboration between CARB and the EPA (SCAQMD 2017a).

Lead State Implementation Plan

In 2008, the EPA designated the Los Angeles County portion of the SoCAB as a nonattainment area under the federal lead classification due to the addition of source-specific monitoring under the new federal regulation. This designation was based on two source-specific monitors in the City of Vernon and the City of Industry that exceeded the new standard in the 2007-to-2009 period. The remainder of the SoCAB, outside the Los Angeles County nonattainment area, remains in attainment of the new 2008 lead standard. On May 24, 2012, CARB approved the State Implementation Plan (SIP) revision for the federal lead standard, which the EPA revised in 2008. Lead concentrations in this nonattainment area have been below the level of the federal standard since December 2011. The SIP revision was submitted to the EPA for approval.

SCAQMD Rules and Regulations

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

- **Rule 401, Visible Emissions.** This rule is intended to prevent the discharge of pollutant emissions from an emissions source that results in visible emissions. Specifically, the rule prohibits the discharge of any air contaminant into the atmosphere by a person from any single source of emission for a period or periods aggregating more than three minutes in any one hour that is as dark as or darker than designated No. 1 on the Ringelmann Chart, as published by the U.S. Bureau of Mines.

- **Rule 402, Nuisance.** This rule is intended to prevent the discharge of pollutant emissions from an emissions source that results in a public nuisance. Specifically, this rule prohibits any person from discharging quantities of air contaminants or other material from any source such that it would result in an injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public. Additionally, the discharge of air contaminants would also be prohibited where it would endanger the

comfort, repose, health, or safety of any number of persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. This rule does not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

- **Rule 403, Fugitive Dust.** This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust, and requires best available control measures to be applied to earth moving and grading activities.

- **Rule 1113, Architectural Coatings.** This rule limits the VOC content of architectural coatings used on projects in the SCAQMD. Any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects in the SCAQMD must comply with the current VOC standards set in this rule.

5.2.2 Environmental Setting

South Coast Air Basin

The Specific Plan area is in the SoCAB, which includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties. The SoCAB is in a coastal plain with connecting broad valleys and low hills; it is bounded by the Pacific Ocean in the southwest quadrant, and high mountains form the remainder of the perimeter. The general region lies in the semipermanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. This usually mild weather pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds (SCAQMD 2005).

Temperature and Precipitation

The annual average temperature varies little throughout the SoCAB, ranging from the low to middle 60s, measured in degrees Fahrenheit (°F). With a more pronounced oceanic influence, coastal areas show less variability in annual minimum and maximum temperatures than inland areas. The climatological station nearest to the Specific Plan area is the Los Angeles International Airport Monitoring Station (ID No. 045114). The average low is reported at 47.5°F in January, and the average high is 76.3°F in August (WRCC 2017).

In contrast to a very steady pattern of temperature, rainfall is seasonally and annually highly variable. Almost all rain falls from November through April. Summer rainfall is normally restricted to widely scattered thundershowers near the coast, with slightly heavier shower activity in the east and over the mountains. Rainfall averages 12.02 inches per year in the project area (WRCC 2017).

Humidity

Although the SoCAB has a semiarid climate, the air near the earth's surface is typically moist because of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the SoCAB by offshore winds, the "ocean effect" is dominant. Periods of heavy fog, especially along the coast, are frequent. Low clouds, often referred to as high fog, are a characteristic climatic feature. Annual average humidity is 70 percent at the coast and 57 percent in the eastern portions of the SoCAB (SCAQMD 2005).

Wind

Wind patterns across the south coastal region are characterized by westerly or southwesterly onshore winds during the day and by easterly or northeasterly breezes at night. Wind speed is somewhat greater during the dry summer months than during the rainy winter season.

Between periods of wind, periods of air stagnation may occur in both the morning and evening hours. Air stagnation is one of the critical determinants of air quality conditions on any given day. During the winter and fall months, surface high-pressure systems over the SoCAB, combined with other meteorological conditions, can result in very strong, downslope Santa Ana winds. These winds normally continue a few days before predominant meteorological conditions are reestablished.

The mountain ranges to the east affect the transport and diffusion of pollutants by inhibiting their eastward transport. Air quality in the SoCAB generally ranges from fair to poor and is similar to air quality in most of coastal southern California. The entire region experiences heavy concentrations of air pollutants during prolonged periods of stable atmospheric conditions (SCAQMD 2005).

Inversions

In conjunction with the two characteristic wind patterns that affect the rate and orientation of horizontal pollutant transport, there are two similarly distinct types of temperature inversions that control the vertical depth through which pollutants are mixed. These are the marine/subsidence inversion and the radiation inversion. The combination of winds and inversions are critical determinants in leading to the highly degraded air quality in summer and the generally good air quality in the winter in the project area (SCAQMD 2005).

SoCAB Nonattainment Designations

The AQMP provides the framework for air quality basins to achieve attainment of the California and National AAQS through the SIP. Areas are classified as attainment or nonattainment areas for particular pollutants depending on whether they meet the ambient air quality standards. Severity classifications for nonattainment are marginal, moderate, serious, severe, and extreme.

- **Unclassified.** A pollutant is designated unclassified if the data are incomplete and do not support a designation of attainment or nonattainment.

- **Attainment.** A pollutant is in attainment if the AAQS for that pollutant was not violated at any site in the area during a three-year period.

- **Nonattainment.** A pollutant is in nonattainment if there was at least one violation of an AAQS for that pollutant in the area.

- **Nonattainment/Transitional.** A subcategory of the nonattainment designation. An area is designated nonattainment/transitional to signify that the area is close to attaining the AAQS for that pollutant.

The attainment status for the SoCAB is shown in Table 5.2-2, *Attainment Status of Criteria Pollutants in the South Coast Air Basin*. The SoCAB is designated in attainment of the California AAQS for sulfates and designated a nonattainment area for lead (Los Angeles County only) under the National AAQS.

Table 5.2-2 Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
Ozone – 1-hour	Extreme Nonattainment	No Federal Standard
Ozone – 8-hour	Extreme Nonattainment	Extreme Nonattainment
PM_{10}	Serious Nonattainment	Attainment/Maintenance
$PM_{2.5}$	Nonattainment	Nonattainment[1]
CO	Attainment	Attainment
NO_2	Attainment	Attainment/Maintenance
SO_2	Attainment	Attainment
Lead	Attainment	Nonattainment (Los Angeles County only)[2]
All others	Attainment/Unclassified	Attainment/Unclassified

Source: CARB 2016b.
1 SCAQMD is seeking to reclassify the SoCAB from "moderate" to "serious" nonattainment under federal $PM_{2.5}$ standard.
2 In 2010, the Los Angeles portion of the SoCAB was designated nonattainment for lead under the new federal and existing state AAQS as a result of large industrial emitters. Remaining areas within the SoCAB are unclassified.

SoCAB Multiple Air Toxics Exposure Study IV

The Multiple Air Toxics Exposure Study (MATES) is a monitoring and evaluation study on ambient concentrations of TACs and the potential health risks from air toxics in the SoCAB. In 2008, SCAQMD conducted its third update, MATES III, based on the Office of Environmental Health Hazards Assessment's (OEHHA) 2003 Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (2003 HRA Guidance Manual). The results showed that the overall risk for excess cancer from a lifetime exposure to ambient levels of air toxics was about 1,200 in a million. The largest contributor to this risk was diesel exhaust, which accounted for 84 percent of the cancer risk (SCAQMD 2008b).

SCAQMD recently released the fourth update, MATES IV, which was also based on OEHHA's 2003 HRA Guidance Manual. The results showed that the overall monitored risk for excess cancer from a lifetime exposure to ambient levels of air toxics decreased to approximately 418 in one million. Compared to the 2008 MATES III, monitored excess cancer risks decreased by approximately 65 percent. Approximately 90 percent of the risk is attributed to mobile sources, and 10 percent is attributed to TACs from stationary sources, such

as refineries, metal processing facilities, gas stations, and chrome plating facilities. The largest contributor to this risk was diesel exhaust, which accounted for approximately 68 percent of the air toxics risk. Compared to MATES III, MATES IV found substantial improvement in air quality and associated decrease in air toxics exposure. As a result, the estimated basinwide population-weighted risk decreased by approximately 57 percent since MATES III (SCAQMD 2015a).

OEHHA updated the guidelines for estimating cancer risks on March 6, 2015 (OEHHA 2015). The new method uses higher estimates of cancer potency during early life exposures, which result in a higher calculation of risk. There are also differences in the assumptions on breathing rates and length of residential exposures. When combined, SCAQMD estimates that risks for a given inhalation exposure level will be about 2.7 times higher than the risk identified in MATES IV using the 2015 OEHHA guidance methodology (e.g., 2.7 times higher than 418 in one million overall excess cancer risk) (SCAQMD 2015a).

Existing Ambient Air Quality

Existing ambient air quality, historical trends, and projections in the vicinity of the Specific Plan area are best documented by measurements made by SCAQMD. The Specific Plan is in Source Receptor Area (SRA) 3 – Southwest Los Angeles County Coastal. The air quality monitoring station closest to the Specific Plan area is the Los Angeles International Airport Monitoring Station. As this station does not have information for $PM_{2.5}$, information for this criteria air pollutant was obtained from the Compton – 700 North Bullis Road Monitoring Station. Data from these stations are summarized in Table 5.2-3, *Ambient Air Quality Monitoring Summary*. The data show that the concentration levels of O_3 and $PM_{2.5}$ in the area regularly exceed the state and federal one-hour and eight-hour O_3 standards as well as the federal $PM_{2.5}$ standards. The CO, SO_2, PM_{10}, and NO_2 standards have not been exceeded in the last five years in the project vicinity.

Table 5.2-3 Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Thresholds Were Exceeded and Maximum Levels				
	2011	2012	2013	2014	2015
Ozone (O_3)					
State 1-Hour ≥ 0.09 ppm (days exceed threshold)	0	1	1	1	1
State 8-hour ≥ 0.07 ppm (days exceed threshold)	0	1	1	6	3
Federal 8-Hour > 0.075 ppm (days exceed threshold)	0	0	1	3	1
Max. 1-Hour Conc. (ppm)	0.078	0.106	0.105	0.114	0.096
Max. 8-Hour Conc. (ppm)	0.067	0.075	0.081	0.080	0.077
Carbon Monoxide (CO)					
State 8-Hour > 9.0 ppm (days exceed threshold)	0	0	*	*	*
Federal 8-Hour ≥ 9.0 ppm (days exceed threshold)	0	0	*	*	*
Max. 8-Hour Conc. (ppm)	1.79	1.51	*	*	*
Nitrogen Dioxide (NO_2)					
State 1-Hour ≥ 0.18 ppm (days exceed threshold)	0	0	0	0	0
Max. 1-Hour Conc. (ppb)	0.0976	0.0772	0.0778	0.0873	0.0870
Sulfur Dioxide (SO_2)					
State 24-Hour ≥ 0.04 ppm (days exceed threshold)	0	0	0	*	*
Federal 24-Hour ≥ 0.14 ppm (days exceed threshold)	0	0	0	*	*

Table 5.2-3 Ambient Air Quality Monitoring Summary

Pollutant/Standard	Number of Days Thresholds Were Exceeded and Maximum Levels				
	2011	2012	2013	2014	2015
Max 24-Hour Conc. (ppm)	0.002	0.002	0.002	*	*
Coarse Particulates (PM_{10})					
State 24-Hour > 50 µg/m³ (days exceed threshold)	0	0	0	0	0
Federal 24-Hour > 150 µg/m³ (days exceed threshold)	0	0	0	0	0
Max. 24-Hour Conc. (µg/m³)	41.0	31.0	38.0	46.0	42.0
Fine Particulates ($PM_{2.5}$)					
Federal 24-Hour > 35 µg/m³ (days exceed threshold)	0	1	1	1	3
Max. 24-Hour Conc. (µg/m³)	35.3	51.2	52.1	35.8	41.3

Sources: CARB 2017. Data for O_3, CO, NO_2, SO_2, and PM_{10} are from the Los Angeles International Airport Monitoring Station; $PM_{2.5}$ is based on data from the Compton – 700 North Bullis Road Monitoring Station.
Notes: ppm = parts per million; ppb = parts per billion; µg/m³ = micrograms per cubic meter
* Data not available.

Existing Emissions

The Specific Plan area currently generates criteria air pollutant emissions from transportation, energy (natural gas use), and area sources (e.g., natural gas fireplaces, aerosols, landscaping equipment). Criteria air pollutants generated within the Specific Plan are shown in Table 5.2-4, *Existing Specific Plan Maximum Daily Operational Phase Criteria Air Pollutant Emissions*.

Table 5.2-4 Existing Specific Plan Maximum Daily Operational Phase Criteria Air Pollutant Emissions

Phase	Operation-Related Regional Emissions (pounds/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Area	961	61	1,199	2	127	127
Energy	2	21	11	<1	2	2
Transportation	130	579	1,785	5	337	94
Total	1,094	661	2,995	6	466	223

Source: CalEEMod Version 2016.3.1.
Notes: Based on highest winter or summer emissions using 2017 emission rates. Totals may not equal 100 percent due to rounding.
Industrial sources of emissions that require a permit from SCAQMD (permitted sources) are not included in the Specific Plan community inventory since they have separate emission reduction requirements.

Sensitive Receptors

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

Residential areas are also considered sensitive to air pollution because residents (including children and the elderly) tend to be at home for extended periods of time, resulting in sustained exposure to any pollutants present. Other sensitive receptors include retirement facilities, hospitals, and schools. Recreational land uses are considered moderately sensitive to air pollution. Although exposure periods are generally short, exercise

places a high demand on respiratory functions, which can be impaired by air pollution. In addition, noticeable air pollution can detract from the enjoyment of recreation. Industrial, commercial, retail, and office areas are considered the least sensitive to air pollution. Exposure periods are relatively short and intermittent, because the majority of the workers tend to stay indoors most of the time. In addition, the workforce is generally the healthiest segment of the population.

The nearest off-site sensitive receptors to the Specific Plan area include the surrounding residences and the adjacent Washington Primary School (K-1) in addition to the following nearby receptors:

- Woodcrest Nazarene Christian School
- Woodcrest Elementary School
- George Washington Preparatory High School
- Duke Ellington Continuation High School
- Cimarron Avenue Elementary School
- Henry Clay Middle School

In addition to the off-site sensitive receptors, existing sensitive receptors in the planning area consist of single- and multifamily residences, West Athens Elementary School, St. Francis X. Cabrini Catholic School, Middle College High School, Animo South Los Angeles Charter High School, and the Busy Bees Wonderland School.

5.2.3 Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, a project would normally have a significant effect on the environment if the project would:

AQ-1 Conflict with or obstruct implementation of the applicable air quality plans of either the South Coast AQMD (SCAQMD) or the Antelope Valley AQMD (AVAQMD).

AQ-2 Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

AQ-3 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

AQ-4 Expose sensitive receptors to substantial pollutant concentrations.

AQ-5 Create objectionable odors affecting a substantial number of people.

5.2.3.1 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT THRESHOLDS

The analysis of the project's air quality impacts follows the guidance and methodologies recommended in SCAQMD's *CEQA Air Quality Handbook* and the significance thresholds on SCAQMD's website.[7] CEQA allows the significance criteria established by the applicable air quality management or air pollution control district to be used to assess impacts of a project on air quality. SCAQMD has established regional thresholds of significance. In addition to the regional thresholds, projects are subject to the AAQS.

Regional Significance Thresholds

SCAQMD has adopted regional construction and operational emissions thresholds to determine a project's cumulative impact on air quality in the SoCAB. Table 5.2-5, *SCAQMD Significance Thresholds*, lists thresholds that are applicable for all projects uniformly regardless of size or scope. There is growing evidence that although ultrafine particulates contribute a very small portion of the overall atmospheric mass concentration, they represent a greater proportion of the health risk from PM. However, the EPA and CARB have not yet adopted AAQS to regulate ultrafine particulates; therefore, SCAQMD has not developed thresholds for them.

Table 5.2-5 SCAQMD Significance Thresholds

Air Pollutant	Construction Phase	Operational Phase
Reactive Organic Gases (ROG)	75 lbs/day	55 lbs/day
Carbon Monoxide (CO)	550 lbs/day	550 lbs/day
Nitrogen Oxides (NO_X)	100 lbs/day	55 lbs/day
Sulfur Oxides (SO_X)	150 lbs/day	150 lbs/day
Particulates (PM_{10})	150 lbs/day	150 lbs/day

Source: SCAQMD 2015b.

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

- Linked to increased cancer risk ($PM_{2.5}$, TACs)
- Aggravates respiratory disease (O_3, $PM_{2.5}$)
- Increases bronchitis (O_3, $PM_{2.5}$)
- Causes chest discomfort, throat irritation, and increased effort to take a deep breath (O_3)
- Reduces resistance to infections and increases fatigue (O_3)
- Reduces lung growth in children ($PM_{2.5}$)
- Contributes to heart disease and heart attacks ($PM_{2.5}$)
- Contributes to premature death (O_3, $PM_{2.5}$)

[7] SCAQMD's air quality significance thresholds are current as of March 2015 and can be found at: http://www.aqmd.gov/ceqa/hdbk.html.

- Linked to lower birth weight in newborns ($PM_{2.5}$) (SCAQMD 2015c)

Exposure to fine particulates and ozone aggravates asthma attacks and can amplify other lung ailments such as emphysema and chronic obstructive pulmonary disease. Exposure to current levels of $PM_{2.5}$ is responsible for an estimated 4,300 cardiopulmonary-related deaths per year in the SoCAB. In addition, University of Southern California scientists' landmark children's health study found that lung growth improved as air pollution declined for children aged 11 to 15 in five communities in the SoCAB (SCAQMD 2015d).

Mass emissions in Table 5.2-5 are not correlated with concentrations of air pollutants but contribute to the cumulative air quality impacts in the SoCAB. Therefore, regional emissions from a single project do not trigger a regional health impact, and it is speculative to identify how many more individuals in the air basin would be affected by the health effects listed above. SCAQMD is the primary agency responsible for ensuring the health and welfare of sensitive individuals to elevated concentrations of air quality in the SoCAB. To achieve the health-based standards established by the EPA, SCAQMD prepares an AQMP that details regional programs to attain the AAQS.

Localized Significance Thresholds

SCAQMD identifies localized significance thresholds (LSTs), shown in Table 5.2-6, *SCAQMD Localized Significance Thresholds*. Emissions of NO_2, CO, PM_{10}, and $PM_{2.5}$ generated at a project site (offsite mobile-source emissions are not included in the LST analysis) could expose sensitive receptors to substantial concentrations of criteria air pollutants. A project that generates emissions that trigger a violation of the AAQS when added to the local background concentrations would generate a significant impact.

Table 5.2-6 SCAQMD Localized Significance Thresholds

Air Pollutant (Relevant AAQS)	Concentration
1-Hour CO Standard (CAAQS)[1]	20 ppm
8-Hour CO Standard (CAAQS/NAAQS)	9.0 ppm
1-Hour NO_2 Standard (CAAQS)	0.18 ppm
Annual Average NO_2 Standard (CAAQS)[1]	0.03 ppm
24-Hour PM_{10} Standard – Construction (SCAQMD)[2]	10.4 µg/m^3
24-Hour $PM_{2.5}$ Standard – Construction (SCAQMD)[2]	10.4 µg/m^3
24-Hour PM_{10} Standard – Operation (SCAQMD)[2]	2.5 µg/m^3
24-Hour $PM_{2.5}$ Standard – Operation (SCAQMD)[2]	2.5 µg/m^3
Annual Average PM_{10} Standard (SCAQMD)[2]	1.0 µg/m^3

Source: SCAQMD 2015b.
ppm = parts per million; µg/m^3 = micrograms per cubic meter
[1] Based on the more restrictive California AAQS for CO and NO_2.
[2] Threshold is based on SCAQMD Rule 403. Since the SoCAB is in nonattainment for PM_{10} and $PM_{2.5}$, the threshold is established as an allowable change in concentration. Therefore, background concentration is not relevant.

5.2.3.2 CO HOTSPOTS

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

5.2.3.3 HEALTH RISK ANALYSIS

Whenever a project would require use of chemical compounds that have been identified in SCAQMD Rule 1401; placed on CARB's air toxics list pursuant to AB 1807, the Air Contaminant Identification and Control Act (1983); or placed on the EPA's National Emissions Standards for Hazardous Air Pollutants, a health risk assessment is required by SCAQMD. Table 5.2-7, *SCAQMD Toxic Air Contaminants Incremental Risk Thresholds*, lists SCAQMD's TAC incremental risk thresholds for operation of a project. CEQA does not require CEQA-level environmental document to analyze the environmental effects of attracting development and people to an area (*California Building Industry Association v. Bay Area Air Quality Management District (2015) 62 Cal.4th 369 (Case No. S213478)*). The purpose of this environmental evaluation is to identify the significant effects of the proposed project on the environment and analyze the impacts of environmental hazards on future users when a proposed project exacerbates an existing environmental hazard or condition. Residential, commercial, school, and office uses do not use substantial quantities of TACs and typically do not exacerbate existing hazards; and therefore, these thresholds are typically applied to new industrial projects.

Table 5.2-7 SCAQMD Toxic Air Contaminants Incremental Risk Thresholds

Maximum Individual Cancer Risk	≥ 10 in 1 million
Cancer Burden (in areas ≥ 1 in 1 million)	> 0.5 excess cancer cases
Hazard Index (project increment)	≥ 1.0

Source: SCAQMD 2015b.

5.2.4 Plans, Programs, and Policies

5.2.4.1 REGULATORY REQUIREMENTS

RR AIR-1 New buildings are required to achieve the current California Building Energy and Efficiency Standards (Title 24, Part 6) and California Green Building Standards Code (CALGreen) (Title 24, Part 11). The 2016 Building and Energy Efficiency Standards are effective starting on January 1, 2017. The Building Energy and Efficiency Standards and CALGreen are updated tri-annually with a goal to achieve net zero energy (NZE) for residential buildings by

2020 and non-residential buildings by 2030. The County's green building standards which implement and exceed CALGreen are identified County Code, Title 31. The County has adopted the Voluntary Tier 1 standards for non-residential construction greater than or equal to 25,000 square feet (Section 301.3.1, Buildings greater than or equal to 25,000 square feet).[8] Newly constructed high-rise residential buildings of seven stories or greater are also required to comply with Section 301.3, which requires implementation of the Voluntary Tier 1 standards. Newly constructed low-rise and high-rise residential buildings (six stories or less) are only required to comply with the mandatory measures of CALGreen.

RR AIR-2 New buildings are required to adhere to the California Green Building Standards Code (CALGreen) requirement to provide bicycle parking for new non-residential buildings, or meet local bicycle parking ordinances, whichever is stricter (CALGreen Sections 5.106.4.1, 14.106.4.1, and 5.106.4.1.2). Non-residential construction would be required to provide anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for five percent of new visitor motorized vehicle parking spaces being added. For employee, long-term secured bicycle parking is required to be provided for five percent of the tenant-occupied (i.e., staff) motorized vehicle parking spaces being added. The proposed project is also required to designate parking for low-emitting, fuel-efficient, and carpool/vanpool spaces identified in CALGreen. Non-residential buildings of 25,000 square feet or more also requires compliance with the Tier 1 voluntary measures in section A5.601.2.4, which require low-emitting, fuel-efficient, and carpool/vanpool spaces for 10 percent of the total parking capacity.

RR AIR-3 Construction activities will be conducted in compliance with 13 California Code of Regulations (CCR) Section 2499, which requires that nonessential idling of construction equipment is restricted to five minutes or less.

RR AIR-4 Construction activities will be conducted in compliance with any applicable South Coast Air Quality Management District (SCAQMD) rules and regulations, including but not limited to the following:

- Rule 403, Fugitive Dust, for controlling fugitive dust and avoiding nuisance.
- Rule 402, Nuisance, which states that a project 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 1113, which limits the volatile organic compound content of architectural coatings.

[8] With the exception that high-rise non-residential construction would be subject to the mandatory (Table A4.106.5.1(3)), rather than the Tier 1 voluntary, measures for solar reflectance in Table A5.106.11.2.2.

- Rules 201, 203 and 219, which regulate permits for installation and use of equipment that may generate air contaminants, such of commercial kitchen equipment and emergency generators.

5.2.5 Environmental Impacts

5.2.5.1 METHODOLOGY

This air quality evaluation was prepared in accordance with the requirements of CEQA to determine if significant air quality impacts are likely to occur in conjunction with implementation of the proposed project. SCAQMD has published guidelines that are intended to provide local governments with guidance for analyzing and mitigating air quality impacts and that were used in this analysis (SCAQMD 1993, 2008a, 2015b, 2017b). Industrial sources of emissions that require a permit from SCAQMD (permitted sources) are not included in the Specific Plan community inventory since they have separate emission reduction requirements. Modeling of criteria air pollutants used the California Emissions Estimator Model (CalEEMod), version 2016.3.1, based on the following:

- **Transportation.** Based on the annual average trip generation and vehicle miles traveled data provided by IBI Group (see Appendix H of this DEIR). Average trip distances of 9.18 and 9.40 miles per trip are used for the existing and project buildout scenarios, respectively. Based on the estimated 46,511 average daily trips generated under existing conditions and the 56,850 average daily trips generated under full buildout conditions, approximately 427,123 vehicle miles per day are generated currently, and 534,386 vehicle miles per day would be generated under full buildout conditions.

- **Area Sources.** Area and stationary sources are based on the CalEEMod defaults for emissions generated from use of consumer products and cleaning supplies.

- **Energy.** Criteria air pollutant emissions from energy use (natural gas used for cooking, heating, etc.) are based on the CalEEMod defaults for natural gas usage by nonresidential land uses. New buildings are assumed to comply with the 2016 Building Energy Efficiency Standards, which are 28 percent more energy efficient for residential buildings and 5 percent more energy efficient for nonresidential buildings and residential buildings of 4 stories or more than the 2013 Building Energy Efficiency Standards. Existing buildings are assumed to comply with the 2005 Building Energy Efficiency Standards.

- **Construction.** It is assumed that development of the proposed Specific Plan would generally commence at the beginning of 2018. In addition, although the specific timeline for developing land uses under the proposed Specific Plan is unknown, this analysis assumes that the various construction activities (e.g., site preparation, demolition, building construction) would overlap. Furthermore, for purposes of this analysis, it is assumed that approximately 40 percent of the existing land uses in the proposed Specific Plan area would be demolished. Of the 40 percent of the existing dwelling units assumed for removal (i.e., 1,383 units), it is assumed that 105 of dwelling units would be single-family homes and the remaining 1,280 would be multifamily units. Construction assumptions were based on CalEEMod defaults such as construction equipment mix and worker, vendor, and haul trips. Table 5.2-8, *Construction*

Activities, Phasing, and Equipment, shows the assumed construction activities and the start and end dates (based on 18-year buildout) and equipment mix for each of the activities.

Table 5.2-8 Construction Activities, Phasing and Equipment

Activities[1]	Start/End Dates[1]	Equipment[2]
Demolition	1/1/2018-10/5/2018	1 concrete/industrial saw; 3 excavators; 2 rubber tired dozers; 1 water truck
Site Preparation	1/1/2018-6/15/2018	3 rubber tired dozers; 4 tractors/loaders/backhoes; 1 water truck
Grading	1/1/2018-3/8/2019	2 excavators; 1 grader; 1 rubber tired dozer; 2 scrapers; 2 tractors/loaders/backhoes; 1 water truck
Building Construction	1/1/2018-12/25/2037	1 crane; 3 forklifts; 1 generator set; 3 tractors/loaders/backhoes; 1 welder
Asphalt Paving	1/1/2018-11/2/2018	2 pavers; 2 paving equipment; 2 rollers
Architectural Coating	1/1/2018-12/18/2020	1 air compressor

Notes: n/a = not applicable
[1] Based on CalEEMod defaults and an assumed 20-year buildout duration for purposes of this analysis.

5.2.5.2 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.2-1: The proposed project would be inconsistent with the SCAQMD Air Quality Management Plan because criteria air pollutant emissions associated with the Specific Plan would exceed the SCAQMD regional significance threshold. [Threshold AQ-1]

Impact Analysis: CEQA requires that projects be evaluated for consistency with the AQMP. A consistency determination plays an important role in local agency project review by linking local planning and individual projects to the AQMP. It fulfills the CEQA goal of informing decision makers of the environmental effects of a project under consideration at a stage early enough to ensure that air quality concerns are fully addressed. It also provides the local agency with ongoing information as to whether they are contributing to the clean air goals of the AQMP. The regional emissions inventory for the SoCAB is compiled by SCAQMD and SCAG. Regional population, housing, and employment projections developed by SCAG are based, in part, on the local jurisdictions' general plan land use designations. These projections form the foundation for the emissions inventory of the AQMP. These demographic trends are incorporated into the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy, compiled by SCAG to determine priority transportation projects and vehicle miles traveled within the SCAG region. Projects that are consistent with the local general plan are considered consistent with the air quality–related regional plan. Typically, only new or amended general plan elements, specific plans, and major projects that have the potential to affect the regional population and employment forecasts need to undergo a consistency review.

Connect Southwest LA Project

Per CEQA Guideline Section 15206, the Connect Southwest LA project is considered regionally significant by SCAG. Changes in the population, housing, or employment growth projections associated with this project have the potential to substantially affect SCAG's demographic projections and therefore the assumptions in SCAQMD's AQMP. The proposed project would increase the land use intensity within the Specific Plan area, resulting in an increase in population and employment in the community of West Athens-Westmont. Because regional transportation modeling is based on the underlying general plan land use designation, the Specific Plan could potentially change the assumptions of the AQMP. However, as discussed in Impact 5.9-1 of Section 5.9, *Population and Housing*, the projected population and employment growth associated with the proposed Specific Plan would not exceed the population and employment projections for the area as assumed in the County of Los Angeles General Plan. Thus, the proposed project would be consistent with the AQMP in this regard.

In addition, the Specific Plan would be consistent with SCAG's regional goals of providing infill housing, improving the jobs-housing balance, and integrating land uses near major transportation corridors. Building upon the recommendations of the 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy, the Specific Plan incorporates a Mobility and Public Realm Strategy that describes the circulation improvements needed to support transit-oriented development within the Specific Plan. A key component of the Specific Plan is the transformation of the current circulation network, which largely supports vehicular travel, into a network that places a higher priority on the principles of complete streets and multimodal design. To achieve the proposed vision, the Specific Plan proposes the following mobility strategies:

- **Strategy 1:** Improve accessibility to transit through the provision of streetscape improvements, high-quality bicycle and pedestrian infrastructure, wayfinding signage, and other enhancements consistent with Metro's First Last Mile Strategic Plan.
    - Improve visibility and access to the Metro Green Line Station through increased lighting, signage, and improved pedestrian and bicycle infrastructure.
    - Design streetscapes that provide a comfortable buffer or sense of separation from vehicular traffic.
    - Reallocate excess portions of right-of-way, such as overly wide vehicular travel lanes, to design sidewalks and bicycle facilities that are comfortable and safe for people to enjoy.
    - Utilize wayfinding, signage, and other amenities that allow pedestrian, bicycle, and transit routes to be easily identifiable.
    - Design streetscapes that are attractive and inviting by incorporating sufficient lighting, street trees, landscaping, benches, and other amenities that are pleasant, offer visual stimulation, and promote activity.

- Support walking and biking first/last mile solutions to transit through the provision of amenities such as bicycle parking, bike racks, street lights, seating, and wayfinding maps and signage.

- **Strategy 2:** Design streets to facilitate safe, accessible connections between major destinations for multiple nodes of transportation.
  - Implement complete streets designs that promote a multimodal network of streets and prioritize safety.
  - Provide safe and comfortable pedestrian and bicycle connections between the Metro Green Line and Los Angeles Southwest College (LASC).
  - Create safe, comfortable, and accessible transit waiting areas through the provision of transit amenities such as shelters, benches, shade structures, lighting, system maps, and transit timetables.
  - Incorporate streetscape improvements as well as bicycle and pedestrian facilities that support transit operations, such as bus pads, wider sidewalks, buffered biked lanes, bike racks, and traffic control devices that prioritize transit vehicles and facilitate pedestrian circulation.
  - Locate transit stops in areas that are active and visible to maximize personal security and safety of waiting transit riders.
  - Prioritize roadway improvement projects that improve access to transit and the Metro Green Line Station.

- **Strategy 3:** Develop and incorporate parking management strategies that encourage efficient use of parking resources and support programs that can reduce parking supply needed.
  - Implement parking policies that encourage travel by public transit and other sustainable modes of transportation, such as priced parking, parking time limits, or prohibited on-street parking.
  - Implement more accurate and flexible parking standards that reflect the parking demand for the area.
  - Support land uses and infrastructure improvements that can reduce the need for parking and promote alternative modes of transportation, such as transit, walking, or biking.

In addition to the mobility strategies above, the proposed Specific Plan includes the following mobility-related policies.

- Policy 4.1: Develop a balanced, integrated, multi-modal transportation system that is efficient and safe, with frequent service connecting to destinations, employment centers, and residential areas.

- Policy 4.2: Provide a variety of transportation choices that promote accessible alternatives to the automobile, including walking, bicycling, and taking transit.

- Policy 4.3: Design streetscapes that are attractive and inviting by incorporating sufficient lighting, street trees/shade, landscaping, benches, and other amenities that are pleasant, offer visual stimulation, and promote activity for all users.

- Policy 4.4: Design sustainable and energy-efficient streetscapes with low-impact development strategies, including sustainable stormwater practices, permeable paved surfaces, drought-tolerant plant species, and solar lighting fixtures.

- Policy 4.5: Support walking and biking as first/last mile solutions to transit by providing amenities such as bicycle parking, bike racks, street lights, seating, and wayfinding maps and signage.

- Policy 4.6: Provide a safe and comfortable pedestrian network linking the transit station with LASC, commercial centers, county facilities, and residential neighborhoods.

- Policy 4.7: Implement parking policies that encourage travel by public transit and other sustainable modes of transportation, such as priced parking, parking time limits, or prohibited on-street parking.

- Policy 4.8: Implement more accurate and flexible parking standards that reflect the parking demand for the area.

As part of the overall multimodal improvements, the Connect Southwest LA project proposes the addition of 11 miles of bikeways to the existing network. To supplement the additional bikeways, the plan also includes installation of more bicycle infrastructure amenities, such as bicycle parking, crossing signals, and wayfinding signage. In addition, a similar goal of the Specific Plan is to improve accessibility to the existing transit system and the overall transit experience. The Specific Plan area is currently serviced by Metro and Gardena Municipal. Improvements to achieve this goal are generally encompassed in the first/last mile strategies and focus on pathway improvements, specifically pathway arterials and collectors. Under the Specific Plan, a multiuse path is proposed that would generally follow Interstate 105 from Los Angeles Southwest College to Vermont Avenue. This proposed path would provide a safe pathway for students and staff to access transit in the area, such as the existing Vermont/Athens Green Line Station.

The AQMP ensures that the region is on track to attain the California and federal AAQS. When a project has the potential to exceed the assumptions of the AQMP because it is more intensive than the underlying land use designation, criteria air pollutants generated during operation of development that would be accommodated by that project are compared to SCAQMD's regional significance thresholds (see Impact 5.2-2 and Impact 5.2-3), which were established to determine whether a project has the potential to cumulatively contribute to the SoCAB's nonattainment designations. While the projected population and employment

growth under the proposed project would be within the projected growth for the area, operation-phase criteria air pollutant emissions associated with development that would be accommodated by the Specific Plan would exceed SCAQMD's regional operational threshold for NO_X. As a result, the proposed project could potentially exceed the assumptions in the AQMP and would not be considered consistent with the AQMP.

Overall, implementation of the Connect Southwest LA project would result in a decrease in VMT per service population (SP) from 33.98 VMT/SP to 27.30 VMT/SP, which is consistent with regional goals to reduce passenger VMT. However, despite furthering the regional transportation and planning objectives, the Specific Plan would result in an increase in emissions compared to existing conditions that would exceed SCAQMD's regional operational significance threshold for NO_X (see Impact 5.2-3). As a result, the proposed project could potentially exceed the assumptions in the AQMP and would not be considered consistent with the AQMP.

Level of Significance before Mitigation: Based on the analysis above, upon implementation of regulatory requirements, Impact 5.2-1 would be potentially significant.

Impact 5.2-2: Construction activities associated with buildout of the proposed project could exceed SCAQMD's regional significance thresholds. [Thresholds AQ-2 and AQ-3]

Impact Analysis: A project would normally have a significant effect on the environment if it violates any air quality standard or contributes substantially to an existing or projected air quality violation. Construction activities produce combustion emissions from various sources, such as onsite heavy-duty construction vehicles, vehicles hauling materials to and from the site, and motor vehicles transporting the construction crew. Site preparation activities produce fugitive dust emissions (PM_{10} and $PM_{2.5}$) from grading, excavation, and demolition. Exhaust emissions from construction onsite would vary daily.

Construction activities would temporarily increase PM_{10}, $PM_{2.5}$, VOC, NO_x, SO_x, and CO regional emissions within the SoCAB. Construction activities associated with buildout of the Specific Plan are anticipated to occur sporadically up to year 2035 or beyond. Buildout would comprise multiple smaller projects undertaken by individual developers/project applicants, each having its own construction timeline and activities. Development of multiple properties could also occur at the same time. However, there is no defined development schedule for these future projects at this time. For this analysis, the maximum daily emissions are based on a very conservative scenario, where several construction projects throughout the Specific Plan area would occur at the same time and all construction phases would overlap. An estimate of maximum daily construction emissions is provided in Table 5.2-9, *Estimate of Regional Construction Emissions in the Specific Plan.*

Table 5.2-9 Estimate of Regional Construction Emissions in the Specific Plan

Source	Criteria Air Pollutants (pounds per day)[1, 2]					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Demolition[3]	4	55	27	<1	8	3
Site Preparation	6	83	31	<1	12	7
Grading[4]	5	60	36	<1	7	4
Building Construction	5	49	35	<1	5	2
Paving	2	18	16	<1	1	1
Architectural Coatings	49	2	4	<1	1	<1
Maximum Daily Emissions	71	267	149	<1	33	18
SCAQMD Regional Construction Threshold	75	100	550	150	150	55
Significant?	No	Yes	No	No	No	No

Source: CalEEMod 2016.3.1.
Note: Totals may not add up to 100 percent due to rounding.
1 Construction equipment mix is based on CalEEMod default construction mix. See Appendix C for a list of assumptions on emissions generated on a worst-case day.
2 Grading includes compliance with SCAQMD Rule 403 fugitive dust control measures. Measures include requiring an application of water at least twice per day to at least 80 percent of the unstabilized disturbed onsite surface areas, replacing disturbed ground cover quickly, and restricting speeds on unpaved roads to less than 15 miles per hour. Modeling also assumes a VOC of 50 g/L for interior and 100 g/L for exterior paints pursuant to SCAQMD Rule 1113.
3 For purposes of this analysis, it is assumed that approximately 2,178,964 building square feet of the existing structures would be demolished.
4 Assumes up to 100,000 cubic yards of soil haul could be required.
5 Based on overlap of the all phases.

As shown in the table, construction activities associated with the proposed project could potentially exceed the SCAQMD regional thresholds for NO_X. The primary source of NO_X emissions is exhaust from vehicles and construction equipment. NO_X is a precursor to the formation of both O_3 and particulate matter (PM_{10} and $PM_{2.5}$). Project-related emissions of NO_X would contribute to the O_3, NO_2, PM_{10}, and $PM_{2.5}$ nonattainment designations of the SoCAB. Therefore, project-related construction activities would result in significant regional air quality impacts. Because cumulative development within the Specific Plan area would exceed the regional significance thresholds, construction of the proposed project could contribute to an increase in health effects in the basin until such time as the attainment standard are met.

Level of Significance before Mitigation: Based on the analysis above, upon implementation of regulatory requirements, Impact 5.2-2 would be potentially significant.

Impact 5.2-3: Implementation of the Specific Plan would generate operational-related with overlapping construction emissions that would exceed SCAQMD's regional significance thresholds. [Thresholds AQ-2 and AQ-3]

Impact Analysis: Buildout of Specific Plan would result in direct and indirect criteria air pollutant emissions from transportation, energy (natural gas use), and area sources (e.g., natural gas fireplaces, aerosols, landscaping equipment). Transportation sources of criteria air pollutant emission are based on the traffic impact analysis conducted by IBI Group (see Appendix H of this DEIR). Development that would be accommodated by the Specific Plan would generate a net increase of 10,339 weekday average daily trips ends, resulting in 107,262 additional daily VMT at project buildout (see Tables 5.12-13 and 5.12-23 in Section 5.12,

Transportation and Traffic). The results of the CalEEMod modeling are in Table 5.2-10, *Maximum Daily Specific Plan Operational Phase Regional Emissions*.

Table 5.2-10 Maximum Daily Specific Plan Operational Phase Regional Emissions

Source	Criteria Air Pollutants (lbs/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
No Project (Existing) 2035[1]						
Area	960	61	1,195	2	127	127
Energy	2	21	11	<1	2	2
Mobile Sources	46	259	610	3	332	90
Total Emissions	1,008	341	1,816	5	461	219
Proposed Project						
Area	701	80	935	1	81	81
Energy	3	28	15	<1	2	2
Mobile Sources	57	320	761	4	416	112
Total Emissions	762	427	1,712	5	499	196
Net Change						
Area	(259)	18	(260)	(<1)	(46)	(46)
Energy	1	7	4	<1	1	1
Mobile Sources	11	61	151	1	83	23
Total Emissions	(247)	86	(104)	<1	37	(23)
SCAQMD Regional Threshold	55	55	550	150	150	55
Exceeds Regional Threshold?	No	Yes	No	No	No	No
Combined Construction + Operation (Worst-Case)						
Combined Construction + Operation	(176)	353	44	1	70	(6)
SCAQMD Regional Threshold	55	55	550	150	150	55
Significant?	No	Yes	No	No	No	No

Source: CalEEMod Version 2016.3.1.
Note: Highest winter or summer emissions are reported. Totals may not add up to 100 percent due to rounding.
[1] The No Project (Existing) 2035 operation emissions do not match those detailed in Table 5.2-4 due to the assumed improvements in vehicle emissions control technology resulting from implementation of federal and state regulations (e.g., Advanced Clean Car/Pavley).

Construction of the new residential and nonresidential uses would be based on market demand and would be constructed over the assumed approximately 20-year project buildout; therefore, emissions from construction activities could add to the total emissions during early phases (see Table 5.2-9). Table 5.2-10 shows maximum daily emissions at buildout once construction is complete and during a worst-case year from overlap of the project with construction. As shown in the table, the net change in operation-phase emissions would generate emissions that exceed the SCAQMD regional significance threshold for NO_X. Similarly, the overlap of construction activities with operation of land uses accommodated under the proposed Specific Plan would result in the exceedance the SCAQMD regional significance threshold for NO_X. As NO_X is a precursor to the formation of ozone and particulate matter, emissions of NO_X that exceed the SCAQMD regional threshold would cumulatively contribute to the O_3, PM_{10}, and $PM_{2.5}$ nonattainment designations of the SoCAB. Therefore, implementation of the Specific Plan would result in a potentially significant impact. Because

cumulative development within the Specific Plan area would exceed the regional significance thresholds, operation of the proposed project could contribute to an increase in health effects in the SoCAB.

Level of Significance before Mitigation: Based on the analysis above, upon implementation of regulatory requirements, Impact 5.2-3 would be potentially significant.

Impact 5.2-4: Construction of the proposed project could expose sensitive receptors to substantial pollutant concentrations. [Threshold AQ-4]

Impact Analysis: Development that would be accommodated by the Connect Southwest LA project could expose sensitive receptors to elevated pollutant concentrations during construction activities if it would cause or contribute significantly to elevating those levels. Unlike the mass of construction emissions shown in Table 5.2-9, described in pounds per day, localized concentrations refer to an amount of pollutant in a volume of air (ppm or μg/m3) and can be correlated to potential health effects. LSTs are the amount of project-related emissions at which localized concentrations (ppm or $\mu g/m^3$) would exceed the AAQS for criteria air pollutants for which the SoCAB is designated a nonattainment area.

Criteria Air Pollutants and Health Risk

SCAQMD currently does not require health risk assessments to be conducted for construction activities. Emissions from construction equipment primarily consist of diesel particulate matter (DPM). The Office of Environmental Health Hazards Assessment (OEHHA) has adopted new guidance for the preparation of health risk assessments issued in March 2015. OEHHA has developed a cancer risk factor and non-cancer chronic reference exposure level for DPM, but these factors are based on continuous exposure over a 30-year time frame. No short-term acute exposure levels have been developed for DPM.

Table 5.2-9 provides an estimate of the magnitude of criteria air pollutant emissions generated by the development that would be accommodated by the Specific Plan for each construction subphase. Buildout of the proposed project would occur over a long period and would comprise several smaller projects with their own construction time frames and construction equipment. Concentrations of criteria air pollutants and DPM generated by a development project depend on the emissions generated onsite and the distance to the nearest sensitive receptor. Therefore, an LST and health risk analysis can only be conducted at a project level, and quantification of LSTs and health risk is not applicable for this program-level environmental analysis. Because potential redevelopment could occur close to existing sensitive receptors, the development that would be accommodated by the Specific Plan has the potential to expose sensitive receptors to substantial pollutant concentrations. Construction equipment exhaust combined with fugitive particulate matter emissions has the potential to expose sensitive receptors to substantial concentrations of criteria air pollutant emissions or DPM and result in a potentially significant impact.

Valley Fever

Valley Fever is an infectious disease caused by the fungus *Coccidioides immitis* and *Coccidioides psadasii*. According to the County Department of Public Health, this fungus is a major cause of community-acquired pneumonia in the southwestern United States. Valley Fever fungus is most prevalent in the San Joaquin Valley and the

Central Valley, where land is arid to semi-arid and receives moderate rainfall (5 to 20 inches per year). Several factors indicate a project's potential to expose sensitive receptors to Valley Fever: disturbance of the topsoil of undeveloped land, dust storms, strong winds, earthquakes, archaeological digs, agricultural activities, and construction activities. There is the potential that construction activities could result in exposure of sensitive receptors to Valley Fever in the arid, desert portions of the unincorporated areas, including the Project Area. Individual projects developed under the Proposed Project would be required to reduce potential risk of exposing sensitive receptors to Valley Fever through implementation of SCAQMD fugitive dust control measures. SCAQMD dust control rules would reduce fugitive dust emissions as well as exposure to on-site workers. Implementation of SCAQMD measures would limit exposure of sensitive receptors to Valley Fever.

Level of Significance before Mitigation: Based on the analysis above, upon implementation of regulatory requirements, Impact 5.2-4 would be potentially significant.

Impact 5.2-5: Operation of the proposed project would not expose sensitive receptors to substantial pollutant concentrations. [Threshold AQ-4]

Impact Analysis: Operation of new land uses consistent with the land use plan of the proposed project would generate new sources of criteria air pollutants and TACs. The following describes potential localized operational air quality impacts from the implementation of the Specific Plan.

Onsite Stationary and Area Sources Emissions

Operation of residential and nonresidential structures in the Specific Plan would include occasional use of landscaping equipment, natural gas consumption for heating, and nominal truck idling for vendor deliveries. The proposed project would permit residential, commercial, and office land uses and would not involve warehousing or similar uses where substantial truck idling could occur onsite. Onsite emissions from the residential and nonresidential uses from onsite energy use (natural gas used for cooking and water heating) and other onsite sources (e.g., landscaping fuel, aerosols) would not generate substantial concentrations of emissions or exacerbate existing health risk in the area.

Industrial and Other Land Uses Requiring a SCAQMD Permit

Certain types of land uses have the potential to generate substantial stationary and area sources of emissions. Land uses that have the potential to generate substantial stationary sources of emissions that would require a permit from SCAQMD include industrial land uses, such as chemical processing facilities, dry cleaners, and gasoline-dispensing facilities. Operators of certain types of facilities must submit emissions inventories. The Air Toxics Program categorizes each facility as being high, intermediate, or low priority based on the potency, toxicity, quantity, and volume of its emissions. If the risks are above established levels, facilities are required to notify surrounding populations and to develop and implement a risk reduction plan. In addition to stationary/area sources of TACs, warehousing and trucking facilities could generate a substantial amount of diesel particulate matter emissions from off-road equipment use and truck idling. Under the proposed Specific Plan, industrial-type land uses such as the aforementioned land uses are not permitted within the proposed project area. Therefore, the Specific Plan would generally not result in an increase in industrial land uses that would generate substantial stationary or area sources of emissions.

Mobile Source Emissions: CO Hotspots

Areas of vehicle congestion have the potential to create pockets of CO called hotspots. These pockets have the potential to exceed the state one-hour standard of 20 ppm or the eight-hour standard of 9.0 ppm. At the time of the 1993 SCAQMD Handbook, the SoCAB was designated nonattainment under the California and National AAQS for CO. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of control technology on industrial facilities, CO concentrations in the SoCAB and in the state have steadily declined. In 2007, the SCAQMD was designated in attainment for CO under both the California and National AAQS.[9] Furthermore, under existing and future vehicle emission rates, a project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (BAAQMD 2017).

Buildout of the Specific Plan would result in approximately 56,850 average daily trips, which would be an increase of approximately 10,339 total daily vehicle trips over existing conditions. The net change in total daily vehicle trips would be lower than the peak hour volumes needed to potentially generate a CO hotspot. Furthermore, distributing the total daily vehicle trips throughout the Specific Plan area and only during peak hours would result in even smaller traffic volumes at the various intersections. Thus, implementation of the Specific Plan would not produce the volume of traffic required to generate a CO hotspot. Therefore, implementation of the proposed project would not have the potential to substantially increase CO hotspots at intersections in the vicinity of the planning area, and impacts would be less than significant.

Level of Significance before Mitigation: Based on the analysis above, upon implementation of regulatory requirements, Impact 5.2-5 would be less than significant.

Impact 5.2-6: The proposed project would not create objectionable odors. [Threshold AQ-5]

Impact Analysis: The proposed project would not emit objectionable odors that would affect a substantial number of people. The threshold for odor is if a project creates an odor nuisance pursuant to SCAQMD Rule 402, Nuisance, which states:

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

The type of facilities that are considered to have objectionable odors include wastewater treatments plants, compost facilities, landfills, solid waste transfer stations, fiberglass manufacturing facilities, paint/coating

[9] As identified in SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide, peak carbon monoxide concentrations in the SoCAB were the result of unusual meteorological and topographical conditions and not of congestion at a particular intersection.

operations (e.g., auto body shops), dairy farms, petroleum refineries, asphalt batch plants, chemical manufacturing, and food manufacturing facilities.

Odors generated by new nonresidential land uses are not expected to be significant or highly objectionable. New industrial uses would be required to be in compliance with SCAQMD Rule 402. Likewise, existing facilities are required to be in compliance with SCAQMD Rule 402 to prevent nuisances on sensitive land uses. Furthermore, as stated, under the proposed Specific Plan, industrial-type land uses such as the aforementioned land uses are not permitted within the Plan area. Therefore, impacts related to objectionable odors would be less than significant.

Level of Significance before Mitigation: Based on the analysis above, upon implementation of regulatory requirements, Impact 5.2-6 would be less than significant.

5.2.6 Cumulative Impacts

In accordance with the SCAQMD methodology, any project that produces a significant project-level regional air quality impact in an area that is in nonattainment contributes to the cumulative impact. Cumulative projects in the local area include new development and general growth within the SoCAB. The greatest source of emissions in the SoCAB is mobile sources. Due to the extent of the area potentially impacted from cumulative project emissions, SCAQMD considers a project cumulatively significant when project-related emissions exceed the SCAQMD regional emissions thresholds shown in Table 5.2-5, *SCAQMD Significance Thresholds*.

Construction

The SoCAB is designated nonattainment for O_3, $PM_{2.5}$, and lead (Los Angeles County only) under the California and National AAQS and nonattainment for PM_{10} under the California AAQS. Construction of cumulative projects would further degrade the regional and local air quality. Air quality would be temporarily impacted during construction activities. Implementation of mitigation measures for related projects would reduce cumulative impacts. However, project-related construction emissions could still potentially exceed the SCAQMD significance thresholds on a project and cumulative basis. Consequently, the proposed project's contribution to cumulative air quality impacts would be cumulatively considerable and therefore would be significant.

Operation

For operational air quality emissions, any project that does not exceed or can be mitigated to less than the daily regional threshold values is not considered by SCAQMD to be a substantial source of air pollution and does not add significantly to a cumulative impact. Operation of the proposed project would result in emissions in excess of the SCAQMD regional emissions threshold for NO_X for long-term operation and would cumulatively contribute to the nonattainment designations of the SoCAB. Therefore, the proposed project's air pollutant emissions would be cumulatively considerable and significant.

5.2.7 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.2-5 and 5.2-6.

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

- **Impact 5.2-1** The Specific Plan would be inconsistent with the SCAQMD Air Quality Management Plan as criteria air pollutant emissions associated with the Specific Plan would exceed the SCAQMD regional significance threshold.
- **Impact 5.2-2** Construction activities associated with buildout of the Specific Plan could exceed SCAQMD's regional significance thresholds.
- **Impact 5.2-3** Implementation of the Specific Plan would generate long-term and overlapping construction emissions that would exceed SCAQMD's regional significance thresholds.
- **Impact 5.2-4** Construction of the proposed project could expose sensitive receptors to substantial pollutant concentrations.

5.2.8 Mitigation Measures

Impact 5.2-1

RRs AIR-1 through AIR-4 and Mitigation Measure AQ-1 (for Impact 5.2-2 and Impact 5.2-3) would reduce the proposed project's regional construction-related and operational-phase criteria air pollutant emissions to the extent feasible to minimize potential conflicts with the SCAQMD AQMP. However, no mitigation measures are available that would reduce impacts associated with inconsistency with the air quality management plans due to the amount of emissions that would be generated by the buildout of the Connect Southwest LA project.

Impact 5.2-2

AQ-1 Applicants for new development projects within the Connect Southwest LA project shall require the construction contractor to use equipment that meets the US Environmental Protection Agency (EPA) Tier 4 emissions standards for off-road diesel-powered construction equipment with more than 50 horsepower, unless it can be demonstrated to the County of Los Angeles that such equipment is not available. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 4 diesel emissions control strategy for a similarly sized engine, as defined by the California Air Resources Board's regulations.

Prior to construction, the project engineer shall ensure that all demolition and grading plans clearly show the requirement for EPA Tier 4 or higher emissions standards for construction equipment over 50 horsepower. During construction, the construction contractor shall

maintain a list of all operating equipment in use on the construction site for verification by the County of Los Angeles. The construction equipment list shall state the makes, models, and numbers of construction equipment onsite. Equipment shall be properly serviced and maintained in accordance with the manufacturer's recommendations. Construction contractors shall also ensure that all nonessential idling of construction equipment is restricted to five minutes or less in compliance with Section 2449 of the California Code of Regulations, Title 13, Article 4.8, Chapter 9.

Impact 5.2-3

Stationary Source

AQ-2 Prior to issuance of a building permit for new development projects within the Connect Southwest LA project, the property owner/developer shall show on the building plans that all major appliances (dishwashers, refrigerators, clothes washers, and dryers) to be provided/installed are Energy Star–certified appliances or appliances of equivalent energy efficiency. Installation of Energy Star or equivalent appliances shall be verified by the County of Los Angeles prior to issuance of a certificate of occupancy.

Transportation and Motor Vehicles

AQ-3 Prior to issuance of building permits for residential development projects within the Connect Southwest LA project, the property owner/developer shall indicate on the building plans that the feature below has been incorporated into the design of the building(s). Proper installation of these features shall be verified by the County of Los Angeles prior to issuance of a certificate of occupancy.

- For multifamily dwellings, electric vehicle charging shall be provided as specified in Section A4.106.8.2 (Residential Voluntary Measures) of the CALGreen Code.

AQ-4 Prior to issuance of building permits for nonresidential development projects within the Connect Southwest LA project, the property owner/developer shall indicate on the building plans that the features below have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the County of Los Angeles prior to issuance of a certificate of occupancy.

- Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided as specified in Section A5.106.5.1 (Nonresidential Voluntary Measures) of the CALGreen Code.
- Facilities shall be installed to support future electric vehicle charging at each nonresidential building with 30 or more parking spaces. Installation shall be consistent with Section A5.106.5.3 (Nonresidential Voluntary Measures) of the CALGreen Code.

Impact 5.2-4

Mitigation Measure AQ-1 applied for Impact 5.2-2 would also reduce the proposed project's localized construction-related criteria air pollutant emissions to the extent feasible.

AQ-5 Prior to discretionary approval by the County of Los Angeles for development projects within the Specific Plan Area that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and are within 25 meters (82 feet) of a sensitive land use, the project applicant shall submit a construction-related air quality study that evaluates potential localized project construction-related air quality impacts to the County of Los Angele Department of Regional Planning for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (SCAQMD) methodology for assessing localized significance thresholds (LST) air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the SCAQMD-adopted thresholds of significance, the County of Los Angeles shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during construction activities. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the County and shall be verified by the County's Department of Regional Planning.

5.2.9 Level of Significance After Mitigation

Impact 5.2-1

The Specific Plan policies and RR AIR-1 through RR-AIR-4 would minimize criteria air pollutant emissions from construction and operation of the proposed project. Mitigation measures applied for Impact 5.2-2 and Impact 5.2-3 would reduce the proposed project's regional construction-related and operational-phase criteria air pollutant emissions to the extent feasible. However, due to the increase in criteria air pollutant emissions, the proposed project would continue to be potentially inconsistent with the assumptions in the AQMP. Therefore, Impact 5.2-1 would remain **significant and unavoidable**.

Impact 5.2-2

Construction activities associated with the buildout of the project would generate criteria air pollutant emissions that would exceed SCAQMD's regional significance thresholds, contribute to the nonattainment designations of the SoCAB, and contribute to known health effects from poor air quality—including worsening of bronchitis, asthma, and emphysema; a decrease in lung function; premature death of people with heart or lung disease; nonfatal heart attacks; irregular heartbeat; decreased lung function; and increased respiratory symptoms. RR AIR-3 through RR AIR-4 would minimize criteria air pollutant emissions from construction equipment exhaust and fugitive dust through compliance with CARB and SCAQMD rules. Mitigation Measure AQ-1 would reduce criteria air pollutants generated from project-related construction activities. Buildout of the proposed project would occur over a long period, and construction time frames and equipment for individual site-specific projects are not available at this time. There is a potential for multiple

developments to be constructed at any one time, resulting in significant construction-related emissions. Therefore, despite adherence to Mitigation Measure AQ-1, project-level and cumulative impacts under Impact 5.2-2 would remain **significant and unavoidable**.

Impact 5.2-3

Buildout of the proposed land use plan would generate additional vehicle trips and area sources of criteria air pollutant emissions that exceed SCAQMD's regional significance thresholds and would contribute to the nonattainment designations of the SoCAB and known health effects from poor air quality—including worsening of bronchitis, asthma, and emphysema; a decrease in lung function; premature death of people with heart or lung disease; nonfatal heart attacks; irregular heartbeat; decreased lung function; and increased respiratory symptoms. RR AIR-1 through RR AIR-2 would minimize criteria air pollutant emissions from transportation and energy use by requiring mandatory measures of CALGreen as well as additional voluntary green building standards of CALGreen for nonresidential buildings 25,000 square feet and larger. Incorporation of Mitigation Measures AQ-2 through AQ-4 would reduce operation-related criteria air pollutants generated by stationary and mobile sources. Mitigation Measures AQ-3 and AQ-4 would encourage and accommodate use of alternative-fueled vehicles. However, despite adherence to Mitigation Measures AQ-2 through AQ-4, project-level and cumulative impacts identified under Impact 5.2-3 would remain **significant and unavoidable** due to the magnitude of land use development associated with the proposed project.

Impact 5.2-4

RR AIR-3 through RR AIR-4 would minimize criteria air pollutant emissions from construction equipment exhaust and fugitive dust through compliance with CARB and SCAQMD rules. Mitigation Measure AQ-1 (applied for Impact 5.2-2) would reduce the proposed project's regional construction emissions and therefore also reduce the project's localized construction-related criteria air pollutant and DPM emissions to the extent feasible. However, because existing sensitive receptors may be close to project-related construction activities, construction emissions generated by individual development projects have the potential to exceed SCAQMD's LSTs (criteria air pollutants and health risk). Mitigation Measure AQ-5 requires preparation of a construction air quality analysis for discretionary projects subject to CEQA if they are within 25 meters of a sensitive use. However, because of the scale of development activity associated with buildout of the Specific Plan, it is not possible to determine whether the scale and phasing of individual development projects would result in the exceedance of the localized emissions and health risk thresholds and contribute to known health effects. Therefore, project-level and cumulative impacts under Impact 5.2-4 would remain **significant and unavoidable**.

5.2.10 References

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5. Environmental Analysis
AIR QUALITY

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5.3 CULTURAL RESOURCES

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the proposed Connect Southwest LA project to impact cultural resources in the County of Los Angeles. Cultural resources comprise paleontological, archaeological, and historical resources. Paleontological resources are the fossilized remains of plants and animals. Archaeology is the branch of paleontology that studies human artifacts, such as places, objects, and settlements that reflect group or individual religious, cultural, or everyday activities. Historical resources include sites, structures, objects, or places that are at least 50 years old and are significant for their engineering, architecture, cultural use or association, etc. In California, historic resources cover human activities over the past 12,000 years. Cultural resources provide information on scientific progress, environmental adaptations, group ideology, or other human advancements. The analysis in this section is based in part on the following information:

- *Cultural Resources Overview and Assessment: The City of Los Angeles, West Athens-Westmont TOD Specific Plan Project Area, Los Angeles County, California,* McKenna et al., July 20, 2016.

A complete copy of this study is included in the Technical Appendices of this Draft EIR (Volume II, Appendix D1)

5.3.1 Environmental Setting

5.3.1.1 RELEVANT PROGRAMS AND REGULATIONS

Federal

National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA) coordinates public and private efforts to identify, evaluate, and protect the nation's historic and archaeological resources. The act authorized the National Register of Historic Places, which lists districts, sites, buildings, structures, and objects that are significant in American history, architecture, archaeology, engineering, and culture.

Section 106 (Protection of Historic Properties) of the NHPA requires federal agencies to take into account the effects of their undertakings on historic properties. Section 106 Review ensures that historic properties are considered during federal project planning and implementation. The Advisory Council on Historic Preservation, an independent federal agency, administers the review process with assistance from state historic preservation offices.

Archaeological Resources Protection Act

The Archaeological Resources Protection Act of 1979 regulates the protection of archaeological resources and sites on federal and Indian lands.

Native American Graves Protection and Repatriation Act

NAGPRA is a federal law passed in 1990 that mandates museums and federal agencies to return certain Native American cultural items—such as human remains, funerary objects, sacred objects, or objects of cultural patrimony—to lineal descendants or culturally affiliated Indian tribes.

State

California Public Resources Code

Archaeological, paleontological, and historical sites are protected under a wide variety of state policies and regulations in the California Public Resources Code (PRC). In addition, cultural and paleontological resources are recognized as nonrenewable resources and receive protection under the PRC and California Environmental Quality Act (CEQA).

- **California Public Resources Code Sections 5020–5029.5** continued the former Historical Landmarks Advisory Committee as the State Historical Resources Commission. The commission oversees the administration of the California Register of Historical Resources and is responsible for the designation of State Historical Landmarks and Historical Points of Interest.

- **California Public Resources Code Sections 5079–5079.65** define the functions and duties of the Office of Historic Preservation, which is responsible for the administration of federal- and state-mandated historic preservation programs in California and the California Heritage Fund.

- **California Public Resources Code Sections 5097.9–5097.991** provide protection to Native American historical and cultural resources and sacred sites and identify the powers and duties of the Native American Heritage Commission. They also require notification to descendants of discoveries of Native American human remains and provide for treatment and disposition of human remains and associated grave goods.

California Health and Safety Code

The discovery of human remains is regulated per California Health and Safety Code Section 7050.5, which states that:

> In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation…until the coroner…has determined…that the remains are not subject to…provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible…. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her

> authority and…has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Local

Los Angeles County Historic Preservation Ordinance

County of Los Angeles Historic Preservation Ordinance (Part 28, Chapter 22.52, Title 22 Los Angeles County Code) became effective in October 2015. The County has adopted a historic preservation ordinance that generally applies to all private property in the unincorporated County area and to County-owned landmarks. The ordinance provides a process to nominate a landmark or historic district at the County level. The Board of Supervisors may designate any County-owned property as a landmark if the board determines that the property satisfies applicable criteria, which are similar to the criteria for eligibility for the state's register of historic resources.

5.3.1.2 EXISTING CONDITIONS

Natural Setting

The project site is located within the western extent of the Los Angeles Basin (Basin), which is part of the Peninsular Range Geomorphic Province of California. The Los Angeles Basin is a coastal plain extending from the Pacific Ocean on the south to the Santa Monica Mountains and Puente Hills on the north. The Basin is also described as consisting of thousands of meters of post-Jurassic sediment overlying crystalline basement rocks.

The project area is within the Southwestern Block of the Basin, of which the basement is the distinguishing feature. Although the basement of the block is exposed only in the Palos Verdes Hills, it has been encountered in numerous oil wells at depths of 5,000 to 14,000 feet below sea level. The basement rocks belong to the Catalina schist facies of the Franciscan Formation and are chiefly green chlorite and blue glaucophane schists.

Important streams include the San Gabriel River, which drains the central San Gabriel Mountains. The San Gabriel River forks downstream near Duarte into the San Gabriel River proper and the Rio Hondo River, which joins the Los Angeles River near Downey, so that the two drainages intermingle. The Los Angeles River reaches the Pacific Ocean near Long Beach, and the San Gabriel River discharges near Seal Beach.

The project area is west of the Los Angeles River channel and associated with the Newport-Inglewood Fault. The nature of the loose, sandy deposits of the older and younger Quaternary Alluvium are subject to liquefaction and ground failures (sinking/rising/expanding, etc.), but less likely to result in landslides, given the current flat terrain. Although the project area is considered to be within an urban setting, there are still some areas of open space.

Cultural Setting

Historical Resources

Prehistoric Period

The project area is associated with the traditional territory of the prehistoric and protohistoric Native American populations generally referred to as the Gabrieliño/Tongva. The Gabrieliño/Tongva society is identified by Late Prehistoric/Protohistoric ethnographic records and archaeological data as occupying Southern California in the Late Prehistoric period.

The term Gabrieliño is a reference to Native American populations under the jurisdiction of the historic Mission San Gabriel de Archangel (located in the City of San Gabriel). The Mission San Gabriel serviced the entire Los Angeles Basin and into the San Bernardino area. Present-day City of Los Angeles is somewhat centrally located in the Gabrieliño's ethnographic boundaries.

The core of the Los Angeles Basin was the site of the historic City of Los Angeles and the ethnographic village of Yangna. Following the founding of the Pueblo de Los Angeles, a large Catholic church (Church of Our Lady the Queen of the Angels) was constructed to service the small but sedentary population of the pueblo, including Native Americans and early European settlers (primarily Spanish/Mexican, but also many others). Evidence of the prehistoric occupation of the area, including the village of Yangna, has been sporadically identified, and the native populations became known as Gabrieliños.

Historic Period

In the 1770s, the Spanish padres, under the direction of Junipero Serra, began the process of establishing a series of missions throughout Alta California, as California was then known. The project area is within the boundaries of lands historically held by the Mission San Gabriel de Archangel. The Mission continued to hold these large tracts until the Mexican government declared its independence from Spain and issued orders for the secularization of the missions around 1824. By 1833-34, the majority of mission lands were taken from the Catholic Church and granted to individuals who had served as Spanish or Mexican soldiers, settlers, financiers, etc.

Historic Subdivisions

The project area is outside the boundaries of any identified rancho, and therefore, following the acquisition of Alta California by the United States, this area was available for purchase, settlement, and/or trade. Historic map research showed this area was mapped as early as 1858. Subdivisions within the project area date as early as the 1880s. The project area is currently covered by numerous County Assessor books, including books 4057, 6076, 6077, 6078, 6079, and 6090.

A total of 28 subdivision maps were identified as involving portions of the current project area. These maps date between 1887 and 1997. In assessing these maps and their respective areas, it has been demonstrated that almost the entire study area was subdivided, to some extent, very early (1887), but most of these areas were subsequently addressed with overlapping maps dating after 1917.

Much of the area was built out subsequent to WWII, and the housing/commercial structures are reflective of the 1940s to 1960s improvements. There are some earlier improvements, and these appear to cluster around the West Athens Elementary School and the area northwest of 120th Street and Vermont Avenue. This area should be considered sensitive for pre-1920 improvements.

The remaining portions of the project area are dominated by modern improvements (e.g., the Los Angeles Southwest College campus, Los Angeles County government facilities, and the Los Angeles County Sheriff's Station). There is also a considerable amount of modern commercial development along Vermont Avenue and Imperial Highway. Residential communities within the study area are dominated by late 1940s through 1960s developments, but also include some modern complexes. The campus of St. Frances Cabrini covers a relatively large property on Imperial Highway; just outside the study area, St. Andrew Catholic Church services the western side of Western Avenue. The early West Athens Elementary School (and associated community center) also covers a large area. Overall, the area is consistent with post WWII improvements with little evidence of intact early improvements.

Archaeological Resources

An archaeological records search was conducted through the California State University, Fullerton, South Central Coastal Information Center (SCCIC) to understand the extent of previous studies and the potential for the area to yield additional evidence of cultural resources. The study area encompassed the Specific Plan area and a one-half mile around the peripheries of the project area.

This research resulted in the identification of a minimum of 38 cultural resource investigations. Of these 38 studies, 26 were identified as cell tower sites involving relatively small study areas. Larger study areas involved research for the I-105 freeway alignment, the West Basin water projects, and the Metro railroad studies. The remaining studies involved properties of less than five acres associated with residential or commercial improvements. Research identified one potential cultural resource within the project area and five in the immediately surrounding area: 19-175276; 19-186739; 19-190272; 19-190274; 19-190621; 19-190623.

- **19-175276.** Site 19-175276 was recorded in 1995 and described as the site of Gompers Middle School on 112th Street. Built between 1937 and 1939, the school was designed by Myron Hunt and H. C. Chambers. There were six structures within the campus, including the Administration Building, Physical Education Building, Home Economic Building, Shop Building, Classroom Building No. 1, and the Auditorium. The campus had a rating of 2S2, meaning the site would qualify for listing in the National Register of Historic Resources. The record is incomplete, but given the street address, this campus is outside the boundaries of the current study area.

- **19-186739.** Site 19-186739 was recorded in 2002 and described as the 1940 Los Angeles Community Church on S. Hoover Street in Los Angeles. This location is east of Vermont Avenue and just northeast of the study area. The record concludes that the church is intact and old enough for consideration as a significant resource, but failed to meet the minimum requirements for recognition as a significant resource.

- **19-190272.** Site 19-190272 was recorded in 2012 and identified as the Faith United Methodist Church of Los Angeles (108th Street). Built in 1949, this church was assessed for historic significance and found to lack the necessary associations or architectural amenities to qualify for recognition as a significant resource. This resource is outside the study area.

- **19-190274.** Site 19-190274 was also recorded in 2012 and was identified as a 1959 utility pole alignment on Vermont Avenue (11850 Vermont Avenue). The pole reported under this site number is located between 117th and 119th Streets. The pole is located within the study area, but was determined ineligible for listing under Criterion A for its association with the Southern California Joint Pole Committee.

- **19-190621.** Site 19-190621 was recorded in 2013 and described as the Church of the Ascension. Erected in 1957, this Catholic church meets the age requirement to be considered historically significant. However, this church, located on 112th Street, is east of the study area and would not be impacted by any project-related activities.

- **19-190623.** Site 19-190623, recorded in 2012, is the site of Gardena Western Business Park at Western Avenue and 135th Street. The complex was identified as a 1961 commercial improvement that is ineligible for recognition as a significant cultural resource. The site is located outside the current study area.

Historic Maps and Aerial Photographs

A review of historic maps included the 1964 USGS Inglewood quadrangle. This map illustrated the project area, including the railroad alignment but not the I-105 freeway alignment, as expected. The oil fields and current street alignments are illustrated. With the exception of the oil fields, a pipeline alignment, the site of the West Athens Elementary School, and the southwestern corner of Western Avenue and Imperial Highway, the entire project area is depicted as being within an urban setting and completely built out. St. Frances Cabrini Church and School are also depicted.

The 1950 USGS Inglewood Quadrangle illustrates similar findings, but with fewer improvements on the north side of 120th Street, east of Western Avenue, and less development west of Western Avenue, south of Imperial Highway. The 1944 Redondo Beach quadrangle illustrates the railroad alignment as the Pacific Electric alignment. The Southern Pacific Railroad alignment runs south along Vermont Avenue.

Aerial photographs showed the railroad alignment and St. Frances Cabrini Church in 1952 and the presence of the sheriff's station by 1972. The beginnings of the Los Angeles Southwest Collage are also evident. By 1980, the college campus is expanded significantly, but there is still no evidence of the I-105 freeway alignment. By 1994, the freeway is present, having replaced numerous residential and/or commercial structures within its alignment. The college is also fully built out.

Areas to the north of Imperial Highway appear to remain intact. Significant changes between the pre-1964 and post-1964 periods are associated with areas between the freeway right-of-way and 120th Street.

Paleontological Resources

The project area is composed of surficial deposits consisting of older Quaternary Alluvium, derived broadly as alluvial fan deposits in the Los Angeles Basin. These deposits have been associated with numerous fossil finds, including, but not limited to, mammoth, squirrel, horse, antelope, pond turtle, puffin, turkey, ground sloth, dire wolf, rabbit, deer mouse, pocket gopher, deer, and bison. Specimens have been identified in the vicinity of 120th Street and Athens Boulevard (just east of the southeastern corner of the project area). Other specimens were identified between 112th Street and 113th Street, near Interstate 110 (Harbor Freeway).

A paleontological overview for the project area was prepared by the Natural History Museum of Los Angeles County. The overview confirmed the project area as consisting primarily of older Quaternary alluvium deposits that have yielded evidence of significant fossil specimens.

Summary

The greater majority of the project area was developed prior to any requirements for cultural resources investigations; therefore, very little of the study area has been formally investigated or evaluated for significant cultural resources. The six known resources for the area are primarily outside the boundaries of the project site. One resource (Site 19-190274), a power pole, was identified within the Specific Plan project area, but determined to be insignificant.

This level of research has resulted in a preliminary finding that the project area is highly sensitive for the presence of paleontological resources, moderately sensitive for historic cultural resources (buildings), and unknown for the presence of prehistoric archaeological resources. No prehistoric archaeological resources have been recorded in the area, but the area is generally considered sensitive for prehistoric archaeological resources, as all of the Los Angeles Basin has been known to have been exploited by the prehistoric Gabrielino/Tongva for thousands of years.

5.3.2 Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, a project would normally have a significant effect on the environment if the project would:

C-1 Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5.

C-2 Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.

C-3 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or contain rock formations indicating potential paleontological resources.

C-4 Disturb any human remains, including those interred outside of formal cemeteries.

C-5 Cause a substantial adverse change in the significance of a tribal cultural resource as defined in the CEQA Public Resources Code Section 21074.

Per Assembly Bill 52, tribal cultural resources, as defined in Public Resources Code Section 21074, must be analyzed in a separate EIR section. Thus, Threshold C-5 is analyzed in Section 5.12, *Tribal Cultural Resources*, of this DEIR.

Historical Resources

CEQA Guidelines Section 15064.5 provides direction on determining significance of impacts to archaeological and historical resources. Generally, a resource shall be considered "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated the with lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
- Has yielded, or may be likely to yield, information important in prehistory or history. (PRC § 5024.1; 14 CCR § 4852)

The fact that a resource is not listed in the California Register of Historical Resources, not determined to be eligible for listing, or not included in a local register of historical resources does not preclude a lead agency from determining that it may be a historical resource.

5.3.3 Plans, Programs, and Policies

5.3.3.1 REGULATORY REQUIREMENTS

RR CUL-1 All construction activities will be conducted in accordance with Section 7050.5 of the California Health and Safety Code regarding the potential discovery of human remains. If applicable, the Native American Heritage Commission will be responsible for designating the most likely descendant, as required by Section 5097.98 of the California Public Resources Code. If the landowner rejects the recommendations of the most likely descendant, the burial location would be determined in compliance with California Public Resources Code, Section 5097.98.

5.3.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.3-1: Development of the project could impact an identified historic resource. [Threshold C-1]

Impact Analysis: Development pursuant to the proposed project could impact known and unknown historic resources within the Specific Plan area. The few previously recorded resources identified with the project area boundaries (e.g., Site 19-190274, power pole) have been assessed as ineligible for recognition as historical resources. The project area is associated with relatively early historic subdivisions and development. With the exception of the modern commercial and residential improvements, the project area can be associated with the establishment of roadways, the railroad alignment, churches, schools, residential tracts, and commercial properties. The majority of these improvements date between the 1940s and 1960s, but also include some improvements dating back into the 1920s and 1930s.

Under CEQA, a project has a significant impact on a historical resource if it "would result in the physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resources would be materially impaired" (CEQA Guidelines Section 15064.5(b)(1)). Material impairment would occur if the project would result in demolition or material alteration of those physical characteristics that convey the resource's historical significance (CEQA Guidelines Section 15064.5(b)(2)).

Direct Impacts

Buildout of the proposed project would have no direct impact on a known historical resource. The only known historical resource is Site 19-190274, a power pole constructed in 1959 on Vermont Avenue. However, it was determined ineligible for listing under Criterion A for its association with the Southern California Joint Pole Committee. Thus, no known historical resources would be demolished, altered, or relocated as a result of the project. Impacts to known historical resources are considered less than significant.

All of the road alignments within the project area are considered historic by age. However, each has been significantly improved via width, pavement, and infrastructure improvements that have destroyed the original alignments. This is particularly seen along the major roadways, including Vermont Avenue, Western Avenue, and Imperial Highway. Secondary streets extend from 110th Street to 120th Street and include numerous east-west and north-south alignments. The names of some streets have been changed over the years, but the actual alignments have not. There have been some lot-line adjustments, but the greater majority of the properties reflect their original dimensions and improvements. Modern improvements, such as the establishment of the I-105 freeway alignment, have also resulted in the removal of some single family residences and interrupted road alignments. Overall, the area is consistent with post WWII improvements with little evidence of intact early improvements. Thus, development in accordance with the Specific Plan would not directly impact these historic-age road alignments and impacts would be less than significant.

Indirect Impacts

Implementation of the proposed project would have the potential to result in indirect impacts to historical resources if it would result in new development that is incompatible, spatially obstructive, or would otherwise damage the integrity of a historical resource.

The Secretary of the Interior's Standards (Standard) Number 9 and 10 provide guidance in evaluating the potential for indirect impacts. Standard Number 9 states:

> New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work will be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

As stated above, only one known potentially historic resource was identified onsite (Site 19-190274) and was determined ineligible for listing. Thus, indirect impacts of the proposed project would have no impact on any known historic resource in the Specific Plan area.

However, the project site includes a number of properties that have not been evaluated for historical significance and that will pass the age criteria threshold during the lifetime of the project. Generally, properties must be at least 50 years old to be eligible for listing in the National Register of Historic Places. Because the California Register and local register are modeled after the National Register, the industry standard is 50 years as the minimum age requirement for eligibility. However, to capture properties that might turn 50 years old during the development of a project or survey, 45 years old is the minimum age requirement for evaluation. Since buildout would occur over a minimum 20-year period, future development has the potential to impact buildings that become 45 years or older. A historical resources evaluation would be required at that time. Future development or improvements within the Specific Plan area could potentially impact unknown historical resources and result in a significant impact.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.3-1 would be potentially significant.

Impact 5.3-2: Development pursuant to the proposed Specific Plan could impact archaeological resources. [Threshold C-2]

Impact Analysis: The cultural resources investigations for the project site identified evidence of redevelopment in some areas, raising the potential for impacts to archaeological resources—primarily in the area east of Western Avenue and between Imperial Highway and 120th Street.

Prehistoric Archaeological Resources

No prehistoric archaeological resources have been recorded in the area, but the area is generally considered sensitive for prehistoric archaeological resources, as all of the Los Angeles Basin has been known to have been exploited by the prehistoric Gabrielino/Tongva for thousands of years. Therefore, although there was no research documentation or physical evidence, the project area should be considered relatively sensitive for prehistoric archaeological resources. Development in accordance with the Specific Plan may result in potentially significant impacts to previously undiscovered prehistoric archaeological resources.

Historic Archaeological Resources

Similar to prehistoric archaeological resources, no evidence of historic archaeological resources was identified during the recent reconnaissance survey. However, these findings are based primarily on the fact that the project site is located in an urban setting with little to no available native soils for visual inspection. There is always a potential for buried historic archaeological resources to be discovered during future grading activities associated with the proposed project, and, therefore, the overall area is considered to have a relative level of sensitivity. Thus, impacts would be potentially significant.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.3-2 would be potentially significant.

Impact 5.3-3: The proposed project could destroy paleontological resources or a unique geologic feature. [Threshold C-3]

Impact Analysis: The project area consists primarily of Older Quaternary alluvium deposits that have yielded evidence of significant fossil specimens, including, but not limited to mammoth, squirrel, horse, antelope, pond turtle, puffin, turkey, ground sloth, dire wolf, rabbit, deer mouse, pocket gopher, deer, and bison. Therefore, it is considered highly sensitive for paleontological resources. While shallow excavations are not likely to yield evidence of fossil specimens, deeper excavations (approximately 15–18 feet below the presence surface) are likely to be sensitive for the presence of significant fossil remains. Therefore, excavations of depths below 15 feet would require a paleontological monitor to identify and collect, if necessary, any specimens discovered during grading and construction activities.

Level of Significance before Mitigation: Based on the analysis aboe, Impact 5.3-3 would be potentially significant.

Impact 5.3-4: Grading activities could potentially disturb human remains. [Threshold C-4]

Impact Analysis: Buildout of the Specific Plan would involve new grading and construction activities that may uncover previously undiscovered materials, such as human remains. However, California Health and Safety Code Section 7050.5, CEQA Section 15064.5, and Public Resources Code Section 5097.98 mandate the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery. Specifically, California Health and Safety Code Section 7050.5 requires that disturbance of the site shall remain halted until the coroner has conducted an investigation into the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the Public Resources Code. If the coroner determines that the remains are not subject to his or her authority and if the coroner has reason to believe the human remains to be those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission. Regulatory requirement RR CUL-1 also requires that the MLD is notified per Section 5097.98 of the California Resources Code.

Although soil-disturbing activities associated with the proposed project could result in the discovery of human remains, compliance with existing law would ensure that significant impacts to human remains would not occur.

Level of Significance before Mitigation: With implementation of regulatory requirement RR CUL-1, Impact 5.3-4 would be less than significant.

5.3.5 Cumulative Impacts

The area considered for cumulative impacts to cultural resources is an approximate one-half-mile radius around the Specific Plan boundary. Future projects near the project site may involve demolishing or altering existing historic resources that may be eligible for California Register of Historic Resources (CRHR) listing. Some projects would disturb soil and thus could damage archaeological and/or paleontological resources that may be buried under those project sites. However, similar to the proposed project, these cumulative projects would be subject to CEQA review, including studies of historical, archaeological, and paleontological resources that are present or could be present onsite, and historic architectural evaluation of structures onsite that could potentially be eligible for listing on the CRHR. Where significant or potentially significant impacts are identified, implementation of all feasible mitigation measures would be required to reduce those impacts. Therefore, cumulative impacts to cultural resources would be less than significant after mitigation, and after implementation of state law and appropriate mitigation measures, impacts of the proposed project on cultural resources would not be cumulatively considerable.

5.3.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements, the following impact would be less than significant: 5.3-4.

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

- **Impact 5.3-1** Potentially historic resources may be impacted by development in accordance with the proposed project.
- **Impact 5.3-2** Previously undiscovered archaeological resources may be uncovered during grading activities associated with the proposed project.
- **Impact 5.3-3** Paleontological resources may be impacted by development of the proposed project.

5.3.7 Mitigation Measures

Impact 5.3-1

CUL-1 Prior to issuance of grading permits, future project applicants/developers of projects on improved properties with buildings and/or structures at least 45 years of age shall prepare the following:

- An intensive-level historical evaluation of the subject property. The evaluation shall be conducted in accordance with all applicable federal, state, and local guidelines for evaluating historical resources. Recommendations for preservation should be considered, if applicable, and

- A Phase I cultural resources investigation compliant with current standards and guidelines for proposed areas of development that includes demolition activities.

The historical evaluation and Phase I investigation shall be submitted to the County of Los Angeles Department of Regional Planning for review and approval.

Impact 5.3-2

CUL-2 Prior to the issuance of any grading permit, future project applicants/developers of previously unimproved sites or sites requiring excavation beyond six feet in depth shall provide written evidence to the County of Los Angles that a County-certified archaeologist has been retained to observe grading activities and salvage and catalogue archaeological resources as necessary. The archaeologist shall be present at the pregrade conference, shall establish procedures for archaeological 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 archaeological resources are found to be significant, the archaeological monitor shall determine appropriate actions, in cooperation with the project applicant/developer, for exploration and/or salvage. The archaeologist shall prepare a comprehensive report including appropriate records for the California Department of Parks and Recreation (Building, Structure, and Object Record; Archaeological Site Record; or District Record, as applicable). If any resources are excavated, the project applicant/developer shall prepare excavated material to the point of identification.

Future applicants/developers shall offer excavated finds for curatorial purposes to the County of Los Angeles, or its designee, on a first-refusal basis. These actions, as well as final mitigation and disposition of the resources, shall be subject to the approval of the County. The project applicant/developer shall pay curatorial fees if an applicable fee program has been adopted by the Board of Supervisors and if such fee program is in effect at the time of presentation of the materials to the County or its designee, all in a manner meeting the approval of the County.

Impact 5.3-3

CUL-3 Prior to issuance of grading permits, future project applicants/developers of previously unimproved sites or sites requiring excavation 15 feet or more below current ground surfaces shall retain a qualified paleontologist to monitor grading activities. Deep excavations may impact undisturbed deposits in older Quaternary alluvium, which is typically associated with

fossils. The qualified paleontologist shall be present during the pregrading meeting to discuss paleontological sensitivity and to assess whether scientifically important fossils have the potential to be encountered. The paleontologist shall determine, based on consultation with the County, when monitoring of grading activities is needed based on the onsite soils and final grading plans.

All paleontological work to assess and/or recover a potential resource at the project site shall be conducted under the direction of the qualified paleontologist and follow the standard protocols of the Natural History Museum of Los Angeles County. If any fossil remains are uncovered during earth-moving activities, all heavy equipment shall be diverted at least 50 feet from the fossil site until the monitor has had an opportunity to examine the remains and determines that earth moving can resume. The extent of land area that is prohibited from disturbance shall be at the discretion of the paleontological monitor. Samples of older Quaternary alluvium shall be collected as necessary for processing and shall be examined for very small vertebrate fossils. The paleontologist shall prepare a report of the results of any findings following accepted professional practice and submit the report for review by the County of Los Angeles Department of Regional Planning.

5.3.8 Level of Significance After Mitigation

The mitigation measures identified above would reduce potential impacts to cultural resources to a level that is less than significant. Therefore, no significant unavoidable adverse impacts to cultural resources have been identified.

5.3.9 References

McKenna et al. (McKenna). 2016, July 20. Cultural Resources Overview and Assessment: The City of Los Angeles, West Athens-Westmont TOD Specific Plan Project Area, Los Angeles County, California.

5.4 GREENHOUSE GAS EMISSIONS

This section of the Draft Environmental Impact Report (DEIR) evaluates the implementation of the Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont project (proposed project; Connect Southwest LA project) to cumulatively contribute to greenhouse gas (GHG) emissions. Because no single project is large enough to result in a measurable increase in global concentrations of GHG emissions, climate change impacts of a project are considered on a cumulative basis. The analysis in this section is based on buildout of the proposed project, as modeled using the California Emissions Estimator Model (CalEEMod) and trip generation and vehicle miles traveled (VMT) provided by IBI Group (see Appendix H to this DEIR). The GHG emissions modeling for construction and operational phases are included in Appendix C of this DEIR.

5.4.1 Environmental Setting

5.4.1.1 GREENHOUSE GASES AND CLIMATE CHANGE

Scientists have concluded that human activities are contributing to global climate change by adding large amounts of heat-trapping gases, known as GHGs, to the atmosphere. The primary source of these GHGs is fossil fuel use. The Intergovernmental Panel on Climate Change (IPCC) has identified four major GHGs—water vapor, carbon dioxide (CO_2), methane (CH_4), and ozone (O_3)—that are the likely cause of an increase in global average temperatures observed within the 20th and 21st centuries. Other GHGs identified by the IPCC that contribute to global warming to a lesser extent are nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons (IPCC 2001).[1,2] The major GHGs are briefly described below.

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

- **Methane (CH_4)** is emitted during the production and transport of coal, natural gas, and oil. Methane emissions also result from livestock and other agricultural practices and from the decay of organic waste in municipal landfills and water treatment facilities.

[1] Water vapor (H_2O) is the strongest GHG and the most variable in its phases (vapor, cloud droplets, ice crystals). However, water vapor is not considered a pollutant, because it is considered part of the feedback loop rather than a primary cause of change.

[2] Black carbon contributes to climate change both directly, by absorbing sunlight, and indirectly, by depositing on snow (making it melt faster) and by interacting with clouds and affecting cloud formation. Black carbon is the most strongly light-absorbing component of particulate matter emitted from burning fuels such as coal, diesel, and biomass. Reducing black carbon emissions globally can have immediate economic, climate, and public health benefits. California has been an international leader in reducing emissions of black carbon, with close to 95 percent control expected by 2020 due to existing programs that target reducing particulate matter from diesel engines and burning activities (CARB 2017b). However, state and national GHG inventories do not include black carbon yet due to ongoing work resolving the precise global warming potential of black carbon. Guidance for CEQA documents does not yet include black carbon.

- **Nitrous oxide (N_2O)** is emitted during agricultural and industrial activities as well as during the combustion of fossil fuels and solid waste.

- **Fluorinated gases** are synthetic, strong GHGs that are emitted from a variety of industrial processes. Fluorinated gases are sometimes used as substitutes for ozone-depleting substances. These gases are typically emitted in smaller quantities, but because they are potent GHGs, they are sometimes referred to as high global-warming-potential (GWP) gases.

    - ***Chlorofluorocarbons (CFCs)*** are GHGs covered under the 1987 Montreal Protocol and used for refrigeration, air conditioning, packaging, insulation, solvents, or aerosol propellants. Since they are not destroyed in the lower atmosphere (troposphere, stratosphere), CFCs drift into the upper atmosphere where, given suitable conditions, they break down the ozone layer. These gases are therefore being replaced by other compounds that are GHGs covered under the Kyoto Protocol.

    - ***Perfluorocarbons (PFCs)*** are a group of human-made chemicals composed of carbon and fluorine only. These chemicals (predominantly perfluoromethane [CF_4] and perfluoroethane [C_2F_6]) were introduced as alternatives, along with hydrofluorocarbons (HFCs), to ozone-depleting substances. In addition, PFCs are emitted as by-products of industrial processes and are used in manufacturing. PFCs do not harm the stratospheric ozone layer, but they have a high GWP.

    - ***Sulfur Hexafluoride (SF_6)*** is a colorless gas soluble in alcohol and ether, and slightly soluble in water. SF_6 is a strong GHG used primarily in electrical transmission and distribution systems as an insulator.

    - ***Hydrochlorofluorocarbons (HCFCs)*** contain hydrogen, fluorine, chlorine, and carbon atoms. Although they are ozone-depleting substances, they are less potent than CFCs. They have been introduced as temporary replacements for CFCs.

    - ***Hydrofluorocarbons (HFCs)*** contain only hydrogen, fluorine, and carbon atoms. They were introduced as alternatives to ozone-depleting substances to serve many industrial, commercial, and personal needs. HFCs are emitted as by-products of industrial processes and are also used in manufacturing. They do not significantly deplete the stratospheric ozone layer, but they are strong GHGs. (IPCC 1995; USEPA 2017)

GHGs are dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Some GHGs have a stronger greenhouse effect than others. These are referred to as high GWP gases. The GWPs of GHGs are shown in Table 5.4-1, *GHG Emissions and Their Relative Global Warming Potential Compared to CO_2*. The GWP is used to convert GHGs to CO_2-equivalence (CO_2e) to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. For

example, under IPCC's Fourth Assessment Report (AR4) GWP values for CH_4, a project that generates 10 metric tons (MT) of CH_4 would be equivalent to one that generates 250 MT of CO_2.[3]

Table 5.4-1 GHG Emissions and Their Relative Global Warming Potential Compared to CO_2

GHGs	Second Assessment Report Atmospheric Lifetime (Years)	Fourth Assessment Report Atmospheric Lifetime (Years)	Second Assessment Report Global Warming Potential Relative to CO_2[1]	Fourth Assessment Report Global Warming Potential Relative to CO_2[1]
Carbon Dioxide (CO_2)	50 to 200	50 to 200	1	1
Methane[2] (CH_4)	12 (±3)	12	21	25
Nitrous Oxide (N_2O)	120	114	310	298
Hydrofluorocarbons:				
HFC-23	264	270	11,700	14,800
HFC-32	5.6	4.9	650	675
HFC-125	32.6	29	2,800	3,500
HFC-134a	14.6	14	1,300	1,430
HFC-143a	48.3	52	3,800	4,470
HFC-152a	1.5	1.4	140	124
HFC-227ea	36.5	34.2	2,900	3,220
HFC-236fa	209	240	6,300	9,810
HFC-4310mee	17.1	15.9	1,300	1,030
Perfluoromethane: CF_4	50,000	50,000	6,500	7,390
Perfluoroethane: C_2F_6	10,000	10,000	9,200	12,200
Perfluorobutane: C_4F_{10}	2,600	NA	7,000	8,860
Perfluoro-2-methylpentane: C_6F_{14}	3,200	NA	7,400	9,300
Sulfur Hexafluoride (SF_6)	3,200	NA	23,900	22,800

Sources: IPCC 1995, 2007.
Note: The GWP values in the IPCC's Fifth Assessment Report (2013) reflect new information on atmospheric lifetimes of GHGs and an improved calculation of the radiative forcing of CO_2. However, SCAQMD uses the AR4 GWP values to maintain consistency in statewide GHG emissions modeling. In addition, the 2014 Scoping Plan Update was based on the AR4 GWP values.
1 Based on 100-year time horizon of the GWP of the air pollutant compared to CO_2.
2 The methane GWP includes direct effects and indirect effects due to the production of tropospheric ozone and stratospheric water vapor. The indirect effect due to the production of CO_2 is not included.

California's GHG Sources and Relative Contribution

California is the 20th largest GHG emitter in the world and the 2nd largest emitter in the United States, surpassed only by Texas (CARB 2014a). However, California also has over 12 million more people than Texas. Because of more stringent air emission regulations, in 2014, California ranked third lowest in energy-related carbon emissions per capita (EIA 2017).

[3] CO_2-equivalence is used to show the relative potential that different GHGs have to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. The global warming potential of a GHG is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere.

In 2016, the statewide GHG emissions inventory was updated for 2000 to 2014 emissions using the AR4 GWPs.[4] Based on these GWPs, California produced 442 million metric tons (MMT) of CO_2e GHG emissions in 2014. California's transportation sector remains the single largest generator of GHG emissions, producing 36.1 percent of the state's total emissions; industrial sector emissions made up 21.1 percent, and electric power generation made up 20.0 percent. Other major sectors of GHG emissions are commercial and residential (8.7 percent), agriculture (8.2 percent), high-GWP GHGs (3.9 percent), and recycling and waste (2.0 percent) (CARB 2016a).

Human Influence on Climate Change

For approximately 1,000 years before the Industrial Revolution, the amount of GHGs in the atmosphere remained relatively constant. During the 20th century, however, scientists observed a rapid change in the climate and the quantity of climate change pollutants in the Earth's atmosphere that is attributable to human activities. The amount of CO_2 in the atmosphere has increased by more than 35 percent since preindustrial times and has increased at an average rate of 1.4 parts per million per year since 1960, mainly due to combustion of fossil fuels and deforestation (IPCC 2007). These recent changes in the quantity and concentration of climate change pollutants far exceed the extremes of the ice ages, and the global mean temperature is warming at a rate that cannot be explained by natural causes alone. Human activities are directly altering the chemical composition of the atmosphere through the buildup of climate change pollutants (CAT 2006). In the past, gradual changes in the earth's temperature changed the distribution of species, availability of water, etc. However, human activities are accelerating this process so that environmental impacts associated with climate change no longer occur in a geologic time frame but within a human lifetime (IPCC 2007).

Like the variability in the projections of the expected increase in global surface temperatures, the environmental consequences of gradual changes in the Earth's temperature are also hard to predict. Projections of climate change depend heavily upon future human activity. Therefore, climate models are based on different emission scenarios that account for historical trends in emissions and on observations of the climate record that assess the human influence of the trend and projections for extreme weather events. Climate-change scenarios are affected by varying degrees of uncertainty. For example, there are varying degrees of certainty on the magnitude of the trends for:

- Warmer and fewer cold days and nights over most land areas.
- Warmer and more frequent hot days and nights over most land areas.
- An increase in frequency of warm spells/heat waves over most land areas.
- An increase in frequency of heavy precipitation events (or proportion of total rainfall from heavy falls) over most areas.

[4] Methodology for determining the statewide GHG inventory is not the same as the methodology used to determine statewide GHG emissions under Assembly Bill 32 (2006).

- Larger areas affected by drought.
- Intense tropical cyclone activity increases.
- Increased incidence of extreme high sea level (excluding tsunamis).

Potential Climate Change Impacts for California

Observed changes over the last several decades across the western United States reveal clear signs of climate change. Statewide average temperatures increased by about 1.7°F from 1895 to 2011, and warming has been greatest in the Sierra Nevada. By 2050, California is projected to warm by approximately 2.7°F above 2000 averages, a threefold increase in the rate of warming over the last century. By 2100, average temperatures could increase from 4.1 to 8.6°F, depending on emissions levels (CCCC 2012).

In California and western North America, observations of the climate have shown: 1) a trend toward warmer winter and spring temperatures; 2) a smaller fraction of precipitation falling as snow; 3) a decrease in the amount of spring snow accumulation in the lower and middle elevation mountain zones; 4) a shift in the timing of snowmelt of 5 to 30 days earlier in the spring; and 5) a similar shift (5 to 30 days earlier) in the timing of spring flower blooms (CAT 2006). According to the California Climate Action Team—a committee of state agency secretaries and the heads of agencies, boards, and departments, led by the Secretary of the California Environmental Protection Agency—even if actions could be taken to immediately curtail climate change emissions, the potency of emissions that have already built up, their long atmospheric lifetimes (see Table 5.4-1), and the inertia of the Earth's climate system could produce as much as 0.6°C (1.1°F) of additional warming. Consequently, some impacts from climate change are now considered unavoidable. Global climate change risks to California are shown in Table 5.4-2, *Summary of GHG Emissions Risks to California,* and include impacts to public health, water resources, agriculture, coastal sea level, forest and biological resources, and energy impacts.

Table 5.4-2 Summary of GHG Emissions Risks to California

Impact Category	Potential Risk
Public Health Impacts	Heat waves will be more frequent, hotter, and longer Fewer extremely cold nights Poor air quality made worse Higher temperatures increase ground-level ozone levels
Water Resources Impacts	Decreasing Sierra Nevada snow pack Challenges in securing adequate water supply Potential reduction in hydropower Loss of winter recreation
Agricultural Impacts	Increasing temperature Increasing threats from pests and pathogens Expanded ranges of agricultural weeds Declining productivity Irregular blooms and harvests
Coastal Sea Level Impacts	Accelerated sea level rise Increasing coastal floods

Table 5.4-2 Summary of GHG Emissions Risks to California

Impact Category	Potential Risk
	Shrinking beaches Worsened impacts on infrastructure
Forest and Biological Resource Impacts	Increased risk and severity of wildfires Lengthening of the wildfire season Movement of forest areas Conversion of forest to grassland Declining forest productivity Increasing threats from pest and pathogens Shifting vegetation and species distribution Altered timing of migration and mating habits Loss of sensitive or slow-moving species
Energy Demand Impacts	Potential reduction in hydropower Increased energy demand

Sources: CEC 2006, 2009; CCCC 2012; CNRA 2014.

Specific climate change impacts that could affect the project include:

- **Water Resources Impacts.** By late this century, all projections show drying, and half of the projections suggest 30-year average precipitation will decline by more than 10 percent below the historical average. This drying trend is caused by an apparent decline in the frequency of rain and snowfall. Even in projections with relatively small or no declines in precipitation, central and southern parts of the state can be expected to be drier from the warming effects alone—the spring snowpack will melt sooner, and the moisture in soils will evaporate during long dry summer months (CCCC 2012).

- **Wildfire Risks.** Earlier snowmelt, higher temperatures, and longer dry periods over a longer fire season will directly increase wildfire risk. Indirectly, wildfire risk will also be influenced by potential climate-related changes in vegetation and ignition potential from lightning. Human activities will continue to be the biggest factor in ignition risk. The number of large fires statewide is estimated to increase from 58 percent to 128 percent above historical levels by 2085. Under the same emissions scenario, estimated burned area will increase by 57 percent to 169 percent, depending on location (CCCC 2012).

- **Health Impacts.** Many of the gravest threats to public health in California stem from the increase of extreme conditions, principally more frequent, more intense, and longer heat waves. Particular concern centers on the increasing tendency for multiple hot days in succession and simultaneous heat waves in several regions throughout the state. Public health could also be affected by climate change impacts on air quality, food production, the amount and quality of water supplies, energy pricing and availability, and the spread of infectious diseases. Higher temperatures also increase ground-level ozone levels. Furthermore, wildfires can increase particulate air pollution in the major air basins of California (CCCC 2012).

- **Increase Energy Demand.** Increases in average temperature and higher frequency of extreme heat events combined with new residential development across the state will drive up the demand for cooling

in the increasingly hot and longer summer season and decrease demand for heating in the cooler season. Warmer, drier summers also increase system losses at natural gas plants (reduced efficiency in the electricity generation process at higher temperatures) and hydropower plants (lower reservoir levels). Transmission of electricity will also be affected by climate change. Transmission lines lose 7 percent to 8 percent of transmitting capacity in high temperatures while needing to transport greater loads. This means that more electricity needs to be produced to make up for the loss in capacity and the growing demand (CCCC 2012).

5.4.1.2 RELEVANT PROGRAMS AND REGULATIONS

This section describes the federal, state, and local regulations applicable to GHG emissions.

Federal Laws

The U.S. Environmental Protection Agency (EPA) announced on December 7, 2009, that GHG emissions threaten the public health and welfare of the American people and that GHG emissions from on-road vehicles contribute to that threat. The EPA's final findings respond to the 2007 U.S. Supreme Court decision that GHG emissions fit within the Clean Air Act definition of air pollutants. The findings did not themselves impose any emission reduction requirements, but allowed the EPA to finalize the GHG standards proposed in 2009 for new light-duty vehicles as part of the joint rulemaking with the Department of Transportation (USEPA 2009).

To regulate GHGs from passenger vehicles, EPA was required to issue an endangerment finding. The finding identifies emissions of six key GHGs—CO_2, CH_4, N_2O, hydrofluorocarbons, perfluorocarbons, and SF_6—that have been the subject of scrutiny and intense analysis for decades by scientists in the United States and around the world. The first three are applicable to the project's GHG emissions inventory because they constitute the majority of GHG emissions and, per South Coast Air Quality Management District (SCAQMD) guidance, are the GHG emissions that should be evaluated as part of a project's GHG emissions inventory.

US Mandatory Report Rule for GHGs (2009)

In response to the endangerment finding, the EPA issued the Mandatory Reporting of GHG Rule that requires substantial emitters of GHG emissions (large stationary sources, etc.) to report GHG emissions data. Facilities that emit 25,000 MT or more of CO_2e per year are required to submit an annual report.

Update to Corporate Average Fuel Economy Standards (2010/2012)

The current Corporate Average Fuel Economy standards (for model years 2011 to 2016) incorporate stricter fuel economy requirements promulgated by the federal government and California into one uniform standard. Additionally, automakers are required to cut GHG emissions in new vehicles by roughly 25 percent by 2016 (resulting in a fleet average of 35.5 miles per gallon by 2016). Rulemaking to adopt these new standards was completed in 2010. California agreed to allow automakers who show compliance with the national program to also be deemed in compliance with state requirements. The federal government issued

new standards in 2012 for model years 2017–2025 that will require a fleet average of 54.5 miles per gallon in 2025. However, the EPA is reexamining the 2017-2025 emissions standards.

EPA Regulation of Stationary Sources under the Clean Air Act (Ongoing)

Pursuant to its authority under the Clean Air Act, the EPA has been developing regulations for new stationary sources such as power plants, refineries, and other large sources of emissions. Pursuant to former President Obama's 2013 Climate Action Plan, the EPA was directed to develop regulations for existing stationary sources also. However, the EPA is reviewing the Clean Power Plan under President Trump's Energy Independence Executive Order.

State Laws

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in Executive Order S-03-05 and B-30-15, Assembly Bill 32 (AB 32), Senate Bill 32 (SB 32), and SB 375.

Executive Order S-03-05

Executive Order S-03-05, signed June 1, 2005, set the following GHG reduction targets for the state:

- 2000 levels by 2010
- 1990 levels by 2020
- 80 percent below 1990 levels by 2050

Assembly Bill 32, the Global Warming Solutions Act (2006)

Current State of California guidance and goals for reductions in GHG emissions are generally embodied in AB 32. AB 32 was passed by the California state legislature on August 31, 2006, to place the state on a course toward reducing its contribution of GHG emissions. AB 32 follows the 2020 tier of emissions reduction targets established in Executive Order S-03-05.

CARB 2008 Scoping Plan

The final Scoping Plan was adopted by CARB on December 11, 2008. The *2008 Scoping Plan* identified that GHG emissions in California are anticipated to be approximately 596 $MMTCO_2e$ in 2020. In December 2007, CARB approved a 2020 emissions limit of 427 $MMTCO_2e$ (471 million tons) for the state (CARB 2008). In order to effectively implement the emissions cap, AB 32 directed CARB to establish a mandatory reporting system to track and monitor GHG emissions levels for large stationary sources that generate more than 25,000 $MTCO_2e$ per year, prepare a plan demonstrating how the 2020 deadline can be met, and develop appropriate regulations and programs to implement the plan by 2012.

First Update to the Scoping Plan

CARB completed a five-year update to the 2008 Scoping Plan, as required by AB 32. The First Update to the Scoping Plan was adopted at the May 22, 2014, board hearing. The update highlights California's progress toward meeting the near-term 2020 GHG emission reduction goals defined in the original 2008 Scoping Plan.

As part of the update, CARB recalculated the 1990 GHG emission levels with the updated AR4 GWPs, and the 427 $MMTCO_2e$ 1990 emissions level and 2020 GHG emissions limit, established in response to AB 32, is slightly higher at 431 $MMTCO_2e$ (CARB 2014b).

As identified in the Update to the Scoping Plan, California is on track to meeting the goals of AB 32. However, the update also addresses the state's longer-term GHG goals within a post-2020 element. The post-2020 element provides a high level view of a long-term strategy for meeting the 2050 GHG goals, including a recommendation for the state to adopt a midterm target. According to the Update to the Scoping Plan, local government reduction targets should chart a reduction trajectory that is consistent with or exceeds the trajectory created by statewide goals (CARB 2014b). CARB identified that reducing emissions to 80 percent below 1990 levels will require a fundamental shift to efficient, clean energy in every sector of the economy. Progressing toward California's 2050 climate targets will require significant acceleration of GHG reduction rates. Emissions from 2020 to 2050 will have to decline several times faster than the rate needed to reach the 2020 emissions limit (CARB 2014b).

Executive Order B-30-15

Executive Order B-30-15, signed April 29, 2015, sets a goal of reducing GHG emissions within the state to 40 percent of 1990 levels by year 2030. Executive Order B-30-15 also directs CARB to update the Scoping Plan to quantify the 2030 GHG reduction goal for the state and requires state agencies to implement measures to meet the interim 2030 goal as well as the long-term goal for 2050 in Executive Order S-03-05. It also requires the Natural Resources Agency to conduct triennial updates of the California adaption strategy, Safeguarding California, in order to ensure climate change is accounted for in state planning and investment decisions.

Senate Bill 32 and Assembly Bill 197

In September 2016, Governor Brown signed SB 32 and AB 197 into law, making the Executive Order goal for year 2030 into a statewide mandated legislative target. AB 197 established a joint legislative committee on climate change policies and requires the CARB to prioritize direction emissions reductions rather than the market-based cap-and-trade program for large stationary, mobile, and other sources.

2017 Climate Change Scoping Plan Update

Executive Order B-30-15 and SB 32 required CARB to prepare another update to the Scoping Plan to address the 2030 target for the state. On January 20, 2017, CARB released the *Draft 2017 Climate Change Scoping Plan Update* with adoption hearings planned for June of 2017. The *Draft 2017 Climate Change Scoping Plan Update* includes the potential regulations and programs including strategies consistent with AB 197 requirements to achieve the 2030 target. The 2017 Scoping Plan establishes a new emissions limit of 260 $MMTCO_2e$ for the year 2030, which corresponds to a 40 percent decrease in 1990 levels by 2030 (CARB 2017a).

California's climate strategy will require contributions from all sectors of the economy, including the land base, and will include enhanced focus on zero- and near-zero emission (ZE/NZE) vehicle technologies; continued investment in renewables, including solar roofs, wind, and other distributed generation; greater use

of low carbon fuels; integrated land conservation and development strategies; coordinated efforts to reduce emissions of short-lived climate pollutants (methane, black carbon, and fluorinated gases); and an increased focus on integrated land use planning to support livable, transit-connected communities and conservation of agricultural and other lands. Requirements for direct GHG reductions at refineries will further support air quality co-benefits in neighborhoods, including in disadvantaged communities historically located adjacent to these large stationary sources, as well as efforts with California's local air pollution control and air quality management districts (air districts) to tighten emission limits on a broad spectrum of industrial sources. Major elements of the 2017 Scoping Plan framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing Zero Emission Vehicle (ZEV) buses and trucks.
- Low Carbon Fuel Standard (LCFS), with an increased stringency (18 percent by 2030).
- Implementation of SB 350, which expands the Renewables Portfolio Standard (RPS) to 50 percent RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy, which focuses on reducing methane and hydroflurocarbon emissions by 40 percent and anthropogenic black carbon emissions by 50 percent by year 2030.
- Continued implementation of SB 375.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- 20 percent reduction in GHG emissions from refineries by 2030.[5]
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

In addition to the statewide strategies listed above, the *2017 Climate Change Scoping Plan* also identified local governments as essential partners in achieving the state's long-term GHG reduction goals and identified local actions to reduce GHG emissions. As part of the recommended actions, CARB recommends that local governments achieve a community-wide goal to achieve emissions of no more than 6 $MTCO_2e$ or less per capita by 2030 and 2 $MTCO_2e$ or less per capita by 2050. For CEQA projects, CARB states that lead agencies may develop evidenced-based bright-line numeric thresholds—consistent with the Scoping Plan and the state's long-term GHG goals—and projects with emissions over that amount may be required to incorporate

[5] The plan includes policies to require direct GHG reductions at some of the State's largest stationary sources and mobile sources in accordance with AB 197. These policies include the use of lower GHG fuels, efficiency regulations, and the Cap-and-Trade Program, which constrains and reduces emissions at covered sources.

on-site design features and mitigation measures that avoid or minimize project emissions to the degree feasible or a performance-based metric using a climate action plan or other plan to reduce GHG emissions (CARB 2017a).

The Scoping Plan scenario is set against the business-as-usual (BAU) yardstick—that is, what the GHG emissions would look like if the state did nothing at all beyond the policies that are required and already in place to achieve the 2020 limit, as shown in Table 5.4-3, *2017 Climate Change Scoping Plan Emissions Reductions Gap to Achieve the 2030 GHG Target*. It includes the existing renewables requirements, advanced clean cars, the "10 percent" LCFS, and the SB 375 program for more vibrant communities, among others. However, it does not include a range of new policies or measures that have been developed or put into statute over the past two years. Also shown in the table, the known commitments are expected to result in emissions that are 50 $MMTCO_2e$ above the target in 2030. In order to make up the gap, a new Post-2020 Cap-and-Trade Program and refinery measure are key components of the 2017 Scoping Plan.

Table 5.4-3 2017 Climate Change Scoping Plan Emissions Reductions Gap to Achieve the 2030 GHG Target

Modeling Scenario	2030 GHG Emissions $MMTCO_2e$
Reference Scenario (Business-as-Usual)	392.4
With Known Commitments	310
2030 GHG Target	260

Source: CARB 2017a.

Table 5.4-4, *2017 Climate Change Scoping Plan Emissions Change by Sector to Achieve the 2030 Target*, provides estimated GHG emissions by sector, compared to 1990 levels, and the range of GHG emissions for each sector estimated for 2030.

Table 5.4-4 2017 Climate Change Scoping Plan Emissions Change by Sector to Achieve the 2030 Target

Scoping Plan Sector	1990 $MMTCO_2e$	2030 Proposed Plan Ranges $MMTCO_2e$	% Change from 1990
Agricultural	26	24-25	-4% to -8%
Residential and Commercial	44	38-40	-9% to -14%
Electric Power	108	42-62	-43% to -61%
High GWP	3	8-11	167% to 267%
Industrial	98	77-87	-11% to -21%
Recycling and Waste	7	8-9	14% to 29%
Transportation (including TCU)	152	103-111	-27% to -32%
Net Sink[1]	-7	TBD	TBD
Sub Total	431	300-345	-20% to -30%
Cap-and-Trade Program	NA	40-85	NA
Total	431	260	-40%

Table 5.4-4 2017 Climate Change Scoping Plan Emissions Change by Sector to Achieve the 2030 Target

Scoping Plan Sector	1990 $MMTCO_2e$	2030 Proposed Plan Ranges $MMTCO_2e$	% Change from 1990

Source: CARB 2017a.
Notes: TCU = Transportation, Communications, and Utilities; TBD: To Be Determined.
[1] Work is underway through 2017 to estimate the range of potential sequestration benefits from the natural and working lands sector.

Senate Bill 1383

On September 19, 2016, the Governor signed SB 1383 to supplement the GHG reduction strategies in the Scoping Plan to consider short-lived climate pollutants, including black carbon and CH_4. Black carbon is the light-absorbing component of fine particulate matter produced during incomplete combustion of fuels. SB 1383 requires the state board, no later than January 1, 2018, to approve and begin implementing that comprehensive strategy to reduce emissions of short-lived climate pollutants to achieve a reduction in methane by 40 percent, hydrofluorocarbon gases by 40 percent, and anthropogenic black carbon by 50 percent below 2013 levels by 2030, as specified. The bill also establishes targets for reducing organic waste in landfill. On March 14, 2017, CARB adopted the "Final Proposed Short-Lived Climate Pollutant Reduction Strategy," which identifies the state's approach to reducing anthropogenic and biogenic sources of short-lived climate pollutants. Anthropogenic sources of black carbon include on- and off-road transportation, residential wood burning, fuel combustion (charbroiling), and industrial processes. According to CARB, ambient levels of black carbon in California are 90 percent lower than in the early 1960s despite the tripling of diesel fuel use (CARB 2017b). In-use on-road rules are expected to reduce black carbon emissions from on-road sources by 80 percent between 2000 and 2020. SCAQMD is one of the air districts that requires air pollution control technologies for chain-driven broilers, which reduces particulate emissions from these char broilers by over 80 percent (CARB 2017b). Additionally, SCAQMD Rule 445 limits installation of new fireplaces in the SoCAB.

Senate Bill 375

In 2008, SB 375, the Sustainable Communities and Climate Protection Act, was adopted to connect the GHG emissions reductions targets established in the 2008 Scoping Plan for the transportation sector to local land use decisions that affect travel behavior. Its intent is to reduce GHG emissions from light-duty trucks and automobiles (excludes emissions associated with goods movement) by aligning regional long-range transportation plans, investments, and housing allocations to local land use planning to reduce VMT and vehicle trips. Specifically, SB 375 required CARB to establish GHG emissions reduction targets for each of the 18 metropolitan planning organizations (MPOs). The Southern California Association of Governments (SCAG) is the MPO for the Southern California region, which includes the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial.

Pursuant to the recommendations of the Regional Transportation Advisory Committee, CARB adopted per capita reduction targets for each of the MPOs rather than a total magnitude reduction target. SCAG's targets are an 8 percent per capita reduction from 2005 GHG emission levels by 2020 and a 13 percent per capita reduction from 2005 GHG emission levels by 2035 (CARB 2010). The 2020 targets are smaller than the 2035

targets because a significant portion of the built environment in 2020 has been defined by decisions that have already been made. In general, the 2020 scenarios reflect that more time is needed for large land use and transportation infrastructure changes. Most of the reductions in the interim are anticipated to come from improving the efficiency of the region's transportation network. The targets would result in 3 $MMTCO_2e$ of reductions by 2020 and 15 $MMTCO_2e$ of reductions by 2035. Based on these reductions, the passenger vehicle target in CARB's Scoping Plan (for AB 32) would be met (CARB 2010).

Under SB 375, CARB is required to update the targets for the MPOs every eight years. In June 2017, CARB released updated targets and technical methodology. The updated targets consider the need to further reduce VMT, as identified in the draft 2017 Scoping Plan Update, while balancing the need for additional and more flexible revenue sources to incentivize positive planning and action toward sustainable communities. Like the 2010 targets, the updated SB 375 targets are in units of percent per capita reduction in GHG emissions from automobiles and light trucks relative to 2005. This excludes reductions anticipated from implementation of state technology and fuels strategies and any potential future state strategies such as statewide road user pricing. The proposed targets call for greater per capita GHG emission reductions from SB 375 than are currently in place, which for 2035, translate into proposed targets that either match or exceed the emission reduction levels in the MPOs' currently adopted SCSs. As proposed, CARB staff's proposed targets would result in an additional reduction of over 10 $MMTCO_2e$ in 2035 compared to the current targets. For the next round of SCS updates, CARB's updated targets for the SCAG region are an 8 percent per capita GHG reduction in 2020 from 2005 levels (unchanged from the 2010 target) and a 21 percent per capita GHG reduction in 2035 from 2005 levels (compared to the 2010 target of 13 percent) (CARB 2017c). CARB anticipates adoption of the updated targets and methodology in October 2017. The updated targets and methodology will take effect on January 1, 2018, and SCS adopted in 2018 and later would be subject to these new targets.

SCAG's 2016-2040 RTP/SCS

SB 375 requires the MPOs to prepare a sustainable communities strategy in their regional transportation plan. For the SCAG region, the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted on April 7, 2016, and is an update to the 2012 RTP/SCS (SCAG 2016). In general, the SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce vehicle miles traveled from automobiles and light duty trucks and thereby reduce GHG emissions from these sources.

The 2016-2040 RTP/SCS projects that the SCAG region will meet or exceed the passenger per capita targets set in 2010 by CARB. It is projected that VMT per capita in the region for year 2040 would be reduced by 7.4 percent with implementation of the 2016-2040 RTP/SCS compared to a no-plan year 2040 scenario. Under the 2016-2040 RTP/SCS, SCAG anticipates lowering GHG emissions 8 percent below 2005 levels by 2020, 18 percent by 2035, and 21 percent by 2040. The 18 percent reduction by 2035 over 2005 levels represents a 2 percent increase in reduction compared to the 2012 RTP/SCS projection. Overall, the SCS is meant to provide growth strategies that will achieve the aforementioned regional GHG emissions reduction targets. Land use strategies to achieve the region's targets include planning for new growth around high quality transit areas and livable corridors, and creating neighborhood mobility areas to integrate land use and transportation

and plan for more active lifestyles (SCAG 2016). However, the SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS; instead, it provides incentives to governments and developers for consistency.

Assembly Bill 1493

California vehicle GHG emission standards were enacted under AB 1493 (Pavley I). Pavley I is a clean-car standard that reduces GHG emissions from new passenger vehicles (light-duty auto to medium-duty vehicles) from 2009 through 2016 and is anticipated to reduce GHG emissions from new passenger vehicles by 30 percent in 2016. California implements the Pavley I standards through a waiver granted to California by the EPA. In 2012, the EPA issued a Final Rulemaking that sets even more stringent fuel economy and GHG emissions standards for model year 2017 through 2025 light-duty vehicles (see also the discussion on the update to the Corporate Average Fuel Economy standards under *Federal Laws*, above). In January 2012, CARB approved the Advanced Clean Cars program (formerly known as Pavley II) for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards. Under California's Advanced Clean Car program, by 2025, new automobiles will emit 34 percent fewer global warming gases and 75 percent fewer smog-forming emissions.

Executive Order S-01-07

On January 18, 2007, the state set a new LCFS for transportation fuels sold within the state. Executive Order S-01-07 sets a declining standard for GHG emissions measured in carbon dioxide equivalent gram per unit of fuel energy sold in California. The LCFS requires a reduction of 2.5 percent in the carbon intensity of California's transportation fuels by 2015 and a reduction of at least 10 percent by 2020. The standard applies to refiners, blenders, producers, and importers of transportation fuels, and would use market-based mechanisms to allow these providers to choose how they reduce emissions during the "fuel cycle" using the most economically feasible methods.

Senate Bills 1078, 107, X1-2, and Executive Order S-14-08

A major component of California's Renewable Energy Program is the RPS established under Senate Bills 1078 (Sher) and 107 (Simitian). Under the RPS, certain retail sellers of electricity were required to increase the amount of renewable energy each year by at least 1 percent in order to reach at least 20 percent by December 30, 2010. Executive Order S-14-08 was signed in November 2008, which expanded the state's Renewable Energy Standard to 33 percent renewable power by 2020. This standard was adopted by the legislature in 2011 (SBX1-2). Renewable sources of electricity include wind, small hydropower, solar, geothermal, biomass, and biogas. The increase in renewable sources for electricity production will decrease indirect GHG emissions from development projects, because electricity production from renewable sources is generally considered carbon neutral.

Senate Bill 350

Senate Bill 350 (de Leon), was signed into law September 2015. SB 350 establishes tiered increases to the RPS of 40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy efficiency savings in electricity and natural gas through energy efficiency and conservation measures.

Executive Order B-16-2012

On March 23, 2012, the state identified that CARB, the California Energy Commission (CEC), the Public Utilities Commission, and other relevant agencies worked with the Plug-in Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to accommodate zero-emissions vehicles in major metropolitan areas, including infrastructure to support them (e.g., electric vehicle charging stations). The executive order also directs the number of zero-emission vehicles in California's state vehicle fleet to increase through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles are zero-emission by 2015 and at least 25 percent by 2020. The executive order also establishes a target for the transportation sector of reducing GHG emissions from the transportation sector 80 percent below 1990 levels.

California Building Code: Building Energy Efficiency Standards

Energy conservation standards for new residential and non-residential buildings were adopted by the California Energy Resources Conservation and Development Commission (now the CEC) in June 1977 and most recently revised in 2016 (Title 24, Part 6, of the California Code of Regulations [CCR]). Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. On June 10, 2015, the CEC adopted the 2016 Building Energy Efficiency Standards, which went into effect on January 1, 2017.

The 2016 Standards continues to improve upon the previous 2013 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. Under the 2016 Standards, residential and nonresidential buildings are 28 and 5 percent more energy efficient than the 2013 Standards, respectively (CEC 2015a). Buildings that are constructed in accordance with the 2013 Building Energy Efficiency Standards are 25 percent (residential) to 30 percent (nonresidential) more energy efficient than the prior 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features. While the 2016 standards do not achieve zero net energy, they do get very close to the state's goal and make important steps toward changing residential building practices in California. The 2019 standards will take the final step to achieve zero net energy for newly constructed residential buildings throughout California (CEC 2015b).

California Building Code: CALGreen

On July 17, 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (24 CCR, Part 11, known as "CALGreen") was adopted as part of the California Building Standards Code. CALGreen established planning and design standards for sustainable site development, energy efficiency (in excess of the California Energy Code

requirements), water conservation, material conservation, and internal air contaminants.[6] The mandatory provisions of CALGreen became effective January 1, 2011, and were last updated in 2016. The 2016 CALGreen became effective on January 1, 2017.

2006 Appliance Efficiency Regulations

The 2006 Appliance Efficiency Regulations (20 CCR §§ 1601–1608) were adopted by the CEC on October 11, 2006, and approved by the California Office of Administrative Law on December 14, 2006. The regulations include standards for both federally regulated appliances and non–federally regulated appliances. Though these regulations are now often viewed as "business as usual," they exceed the standards imposed by all other states, and they reduce GHG emissions by reducing energy demand.

Solid Waste Regulations

California's Integrated Waste Management Act of 1989 (AB 939; Public Resources Code §§ 40050 et seq.) set a requirement for cities and counties throughout the state to divert 50 percent of all solid waste from landfills by January 1, 2000, through source reduction, recycling, and composting. In 2008, the requirements were modified to reflect a per capita requirement rather than tonnage. To help achieve this, the act requires that each city and county prepare and submit a source reduction and recycling element. AB 939 also established the goal for all California counties to provide at least 15 years of ongoing landfill capacity.

AB 341 (Chapter 476, Statutes of 2011) increased the statewide goal for waste diversion to 75 percent by 2020 and requires recycling of waste from commercial and multifamily residential land uses.

The California Solid Waste Reuse and Recycling Access Act (AB 1327; Public Resources Code §§ 42900 et seq.) requires areas to be set aside for collecting and loading recyclable materials in development projects. The act required the California Integrated Waste Management Board to develop a model ordinance for adoption by any local agency requiring adequate areas for collection and loading of recyclable materials as part of development projects. Local agencies are required to adopt the model or an ordinance of their own.

Section 5.408 of the 2013 CALGreen also requires that at least 50 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse.

In October of 2014 Governor Brown signed AB 1826, requiring businesses to recycle their organic waste on and after April 1, 2016, depending on the amount of waste they generate per week. This law also requires that on and after January 1, 2016, local jurisdictions across the state implement an organic waste recycling program to divert organic waste generated by businesses, including multifamily residential dwellings that consist of five or more units. Organic waste means food waste, green waste, landscape and pruning waste, nonhazardous wood waste, and food-soiled paper waste that is mixed in with food waste.

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

Water Efficiency Regulations

The 20x2020 Water Conservation Plan was issued by the Department of Water Resources (DWR) in 2010 pursuant to Senate Bill 7, which was adopted during the 7th Extraordinary Session of 2009–2010 and therefore dubbed "SBX7-7." SBX7-7 mandated urban water conservation and authorized the DWR to prepare a plan implementing urban water conservation requirements (20x2020 Water Conservation Plan). In addition, it required agricultural water providers to prepare agricultural water management plans, measure water deliveries to customers, and implement other efficiency measures. SBX7-7 requires urban water providers to adopt a water conservation target of 20 percent reduction in urban per capita water use by 2020 compared to 2005 baseline use.

The Water Conservation in Landscaping Act of 2006 (AB 1881) requires local agencies to adopt the updated DWR model ordinance or equivalent. AB 1881 also requires the CEC to consult with the DWR to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

Local Laws and Programs

Los Angeles County Community Climate Action Plan (CCAP)

The County's *Final Unincorporated Los Angeles County Community Climate Action Plan 2020* (CCAP) was adopted as part of the Los Angeles County General Plan 2035 on October 6, 2015. The plan addresses the County's local GHG reduction goals for 2020 pursuant to AB 32. The purpose of the CCAP is to: 1) establish a baseline emissions inventory and reduction needed to meet County goals; 2) identify specific actions that will measurably reduce GHG emissions consistent with AB 32; 3) establish a framework for implementing state and local level actions; and 4) provide a mechanism for ongoing tracking and updates to the CCAP.

As part of the CCAP, the County has identified a GHG reduction target of at least 11 percent below 2010 levels by 2020. The CCAP identifies 26 local actions to reduce community-wide GHG reductions in 2020 to reach the GHG reduction goal for the unincorporated areas of Los Angeles County. As identified in the CCAP, the community and statewide actions would reduce GHG emissions in the unincorporated areas by more than 1.95 $MMTCO_2e$.

Since adoption of the CCAP, the County Department of Regional Planning has been working collaboratively with other County departments and individually on ordinance amendments to Title 22 in order to implement the CCAP. The department is currently working on the following CCAP implementation ordinances for Title 22:

- Title 22 Compatibility for Cool Roofs and Cool Pavement
- Electric Vehicle Infrastructure as an Accessory Use
- Idle Reduction
- Secondary Uses under High-Voltage Power Lines

5.4.1.3 EXISTING CONDITIONS

The proposed site currently generates direct and indirect GHG emissions from vehicle trips generated by the project, energy use (indirectly from purchased electricity use and directly through fuel consumed for building heating), area sources (e.g., equipment used on-site, consumer products, coatings), water/wastewater generation, and waste disposal. GHG emissions generated within the Specific Plan are shown in Table 5.4-5, *Existing Specific Plan GHG Emissions*.

Table 5.4-5 Existing Specific Plan GHG Emissions

Source	GHG Emissions MTCO2e/Year	
	Existing	Percent of Total
Area	909	1%
Energy	18,743	19%
Transportation	74,541	75%
Waste	3,050	3%
Water	2,431	2%
Total All Sectors	99,673	100%

Source: CalEEMod Version 2016.3.1.
Notes: Based on 2017 emission rates and IPCC's AR4 GWPs. Totals may not equal 100 percent due to rounding.
Industrial sources of emissions that require a permit from SCAQMD (permitted sources) are not included in the Specific Plan community inventory since they have separate emission reduction requirements.

5.4.2 Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, a project would normally have a significant effect on the environment if the project would:

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

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

5.4.2.1 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

To provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents, SCAQMD has convened a GHG CEQA Significance Threshold Working Group. Based on the last meeting (Meeting No. 15) in September 2010, the SCAQMD Working Group identified a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency (SCAQMD 2010):

- **Tier 1.** If a project is exempt from CEQA, project-level and cumulative GHG emissions are less than significant.

- **Tier 2.** If the project complies with a GHG emissions reduction plan or mitigation program that avoids or substantially reduces GHG emissions in the project's geographic area (i.e., city or county), project-level and cumulative GHG emissions are less than significant.

For projects that are not exempt or where no qualifying GHG reduction plans are directly applicable, SCAQMD requires an assessment of GHG emissions. SCAQMD has identified a "bright-line" screening-level threshold of 3,000 $MTCO_2e$ annually for all land use types or the following land-use-specific thresholds: 1,400 $MTCO_2e$ for commercial projects, 3,500 $MTCO_2e$ for residential projects, or 3,000 $MTCO_2e$ for mixed-use projects. This bright-line threshold is based on a review of 711 CEQA projects from the Governor's Office of Planning and Research database. The review found that 90 percent of CEQA projects would exceed the bright-line thresholds identified above. Therefore, projects that do not exceed the bright-line threshold would have a nominal and therefore less than cumulatively considerable impact on GHG emissions:

- **Tier 3.** If GHG emissions are less than the screening-level threshold, project-level and cumulative GHG emissions are less than significant.

- **Tier 4.** If emissions exceed the screening threshold, a more detailed review of the project's GHG emissions is warranted.

SCAQMD has identified an efficiency target for projects that exceed the bright-line threshold: a 2020 efficiency target of 4.8 $MTCO_2e$ per year per service population ($MTCO_2e$/year/SP) for project-level analyses and 6.6 $MTCO_2e$/year/SP for plan-level analyses (e.g., general plans). Service population is defined as the sum of the residential and employment population of a project. The per capita efficiency targets are based on the AB 32 GHG reduction target and 2020 GHG emissions inventory prepared for CARB's 2008 Scoping Plan.[7]

Since the SCAQMD efficiency targets identified by the Working Group are based on the GHG reduction goals of AB 32 for year 2020, they have been adjusted based on the long-term GHG reduction targets of SB 32, which set a goal of 40 percent below 1990 levels by 2030, as show in Table 5.4-6, *2030 GHG Reduction Targets*.

Table 5.4-6 2030 GHG Reduction Targets

GHG Sector[1]	Scoping Plan Scenario GHG Emissions $MMTCO_2e$
2017 Scoping Plan End Use Sector 2030 – Land Use Only Sectors	
Residential – residential energy consumption	38.4
Commercial – commercial energy consumption	26.8
Transportation – transportation energy consumption	104.1
Transportation Communications and Utilities – energy that supports public infrastructure like street lighting and waste treatment facilities	4.3

[7] SCAQMD took the 2020 statewide GHG reduction target for land use only GHG emissions sectors and divided it by the 2020 statewide employment for the land use sectors to derive a per capita GHG efficiency metric that coincides with the GHG reduction targets of AB 32 for year 2020.

Table 5.4-6 2030 GHG Reduction Targets

Non-Energy Solid Waste – methane emissions from solid waste disposal	9.17
Total 2017 Scoping Plan Land Use Sector Target	182.8
2030 Project-Level Efficiency Target	
2030 Population[2]	44,085,600
2030 Employment[3]	17,394,580
2030 Service Population	61,480,180
2030 Efficiency Target	3.0 $MTCO_2e$/SP
2035 Project-Level Efficiency Target[4]	
2035 Land Use Sector Target Estimate	151,400,000
2035 Population Estimate	47,233,240
2035 Employment Estimate	18,992,870
2035 Service Population Estimate	66,266,110
2035 Efficiency Target	2.4 $MTCO_2e$/SP

Sources:
[1] CARB 2017a.
[2] CDOF 2014.
[3] Caltrans 2016. Without industrial and agricultural sectors.
[4] The 2035 Efficiency target is based on interpolating the 2030 land use emissions target of 183 $MMTCO_2e$ (40 percent below 1990 levels by 2030) and the 2050 land use emissions goal of 57.4 $MMTCO_2e$ (80 percent below 1990 levels by 2050), which equates to approximately 47 percent below 1990 levels by 2035. The population and employment estimates are based on a similar forecast to estimate the service population in California in 2035.

Because buildout of the project would occur in 2035, the applicable threshold is based on the trajectory needed to achieve the year 2030 GHG reduction target of SB 32 (40 percent below 1990 levels by 2030) and Executive Order S-03-05 (80 percent below 1990 levels by 2050) for the horizon year of the project. Project emissions are compared to the SCAQMD's project-level efficiency threshold of:

- The 2035 GHG estimated efficiency target would be 2.4 $MTCO_2e$ per service population per year, to be on a trajectory to achieve the GHG reduction target of SB 32.

Project-related GHG emissions include on-road transportation, energy use, water use and wastewater generation, solid waste disposal, area sources, off-road emissions, and construction activities. The SCAQMD Working Group identified that because construction activities would result in a "one-time" net increase in GHG emissions, construction activities should be amortized into the operational phase GHG emissions inventory based on the service life of a building. For buildings in general, it is reasonable to look at a 30-year time frame, since this is a typical interval before a new building requires the first major renovation. The net increase in proposed project emissions is compared to the SCAQMD's bright-line threshold. If the proposed project exceeds the bright-line target, total GHG emissions would be compared to the SCAQMD efficiency target for buildout year 2035.

5.4.3 Plans, Programs, and Policies

5.4.3.1 REGULATORY REQUIREMENTS

RR GHG-1 New buildings are required to achieve the current California Building Energy and Efficiency Standards (Title 24, Part 6) and California Green Building Standards Code (CALGreen) (Title 24, Part 11). The 2016 Building and Energy Efficiency Standards are effective starting on January 1, 2017. The Building Energy and Efficiency Standards and CALGreen are updated tri-annually with a goal to achieve net zero energy (NZE) for residential buildings by 2020 and non-residential buildings by 2030. The County's green building standards which implement and exceed CALGreen are identified County Code, Title 31. The County has adopted the Voluntary Tier 1 standards for non-residential construction greater than or equal to 25,000 square feet (Section 301.3.1, Buildings greater than or equal to 25,000 square feet).[8] Newly constructed high-rise residential buildings of seven stories or greater are also required to comply with Section 301.3, which requires implementation of the Voluntary Tier 1 standards. Newly constructed low-rise and high-rise residential buildings (six stories or less) are only required to comply with the mandatory measures of CALGreen.

RR GHG-2 New buildings are required to adhere to the California Green Building Standards Code (CALGreen) requirement to provide bicycle parking for new non-residential buildings, or meet local bicycle parking ordinances, whichever is stricter (CALGreen Sections 5.106.4.1, 14.106.4.1, and 5.106.4.1.2). Non-residential construction would be required to provide anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for five percent of new visitor motorized vehicle parking spaces being added. For employee, long-term secured bicycle parking is required to be provided for five percent of the tenant-occupied (i.e., staff) motorized vehicle parking spaces being added. The proposed project is also required to designate parking for low-emitting, fuel-efficient, and carpool/vanpool spaces identified in CALGreen. Non-residential buildings of 25,000 square feet or more also requires compliance with the Tier 1 voluntary measures in section A5.601.2.4, which require low-emitting, fuel-efficient, and carpool/vanpool spaces for 10 percent of the total parking capacity.

RR GHG-3 New buildings are required to adhere to the California Green Building Standards Code (CALGreen) and Water Efficient Landscape Ordinance requirements integrated into the County Code to increase water efficiency and reduce urban per capita water demand. The County's green building standards are identified County Code, Title 31. Non-residential structures and residential structures seven stories and higher are also required to comply with Section 301.3.1, *Nonresidential Buildings greater than or equal to 25,000 square feet*, which requires implementation of the Tier 1 voluntary standards (30 percent reduction) for indoor potable water use and 60 percent of Reference evapotranspiration (ETo) for outdoor potable water use; Section 5.106.4, *Low Impact Development*; and Section 4.106.5, *Landscape*

[8] With the exception that high-rise non-residential construction would be subject to the mandatory (Table A4.106.5.1(3)), rather than the Tier 1 voluntary, measures for solar reflectance in Table A5.106.11.2.2.

Design, which requires use of non-invasive, drought-tolerant plants. Title 31 requires project designs and practices that will result in the conservation of water and energy resources, such as measures for building commissioning, clean vehicle parking, and solid waste recycling.

RR GHG-4 Construction contractors within Los Angeles County are required to adhere to the County's Construction & Demolition (C&D) Debris Recycling and Reuse Ordinance, Chapter 20.87 of the Los Angeles County Code. The County's C&D requirements are consistent with CALGreen requirements and require construction contractors to divert a minimum of 50 percent of the construction generated waste from area landfills, depending on the type and intensity of construction. Construction contractors would be required to divert a minimum of 65 percent of the C&D debris by weight and submit a Recycling and Reuse Plan to the County's Construction & Demolition Unit for review and approval. Additionally, according to the County's Green Building Ordinance, non-residential construction of 25,000 square feet or more requires implementation of CALGreen Tier 1 voluntary standards, the proposed project building materials will include a minimum of 10 percent of recycled content based on estimated cost.

RR GHG-5 Construction activities will be conducted in compliance with 13 California Code of Regulations Section 2499, which requires that nonessential idling of construction equipment is restricted to five minutes or less.

5.4.4 Environmental Impacts

5.4.4.1 METHODOLOGY

This GHG evaluation was prepared in accordance with the requirements of CEQA to determine if significant GHG impacts are likely to occur in conjunction with the proposed project. SCAQMD has published guidelines that are intended to provide local governments with guidance for analyzing and mitigating environmental impacts and which were used in this analysis. Modeling of GHG was conducted using CalEEMod, version 2016.3.1. Life cycle emissions are not included in this analysis because not enough information is available for the proposed project, and therefore life cycle GHG emissions would be speculative.[9] Black carbon emissions are not included in the GHG analysis because CARB does not include this pollutant in the state's AB 32 inventory and treats this short-lived climate pollutant separately.[10] Industrial sources of emissions that require a permit from SCAQMD (permitted sources) are not included in the

[9] Life cycle emissions include indirect emissions associated with materials manufacture. However, these indirect emissions involve numerous parties, each of which is responsible for GHG emissions of their particular activity. The California Resources Agency, in adopting the CEQA Guidelines Amendments on GHG emissions found that lifecycle analyses was not warranted for project-specific CEQA analysis in most situations, for a variety of reasons, including lack of control over some sources, and the possibility of double-counting emissions (see Final Statement of Reasons for Regulatory Action, December 2009). Because the amount of materials consumed during the operation or construction of the proposed project is not known, the origin of the raw materials purchased is not known, and manufacturing information for those raw materials are also not known, calculation of life cycle emissions would be speculative. A life-cycle analysis is not warranted (OPR 2008).

[10] Particulate matter emissions, which include black carbon, are analyzed in Section 5.2, *Air Quality*. Black carbon emissions have sharply declined due to efforts to reduce on-road and off-road vehicle emissions, especially diesel particulate matter. The State's existing air quality policies will virtually eliminate black carbon emissions from on-road diesel engines within 10 years (CARB 2017b).

Connect Southwest LA community inventory since they have separate emission reduction requirements. GHG modeling is included in Appendix C of this Draft EIR.

The analysis in this section is based on buildout of the proposed project as modeled using CalEEMod, version 2016.3.1, for the following sectors:

- **Transportation.** On-road transportation sources are based on trip generation rates and VMT provided by IBI Group (see Appendix H). An average trip distance of 9.18 and 9.40 miles per trip are utilized for the existing and project buildout scenarios, respectively.

- **Energy Use.** Electricity and natural gas use are based on the rates identified in CalEEMod version 2016.3.1 and the carbon intensity for Southern California Edison's electricity. Existing residential and nonresidential building energy-use was modeled using historical energy demand rates in CalEEMod. New buildings would achieve the 2016 Building and Energy Efficiency Standards at a minimum, which are 28 percent more energy efficient for residential buildings and 5 percent more energy efficient for non-residential buildings and residential buildings of four stories or more.

- **Water/Wastewater.** GHG emissions from this sector are associated with the embodied energy used to supply, treat, and distribute water and treat wastewater and fugitive GHG emissions from wastewater treatment. Emissions are based on wastewater consumption rates identified in IBI Group's Infrastructure Assessment (Appendix I2).

- **Solid Waste Disposal.** Indirect emissions from waste generation are based on the solid waste generation rates identified in Section 5.14, *Utilities and Service Systems*, which are based on rates identified by CalRecycle.

- **Area Sources.** GHG emissions from this sector are from use of landscaping equipment used for property maintenance and consumer products (e.g., cleaning supplies, etc.).

- **Construction.** GHG emissions are from construction-related vehicle and equipment use are based on a worst-case emissions scenario for buildout of the Specific Plan. Because there is no defined development schedule for these future projects at this time, the maximum daily emissions are based on a very conservative scenario, where several construction projects throughout the Connect Southwest LA praject area would occur at the same time and all construction phases would overlap. Emissions are amortized over a 30-year period and included as part of the overall inventory. See Section 5.2.5.1 of Section 5.2, *Air Quality*, and Appendix C of the DEIR for further details regarding the construction assumptions assumed for this project.

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.4-1: Development of the proposed project would not result in a substantial increase of GHG emissions. [Threshold GHG-1]

Impact Analysis: Development under the proposed project would contribute to global climate change through direct and indirect emissions of GHG from land uses within the Specific Plan area. The proposed project would result in a net increase of an additional 1,060 dwelling units and 1,690,638 million non-residential square feet, resulting in an increase in 3,204 people and 3,803 employees in the Specific Plan area compared the existing land uses. Buildout of the proposed project is not linked to a specific development time frame. Development that would be accommodated by the Specific Plan would generate a net increase of 10,339 weekday average daily trips ends, resulting in 107,262 additional daily VMT at project buildout. GHG emissions from construction activities are amortized into the operational phase GHG emissions inventory to account for one-time emissions from construction in accordance with SCAQMD methodology. The community GHG emissions inventory for the Specific Plan at buildout compared to existing conditions is in Table 5.4-7, *Connect Southwest LA Specific Plan GHG Emissions Forecast*.

Table 5.4-7 Connect Southwest LA Specific Plan GHG Emissions Inventory

Sector	GHG Emissions $MTCO_2e$/Year			
	Existing	Specific Plan Buildout	Percent	Change from Existing
Area	909	1,178	1%	269
Energy[1]	18,743	28,407	28%	9,664
On-Road Transportation[2]	74,541	64,932	63%	(9,609)
Solid Waste Disposal	3,050	4,313	4%	1,263
Water/Wastewater[3]	2,431	2,907	3%	476
Amortized Construction[4]	NA	864	1%	864
Total	**99,673**	**102,600**	**100%**	**2,927**
SCAQMD Bright-Line Threshold	—	—	—	3,000
Exceed Threshold?	—	—	—	No
Service Population (SP)[5]	12,569	19,576	—	7,007
$MTCO_2e$/SP	7.93	5.24	—	(2.96)

Source: CalEEMod 2016.3.1. Based on 2035 emission rates and IPCC's AR4 GWPs. Totals may not equal 100 percent due to rounding.
Notes: Industrial sources of emissions that require a permit from SCAQMD (permitted sources) are not included in the Specific Plan community inventory since they have separate emission reduction requirements.
Totals may not add to 100 percent due to rounding.
$MTCO_2e$ = metric tons of carbon dioxide equivalent.
1 Existing residential and nonresidential building energy use modeled using historical energy demand rates in CalEEMod. New buildings would achieve the 2016 Building and Energy Efficiency Standards.
2 Transportation emissions are based on trip generation and VMT provided by IBI Group (see Appendix H).
3 Water use is based on the wastewater demand rates provided by IBI Group (see Appendix I2).
4 Short-term (one time) total construction emissions during the assumed 20-year buildout are amortized over a 30-year project lifetime in accordance with SCAQMD guidance and incorporated into the operational emissions analysis.
5 Existing based on a service population of 11,158 people and 1,411 employees. Specific Plan buildout is based on a service population of 14,362 people and 5,214 employees.

As shown in Table 5.4-7, buildout conditions under the proposed Specific Plan would result in a net increase in GHG emissions of 2,927 $MTCO_2e$ annually from project-related operational activities and would not exceed SCAQMD's draft bright-line screening threshold of 3,000 $MTCO_2e$ for all land use types.

Furthermore, the GHG emissions per service population rate would decrease from 7.93 $MTCO_2e$/year/SP to 5.24 $MTCO_2e$/year/SP. Overall, under the Specific Plan, although increase in land use development would result in a 56 percent increase in the total service population, it would result in a 34 percent decrease in GHG emissions per service population.

The net increase in overall GHG emissions would be attributed to the increase in land use intensity and associated population and employment growth within the Specific Plan boundaries. While implementation of the proposed Specific Plan would result in an increase in daily vehicle trips and VMT, regulations aimed at reducing vehicle tail pipe emissions (e.g., Advance Clean Cars) would result in contributing to the overall net decrease in mobile-source emissions. In addition, the improvement in per service population efficiency would be attributable to the overall land use plan and development standards of the Specific Plan. Placement of land uses that complement each other as well as improvements in access to alternative transportation options contribute to reducing VMT per service population. A multiuse path between Los Angeles Southwest College to the existing Vermont/Athens Metro Station is proposed as part of the first/last mile strategies under the proposed Specific Plan. Other improvements include expanding the bicycle network through the installation of an additional 11 miles of bikeways throughout the Specific Plan area on corridors such as Normandie Avenue, Western Avenue, and Imperial Highway. Under the proposed Specific Plan, daily VMT per service population would decrease to 26.65 miles/SP from the current 33.89 miles/SP. Aside from the policies and strategies to reduce VMT per service population, new buildings under the Specific Plan would be more energy efficient than existing buildings. Likewise, new plumbing fixtures and landscaping would result in a decrease in water use on a per capita basis. Increasing energy efficiency in buildings and water conservation are supported in the policies, regulating code, and design guidelines proposed under the Specific Plan. These aspects of the Connect Southwest LA project would contribute to the overall reduction of GHG emissions per service population.

In summary, a combination of the proposed land use development and multimodal mobility improvements under the Specific Plan, in addition to regulatory requirements, would contribute to reducing emissions and increasing efficiency. The proposed land use development and multimodal mobility improvements would contribute in reducing vehicle trips and VMT. Regulatory requirements would contribute to reducing on-road vehicle tailpipe emissions (e.g., Advance Clean Cars) in addition to increasing building energy efficiency, thereby reducing energy sector emissions (e.g., 2016 Building Energy Efficiency Standards). Overall, these various components would result in a net increase in emissions of 2,927 $MTCO_2e$ annually and would not exceed SCAQMD's draft bright-line screening threshold of 3,000 $MTCO_2e$. Therefore, GHG emissions impacts associated with implementation of the proposed Specific Plan are considered less than significant.

Level of Significance before Mitigation: Upon implementation of regulatory requirements, Impact 5.4-1 would be less than significant.

Impact 5.4-2: The proposed project would not conflict with the plans adopted for the purpose of reducing GHG emissions. [Threshold GHG-2]

Impact Analysis: Applicable plans adopted for the purpose of reducing GHG emissions include CARB's Scoping Plan, SCAG's 2016-2040 RTP/SCS, and the Los Angeles County CCAP. A consistency analysis with these plans is presented below.

CARB Scoping Plan

In accordance with AB 32, CARB developed the 2008 Scoping Plan to outline the state's strategy established by AB 32, which is to return to the State's GHG emissions inventory to 1990 levels by year 2020. In September 2016, SB 32 was signed into law, requiring the state's GHG emissions to return to 40 percent below 1990 levels by 2030. Executive Order B-30-15 and SB 32 require CARB to prepare another update to the Scoping Plan to address the 2030 target for the state. On January 20, 2017, CARB released the draft *2017 Climate Change Scoping Plan* to address the new interim GHG emissions target under SB 32. The CARB Scoping Plan is applicable to state agencies and is not directly applicable to cities/counties and individual projects. Nonetheless, the Scoping Plan has been the primary tool used to develop performance-based and efficiency-based CEQA criteria and GHG reduction targets for climate action planning efforts.

CARB is working towards adopting the *2017 Climate Change Scoping Plan*, which will provide strategies for the state to meet the 2030 GHG reduction target as established under SB 32. Statewide strategies to reduce GHG emissions in the *2017 Climate Change Scoping Plan* include implementing SB 350, which expands the RPS to 50 percent by 2030 and doubles energy efficiency savings; expanding the LCFS to 18 percent by 2030; implementing the Mobile Source Strategy to deploy zero-electric vehicle buses and trucks; implementation of the Sustainable Freight Action Plan; implementation of the Short-Lived Climate Pollutant Reduction Strategy, which reduces methane and hydrofluorocarbons 40 percent below 2013 levels by 2030 and black carbon emissions 50 percent below 2013 levels by 2030; continuing to implement SB 375; creation of a post-2020 Cap-and-Trade Program; establishing a new regulation to reduce GHG emissions from the refinery sector by 20 percent; and development of an Integrated Natural and Working Lands Action Plan to secure California's land base as a net carbon sink (CARB 2017).

The project GHG emissions shown in Table 5.4-7 include reductions associated with statewide strategies that have been adopted since AB 32 and SB 32. The proposed project would comply with these reduction measures since they are statewide strategies. In addition, future buildings constructed over the lifetime of the proposed project would be subject to the future triannual updates to the Building and Energy Efficiency Standards, which will ultimately require zero net energy (ZNE) construction. The regulating code in the proposed Specific Plan includes the following general use regulations and standards pertaining to sustainability and resource conservation:

- Buildings and development projects within the Specific Plan area shall be designed and constructed using sustainable, energy efficient materials and incorporate strategies for the conservation of water, energy, and other natural resources.

- White or green roofs shall be used as much as possible, while the use of pavement, asphalt, and other heat producing surfaces should be minimized to reduce the heat island effect.
- Building and development projects shall be more energy efficient than required by local and state codes.
- Energy-efficient natural lighting shall be used in buildings and new developments. Maximize daylighting and views through window placement and design.

Additionally, the Scoping Plan itself is not directly applicable to the proposed project. Therefore, the proposed project would not obstruct implementation of the CARB Scoping Plan, and impacts would be less than significant.

SCAG's 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy

SCAG adopted the 2016-2040 RTP/SCS in April 2016 pursuant to the requirements of SB 375. SCAG's RTP/SCS identifies that land use strategies that focus on new housing and job growth in areas served by high quality transit and other opportunity areas would be consistent with a land use development pattern that supports and complements the proposed transportation network. The overarching strategy in the 2016 RTP/SCS is to provide for a plan that allows the southern California region to grow in more compact communities in existing urban areas; provide neighborhoods with efficient and plentiful public transit and abundant and safe opportunities to walk, bike, and pursue other forms of active transportation; and preserve more of the region's remaining natural lands (SCAG 2016). The 2016 RTP/SCS contains transportation projects to help more efficiently distribute population, housing, and employment growth, as well as a forecast development that is generally consistent with regional-level general plan data. The projected regional development pattern, when integrated with the proposed regional transportation network identified in the RTP/SCS, would reduce per capita vehicular travel–related GHG emissions and achieve the GHG reduction per capita targets for the SCAG region.

The RTP/SCS does not require that local general plans, specific plans, or zoning be consistent with the RTP/SCS, but provides incentives for consistency for governments and developers. The 2016 RTP/SCS SCAG anticipates lowering GHG emissions below 2005 levels by 8 percent by 2020, 18 percent by 2035, and 22 percent by 2040 (SCAG 2016). Key strategies in the SCAG's RPT/SCS are identified in Table 5.7-3, *SCAG 2016-2040 RTP/SCS Goals Consistency Analysis,* in Section 5.7, *Land Use and Planning*. Table 5.4-8, *SCAG 2016 RTP/SCS Transportation-Land Use Consistency*, evaluates the project in comparison to the three primary transportation-land use strategies in the RTP/SCS.

Table 5.4-8 SCAG 2016 RTP/SCS Transportation-Land Use Consistency

SCAG Transportation-Land Use Strategies	Implementing Policies/Strategies	Consistency
Focusing new growth around High Quality Transit Areas (HQTA). The 2016 RTP/SCS overall land use pattern reinforces the trend of focusing new housing and employment in the region's HQTAs. The 2016 RTP/SCS assumes that	Additional local policies that ensure that development in HQTAs achieve the intended reductions in VMT and GHG emissions include: ▪ Affordable housing requirements ▪ Reduced parking requirements ▪ Adaptive reuse of existing structures	Consistent: The entire Specific Plan area has been identified in an HQTA (SCAG 2017a). In addition, the Specific Plan is in a designated Transit Priority Area (SCAG 2017b). The proposed project would increase

Table 5.4-8 SCAG 2016 RTP/SCS Transportation-Land Use Consistency

SCAG Transportation-Land Use Strategies	Implementing Policies/Strategies	Consistency
46 percent of new housing and 55 percent of new employment locations developed between 2012 and 2040 will be in HQTAs, which comprise only 3 percent of the total land area in the SCAG region.	▪ Density bonuses tied to family housing units such as three- and four-bedroom units ▪ Development standards that include local serving retail ▪ Increased Complete Streets investments around HQTAs.	residential and nonresidential land use intensities within this HQTA. The following list some of the land use policies of the Specific Plan that are consistent with this SCAG strategy: ▪ Policy 1.1: Encourage the adaptive reuse of buildings and appropriately scaled infill, mixed-use development in the planning area. ▪ Policy 1.5: Support land uses and infrastructure improvements that can reduce the need for parking and promote alternative modes of transportation, such as transit, walking, or biking. ▪ Policy 2.1: Accommodate the development of a mix of housing to meet the needs of current and future residents, including an equitable distribution of affordable housing through such means as value capture development. In addition to the policies above, the planned circulation improvements (see Chapter 6, Mobility & Public Realm, of the Specific Plan) are based on Complete Streets principles—i.e., creating and improving a multimodal network.
Plan for growth around Livable Corridors. SCAG's livable corridors strategy seeks to revitalize commercial strips through integrated transportation and land use planning that results in increased economic activity and improved mobility options.	Additional livable corridors strategies include: ▪ Transit improvements, including dedicated lane Bus Rapid Transit (BRT) or semidedicated BRT-light. The remaining corridors have the potential to support other features that improve bus performance (enhanced bus shelters, real-time travel information, off-bus ticketing, all door boarding, and longer distances between stops to improve speed and reliability). ▪ Active transportation improvements: Livable corridors include increased investments in complete streets to make these corridors and the intersecting arterials safe for biking and walking. ▪ Land use policies: Livable corridor	Consistent: Livable corridors are predominantly a subset of the HQTAs; however, 154 miles are not designated as HQTAs in SCAG's RTP/SCS. These additional miles were identified in Sustainability Planning Grant projects, which SCAG proposes for active transportation improvement. The Specific Plan incorporates a mobility and public realm strategy that transforms the current circulation network to one that places a higher priority on the principles of complete streets and multi-modal design. The Connect Southwest LA Specific Plan would make the area more user friendly for all modes of travel. Under the proposed Specific Plan, the

Table 5.4-8 SCAG 2016 RTP/SCS Transportation-Land Use Consistency

SCAG Transportation-Land Use Strategies	Implementing Policies/Strategies	Consistency
	strategies include the development of retail centers at key nodes along the corridors, increasing neighborhood-oriented retail at more intersections and zoning that allows for the replacement of underperforming auto-oriented strip retail between nodes with higher density residential and employment.	existing designated bikeways network would be extended by 11 miles. Planned improvements include improved crossings, signage, and wayfinding. The proposed Specific Plan would also place emphases on creating mixed-use neighborhoods and have included development standards that support neighborhood-serving retail. As an example, planned improvements for the designated Vermont Station District include better access and visibility for the Vermont/Athens Green Line Station by upgrading elevators, stairs, and escalators to the platforms. The Vermont Station District would also focus on developing a higher-intensity mix of retail, office, restaurant, and residential uses in a compact walkable setting.
Provide more options for short trips in Neighborhood Mobility Areas and Complete Communities: Neighborhood mobility areas have a high intersection density, low to moderate traffic speeds, and robust residential retail connections. These areas are suburban in nature, but can support slightly higher density in targeted locations. The land use strategies include shifting retail growth from large centralized retail strip malls to smaller distributed centers throughout a neighborhood mobility area.	▪ Neighborhood mobility area land use strategies include pursuing local policies that encourage replacing motor vehicle use with neighborhood electric vehicle (NEV) use. NEVs are a federally designated class of passenger vehicle rated for use on roads with posted speed limits of 35 miles per hour or less. Steps needed to support NEV use include providing state and regional incentives for purchases, local planning for charging stations, designating a local network of low speed roadways, and adopting local regulations that allow smaller NEV parking stalls. ▪ Complete communities strategies include creation of districts through a concentration of activities with housing, employment, and a mix of retail and services in close proximity to each other. Focusing a mix of land uses in strategic growth areas creates complete communities where most daily needs can be met within a short distance of home, providing residents with the opportunity to patronize their local area and run daily errands by walking or cycling rather than driving.	Consistent: The proposed Specific Plan would increase land use intensities within the Specific Plan area, which would include accommodating a mix of uses. As stated, the strategy for the Vermont Station District would be to develop a higher-intensity mix of land uses in a compact, walkable community. In addition, the Western Avenue Commercial District would accommodate a higher intensity in a mix of uses and emphasize neighborhood-serving retail. Overall, the planned land use development in creating higher intensity and mixed-use development combined with the aforementioned planned multimodal improvements would create more transit-oriented and walkable communities within the proposed Specific Plan area.

Source: SCAG 2016.

5. Environmental Analysis
GREENHOUSE GAS EMISSIONS

The Connect Southwest LA project would be consistent with SCAG's regional goals of providing infill housing, improving the jobs-housing balance, and integrating land uses near major transportation corridors. Building upon the recommendations of the RTP/SCS, the Specific Plan incorporates a mobility and public realm strategy that describes the circulation improvements needed to support transit-oriented development. A key component of the Specific Plan is the transformation of the current circulation network, which largely supports vehicular travel, into a network that places a higher priority on the principles of complete streets and multimodal design. To achieve the proposed vision, the Specific Plan proposes mobility strategies:

- Strategy 1: Improve accessibility to transit through the provision of streetscape improvements, high quality bicycle and pedestrian infrastructure, wayfinding signage, and other enhancements consistent with Metro's First Last Mile Strategic Plan.
    - Improve visibility and access to the Metro Green Line Station through increased lighting, signage, and improved pedestrian and bicycle infrastructure.
    - Design streetscapes that provide a comfortable buffer or sense of separation from vehicular traffic.
    - Reallocate excess portions of right-of-way, such as overly wide vehicular travel lanes, to design sidewalks and bicycle facilities that are comfortable and safe for people to enjoy.
    - Utilize wayfinding, signage, and other amenities that allow pedestrian, bicycle, and transit routes to be easily identifiable.
    - Design streetscapes that are attractive and inviting by incorporating sufficient lighting, street trees, landscaping, benches, and other amenities that are pleasant, offer visual stimulation, and promote activity.
    - Support walking and biking first/last mile solutions to transit through the provision of amenities such as bicycle parking, bike racks, street lights, seating, and wayfinding maps and signage.
- Strategy 2: Design streets to facilitate safe, accessible connections between major destinations for multiple nodes of transportation.
    - Implement complete streets designs that promote a multimodal network of streets and prioritize safety.
    - Provide safe and comfortable pedestrian and bicycle connections between the Metro Green Line and Los Angeles Southwest College (LASC).
    - Create safe, comfortable, and accessible transit waiting areas through the provision of transit amenities such as shelters, benches, shade structures, lighting, system maps, and transit timetables.

- Incorporate streetscape improvements as well as bicycle and pedestrian facilities that support transit operations, such as bus pads, wider sidewalks, buffered biked lanes, bike racks, and traffic control devices that prioritize transit vehicles and facilitate pedestrian circulation.
- Locate transit stops in areas that are active and visible to maximize personal security and safety of waiting transit riders.
- Prioritize roadway improvement projects that improve access to transit and the Metro Green Line Station.

- Strategy 3: Develop and incorporate parking management strategies that encourage efficient use of parking resources and support programs that can reduce parking needed.
  - Implement parking policies that encourage travel by public transit and other sustainable modes of transportation, such as priced parking, parking time limits, or prohibited on-street parking.
  - Implement more accurate and flexible parking standards that reflect the parking demand for the area.
  - Support land uses and infrastructure improvements that can reduce the need for parking and promote alternative modes of transportation, such as transit, walking, or biking.

In addition to these mobility strategies, the proposed Specific Plan includes other mobility-related policies.

- Policy 4.1: Develop a balanced, integrated, multimodal transportation system that is efficient and safe with frequent service connecting to destinations, employment centers, and residential areas.
- Policy 4.2: Provide a variety of transportation choices that promote accessible alternatives to the automobile, including walking, bicycling, and taking transit.
- Policy 4.3: Design streetscapes that are attractive and inviting by incorporating sufficient lighting, street trees/shade, landscaping, benches, and other amenities that are pleasant, offer visual stimulation, and promote activity for all users.
- Policy 4.4: Design sustainable and energy-efficient streetscapes with low-impact development strategies, including sustainable stormwater practices, permeable paved surfaces, drought-tolerant plant species, and solar lighting fixtures.
- Policy 4.5: Support walking and biking as first/last mile solutions to transit by providing amenities such as bicycle parking, bike racks, street lights, seating, and wayfinding maps and signage.

- Policy 4.6: Provide a safe and comfortable pedestrian network linking the transit station with LASC, commercial centers, county facilities, and residential neighborhoods.

- Policy 4.7: Implement parking policies that encourage travel by public transit and other sustainable modes of transportation, such as priced parking, parking time limits, or prohibited on-street parking.

- Policy 4.8: Implement more accurate and flexible parking standards that reflect the parking demand for the area.

As discussed above, the planned improvements under the proposed Specific Plan, in addition to the strategies and policies, would be generally consistent with strategies of the 2016-2040 RTP/SCS. As stated in Impact 5.4-1, implementation of the proposed project would reduce daily VMT/SP from 33.89 miles/SP to 26.65 miles/SP. Therefore, implementation of the proposed Specific Plan would not interfere with SCAG's ability to implement the regional strategies outlined in the 2016-2040 RTP/SCS and no impact would occur.

Los Angeles County CCAP

The County adopted a CCAP on October 6, 2015. The CCAP identifies and evaluates feasible and effective policies to reduce GHG emissions in order to reduce energy costs, protect air quality, and improve the economy and the environment. The policies identified in the proposed CCAP represent the County's actions to achieve the GHG reduction targets of AB 32 for target year 2020. A consistency analysis with the proposed project to the applicable measures in the proposed CCAP is shown in Table 5.4-9, *Consistency with the Unincorporated Los Angeles County Community Climate Action Plan*. As identified in the table, the proposed project would be consistent with the measures in the CCAP. Therefore, the proposed project would not conflict with the CCAP and no impact would occur.

Table 5.4-9 Consistency with the Unincorporated Los Angeles County Community Climate Action Plan

#	Applicable Measure	Consistency
BE-1	Green Building Development. Promote and incentivize at least Tier 1 voluntary standards within CALGreen for all new residential and nonresidential buildings. Develop a heat island reduction plan and facilitate green building development by removing regulatory and procedural barriers.	Consistent: The 2016 Building and Energy Efficiency Standards became effective January 1, 2016, and would be applicable to the proposed project. Pursuant to the County's Green Building Ordinance, nonresidential buildings over 25,000 square feet and residential buildings seven stories high and taller would be required to achieve the Tier 1 energy standards. New buildings would replace existing structures that were constructed prior to adoption of the California Building and Energy Efficiency Code with newer facilities that achieve the latest Building and Energy Efficiency Standards. (see RR GHG-1)
BE-3	Solar Installations. Promote and incentivize solar installations for new and existing homes, commercial buildings, carports and parking areas, water heaters, and warehouses.	Consistent: The current Building and Energy Efficiency Standards do not mandate that new homes have solar panels: however, they require that new buildings be constructed to accommodate the rooftop load and wiring necessary to support solar panels. In accordance with Executive Order B-30-15, approximately 50 percent of total energy demand in the state would be met through renewable resources in order to achieve the 50 percent RPS goal by 2030.

Table 5.4-9 Consistency with the Unincorporated Los Angeles County Community Climate Action Plan

#	Applicable Measure	Consistency
LUT-1	Bicycle Programs and Supporting Facilities. Construct and improve bicycle infrastructure to increase biking and bicyclist access to transit and transit stations/hubs. Increase bicycle parking and "end-of-trip" facilities offered through the unincorporated County.	Consistent: Under the proposed Specific Plan, an additional 11 miles of bikeways would be installed within the Specific Plan area. The new bikeways would include a mix of Class I, II, and III bikeways. As shown in the Bicycle Network Map (Figure 6.3 of the Specific Plan), new Class II bikeways would be included along Imperial Highway and Normandie Avenue as well as various other roadways. Western Avenue would also include new Class II bikeways in addition to Class III bikeways. The proposed multiuse path between LASC and the Vermont/Athens Green Line Station would include a designated Class I path. In addition to these planned improvements, the Specific Plan also includes design guidelines to guide the installation of bicycle parking, crossing signals, and wayfinding signage. The regulating code includes provisions for the development of end-of-trip facilities and short- and long-term bicycle parking.
LUT-2	Pedestrian Network. Construct and improve pedestrian infrastructure to increase walking and pedestrian access to transit and transit stations/hubs. Program the construction of pedestrian projects toward the goal of completing 15,000 linear feet of new pedestrian improvements/amenities per year.	Consistent: The Specific Plan incorporates a mobility and public realm strategy that transforms the current circulation network to one that places a higher priority on the principles of complete streets and multimodal design. The Specific Plan would make the area more user friendly for all modes of travel. As stated, a proposed improvement under the Specific Plan includes a multiuse trail that would connect LASC to the Vermont/Athens Green Line Station. This planned improvement would be part of the overall goal of the proposed Specific Plan to improve the quality of the pedestrian infrastructure to promote pedestrian activity and to reinforce the West Athens-Westmont community as a transit-oriented development district. Other planned improvements include improvements to sidewalks and implementation of a sidewalk hierarchy system, which would establish a physical framework for sidewalk design and facilitate the most appropriate allocation of space that encourages people to walk as part of their daily routine. In addition to sidewalk improvements, the proposed Specific Plan also contains design guidelines to facilitate safe pedestrian crossings and pedestrian amenities such as street trees, seating, street lights, and public art.
LUT-3	Transit Expansion. Collaborate with the Los Angeles County Metropolitan Transportation Authority (Metro) on a transit program that prioritizes transit by creating bus priority lanes, improving transit facilities, reducing transit-passenger time, and providing bicycle parking near transit stations. Construct and improve bicycle, pedestrian and transit infrastructure to increase bicyclist and pedestrian access to transit and transit stations/hubs.	Consistent: The Specific Plan recognizes that station access is a key element in successful TOD station area planning and has identified strategies that focus on improving accessibility during the first and last miles of a transit rider's journey. These strategies include streetscape improvements, bicycle and pedestrian infrastructure improvements, and signage and wayfinding improvements. A possible design to improve the bus and bicycle interface is the creation of a short and separate bicycle channel that diverts bicycle traffic behind transit stops. Additional strategies include transit amenities improvements such as installation of shelters, benches, lighting, transit information, bicycle racks, and public art. Strategies for the Vermont Station District include upgrading the elevators, escalators, and stairs and improving the west station entrance of the Vermont/Athens Green Line Station to improve access and visibility.

Table 5.4-9 Consistency with the Unincorporated Los Angeles County Community Climate Action Plan

#	Applicable Measure	Consistency
LUT-4	Travel Demand Management. Encourage ride- and bike-sharing programs and employer sponsored vanpools and shuttles. Encourage market-based bike sharing programs that support bicycle use around and between transit stations/hubs. Implement marketing strategies to publicize these programs and reduce commute trips.	Consistent: The Specific Plan includes both short-term and long-term bicycle parking standards for new nonresidential uses to encourage bicycle use around and between transit stations to reduce commute trips. The Specific Plan would not preclude the future installation of a bike sharing program. Mitigation Measure AQ-4 requires preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles for nonresidential buildings.
LUT-5	Car Sharing Program. Implement a car-sharing program to allow people to have on-demand access to a shared fleet of vehicles.	Consistent: This measure is not directly applicable to the Specific Plan. However, car sharing services are available to residents, employees, and visitors in the West Athens area (e.g., ZipCar) as well as service-based vehicle programs (e.g., Uber, Lyft). The Specific Plan would not conflict with this GHG reduction measure.
LUT-6	Land Use Design and Density. Promote sustainability in land use design, including diversity of urban and suburban developments.	Consistent: The Specific Plan includes the Sustainability and Resource Conservation regulating code that provides guidelines and requirements regarding sustainable building design such as requiring development projects to be designed and constructed using sustainable, energy efficient materials, to be more energy efficient than required by local and state codes, and use white or green roofs to the extent feasible. In addition, the Specific Plan would result in higher density development and would increase the number of multifamily dwelling units, affordable housing units, and mixed-use areas (e.g., Vermont Station District).
LUT-7	Transportation Signalization Program. Improve the network of traffic signals on the major streets throughout LA County.	Consistent: This measure is not directly applicable to the Specific Plan. The County of Los Angeles maintains a traffic signal signalization program (TSSP) to improve the network of traffic signals. The typical TSSP project involves upgrading all the traffic signals along a route to keep the signals synchronized, placing vehicle detectors in the pavement to detect the presence of vehicles, coordinating the timing of the signals between successive intersections, and automatically adjusting the traffic signals to facilitate the movement of vehicles through the intersections. The Specific Plan would not conflict with this measure.
LUT-8	Electric Vehicle Infrastructure. Install 500 electric vehicle (EV) charging facilities at County owned public venues (e.g., hospitals, beaches, stand-alone parking facilities, cultural institutions, and other facilities) and ensure that at least one-third of these charging stations will be available for visitor use.	Consistent: This measure is not directly applicable to the Specific Plan as it pertains to County-owned facilities. However, CALGreen now requires installation of electric vehicle charging spaces in nonresidential development based on the total number of spaces (2016 CALGreen Table 5.106.5.3.3). Based on a net increase of 2.4 million square feet of nonresidential uses, the proposed minimum parking standards in the Specific Plan, and the CALGreen requirement that 6 percent of total parking spaces be EV charging spaces, the Specific Plan would result in a minimum of 245 new EV charging spaces in the Specific Plan area.
LUT-9	Idling Reduction Goal. Encourage idling limits of 3 minutes for heavy-duty construction equipment, as feasible within manufacturer's specifications.	Consistent: The current idling limit adopted by CARB and local air district regulations is 5 minutes (see RR GHG-5). Compliance with CARB airborne toxic control measures that reduce diesel emissions and Mitigation Measure AQ-1 would also reduce construction vehicle exhaust associated with the proposed project to the extent feasible.

Table 5.4-9 Consistency with the Unincorporated Los Angeles County Community Climate Action Plan

#	Applicable Measure	Consistency
LUT-11	Sustainable Pavements Program. Reduce energy consumption and waste generation associated with pavement maintenance and rehabilitation.	Consistent: This measure is not directly applicable to the Specific Plan. However, pavement maintenance and rehabilitation within the Specific Plan would be conducted in accordance with the latest County policies and procedures. The Los Angeles County Department of Public Works (DPW) applies a 3-pronged sustainable approach in the rehabilitation, construction, and maintenance of its road network. This approach incorporates principles that (1) focus on taking care of our roads that are in good condition first; (2) use recycled materials from recycled tires or aggregates from existing pavement in the treatment selections; and (3) reutilize the existing materials in place by recycling the pavement or adding cement to the subgrade beneath the pavement to improve its strength. The Specific Plan would not conflict with this measure.
LUT-12	Electrify Construction and Landscaping Equipment. Utilize electric equipment wherever feasible for construction projects. Reduce the use of gas-powered landscaping equipment.	Consistent: Pursuant to the California Building Code (Title 24), buildings are now required to include electrical outlets on the exterior of buildings to support the use of electric landscaping equipment.
WAW-1	Per Capita Water Use Reduction Goal. Meet the State established per capita water use reduction goal, as identified by SB X7-7 for 2020.	Consistent: The nonresidential buildings that are 25,000 square feet and larger and residential buildings seven stories or higher would comply with Section 301.3.1, "Nonresidential Buildings greater than or equal to 25,000 square feet," which requires implementation of the Tier 1 voluntary standards (30 percent reduction) for indoor potable water use and 60 percent of reference evapotranspiration (ETo) for outdoor potable water use; Section 5.106.4, Low Impact Development; and Section 4.106.5, Landscape Design, which require use of noninvasive, drought-tolerant plants, which would reduce per capita urban water use (see RR GHG-3).
WAW-2	Recycled Water Use, Water Supply Improvement Programs, and Stormwater Runoff. Promote the use of wastewater and gray water to be used for agricultural, industrial, and irrigation purposes. Manage stormwater, reduce potential treatment, and protect local groundwater supplies.	Consistent: The proposed project would not introduce new sources of agriculture or industrial manufacturing. Water used for landscape irrigation would be minimized through implementation of the County's Water Efficient Landscape Ordinance (see RR GHG-3).
SW-1	Waste Diversion Goal. For the County's unincorporated areas, adopt a waste diversion goal to comply with all state mandates associated with diverting from landfill disposal at least 75% of the waste by 2020.	Consistent: In accordance with the County's Construction & Demolition (C&D) Debris Recycling and Reuse Ordinance, Chapter 20.87 of the Los Angeles County Code, development within the Specific Plan would be required to divert a minimum of 65 percent of the C&D debris by weight and submit a Recycling and Reuse Plan to the County's Construction & Demolition Unit for review and approval. Additionally, according to the County's Green Building Ordinance, which requires implementation of CALGreen Tier 1 voluntary standards, the proposed project building materials would include a minimum of 10 percent of recycled content based on estimated cost (see RR GHG-4).
LC-1	Develop Urban Forests. Support and expand urban forest programs within the unincorporated areas.	Consistent. The Specific Plan encourages installation of street trees, especially along pathway arterials. All street trees are required to be planted in accordance with established County planting standards. The Specific Plan includes street trees standards under its design guidelines.

Table 5.4-9 Consistency with the Unincorporated Los Angeles County Community Climate Action Plan

#	Applicable Measure	Consistency

Source: County of Los Angeles, 2015.
Notes: Measure BE-2 is a program for existing development and is not applicable to the proposed project. Measure BE-4 is a County-wide program that promotes alternative renewable energies and is not applicable to the proposed project. Measures BE-5 and BE-6 are a County-wide program to encourage use of biogas and energy efficiency retrofits at wastewater treatment facilities and are not applicable to the proposed project. Measure LUT-10 is a County-wide program for goods movement and it not applicable to the proposed project. Measure LC-2, LC-3, and LC-4 are not applicable to the proposed project because they are County-wide programs that focus on creating and protecting open space areas and promoting the sale of locally grown produce.

Level of Significance before Mitigation: Upon implementation of regulatory requirements, Impact 5.4-2 would be less than significant.

5.4.5 Cumulative Impacts

Project-related GHG emissions are not confined to a particular air basin but are dispersed worldwide. Therefore, impacts under Impact 5.4-1 are not project-specific impacts, but the proposed project's contribution to the cumulative impact of global warming. Implementation of the proposed project would not exceed the SCAQMD proposed bright-line screening threshold of 3,000 $MTCO_2e$ per year and would not result in a substantial increase in GHG emissions. Thus, the proposed project's GHG emissions and contribution to global climate change impacts are not considered cumulatively considerable, and therefore are less than significant.

5.4.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.4-1 and 5.4-2.

5.4.7 Mitigation Measures

No mitigation measures are required.

5.4.8 Level of Significance After Mitigation

Impacts would be less than significant.

5.4.9 References

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5.5 HAZARDS AND HAZARDOUS MATERIALS

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential impacts of the Connect Southwest LA project on human health and the environment due to exposure to hazardous materials or conditions associated with the project site, project construction, and project operations. Appropriate mitigation measures are included as necessary. The analysis in this section is based, in part, upon the following source(s):

- *Radius Map Report, West Athens TOD,* Environmental Data Resources, Inc., April 3, 2017.

A complete copy of this study is included in the Technical Appendices to this Draft EIR (Volume II, Appendix E).

5.5.1 Environmental Setting

5.5.1.1 RELEVANT PROGRAMS AND REGULATIONS

Federal

Resource Conservation and Recovery Act

Federal hazardous waste laws are generally promulgated under the Resource Conservation and Recovery Act of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984 (collectively, RCRA). These laws provide for the "cradle to grave" regulation of hazardous wastes. Any business, institution, or other entity that generates hazardous waste is required to identify and track its hazardous waste from the point of generation until it is recycled, reused, or disposed. The Department of Toxic Substances Control (DTSC) is responsible for implementing the RCRA program as well as California's own hazardous waste laws, which are collectively known as the Hazardous Waste Control Law. Under the Certified Unified Program Agency (CUPA) program, the California Environmental Protection Agency (CalEPA) has in turn delegated enforcement authority to the County of Los Angeles (County) for state law regulating hazardous waste producers or generators.

Comprehensive Environmental Response, Compensation, and Liability Act and the Superfund Amendments and Reauthorization Act

Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), commonly known as Superfund, on December 11, 1980. CERCLA established prohibitions and 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. The Superfund Amendments and Reauthorization Act (SARA) amended the CERCLA on October 17, 1986. SARA stressed the importance of permanent remedies and innovative treatment technologies in cleaning up hazardous waste sites; required Superfund actions to consider the standards and requirements found in other state and federal environmental laws and regulations; provided new enforcement authorities and settlement tools; increased state involvement in every phase of the

Superfund program; increased the focus on human health problems posed by hazardous waste sites; encouraged greater citizen participation in making decisions on how sites should be cleaned up; and increased the size of the trust fund to $8.5 billion.

Emergency Planning Community Right-to-Know Act

The Emergency Planning Community Right-to-Know Act (EPCRA), also known as SARA Title III, was enacted in October 1986. This law requires any infrastructure at the state and local levels to plan for chemical emergencies. Reported information is made publicly available so that interested parties can be informed about potentially dangerous chemicals in their community. EPCRA Sections 301 through 312 are administered by the US Environmental Protection Agency's Office of Emergency Management. The EPA's Office of Information Analysis and Access implements the EPCRA Section 313 program. In California, SARA Title III is implemented through the California Accidental Release Prevention Program (CalARP).

Hazardous Materials Transportation Act

The US Department of Transportation regulates hazardous materials transportation under the Code of Federal Regulations (CFR), Title 49. State agencies that have 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 (Caltrans). These agencies also govern permitting for hazardous materials transportation. Title 49 of the CFR reflects laws passed by Congress as of January 2, 2006.

Federal Response Plan

The Federal Response Plan of 1999 is a signed agreement among 27 federal departments and agencies, including the American Red Cross, that: 1) provides the mechanism for coordinating delivery of federal assistance and resources to augment efforts of state and local governments overwhelmed by a major disaster or emergency; 2) supports implementation of the Robert T. Stafford Disaster Relief and Emergency Act, as well as individual agency statutory authorities; and 3) supplements other federal emergency operations plans developed to address specific hazards. The Federal Response Plan is implemented in anticipation of a significant event likely to result in a need for federal assistance or in response to an actual event requiring federal assistance under a Presidential declaration of a major disaster or emergency.

State

California Health and Safety Code and Code of Regulations

California Health and Safety Code Chapter 6.95 and the California Code of Regulations, Title 19, Section 2729, set out the minimum requirements for business emergency plans and chemical inventory reporting. These regulations require businesses to provide emergency response plans and procedures, training program information, and a hazardous material chemical inventory disclosing hazardous materials stored, used, or handled on site. A business that uses hazardous materials or a mixture containing hazardous materials must establish and implement a business plan if the hazardous material is handled in certain quantities.

California Education Code

The California Education Code (CEC) establishes the law for California public education. CEC requires that the DTSC be involved in the environmental review process for the proposed acquisition and/or construction of school properties that will use state funding. The CEC requires that a Phase I Environmental Site Assessment be completed prior to acquiring a school site or engaging in a construction project. Depending on the outcome of the Phase I Environmental Site Assessment, a Preliminary Environmental Assessment and remediation may be required. The CEC also requires potential, future school sites that are proposed within two miles of an airport to be reviewed by the Caltrans Division of Aeronautics; if Caltrans does not support the proposed site, no state or local funds can be used to acquire the site or construct the school.

California Building Code

The State of California provides a minimum standard for building design through the California Building Code (CBC) (California Code of Regulations [CCR], Title 24, Part 2). It is generally adopted on a jurisdiction-by-jurisdiction basis, subject to modification based on local conditions. Commercial and residential buildings are plan-checked by local city and county building officials for compliance with the CBC. Typical fire safety requirements of the CBC include: the installation of sprinklers in all high-rise buildings; the establishment of fire resistance standards for fire doors, building materials, and particular types of construction; and the clearance of debris and vegetation within a prescribed distance from occupied structures in wildlife hazard areas. The CBC is updated on a three-year cycle; the 2016 CBC took effect on January 1, 2017.

California Fire Code

Title 24, Part 9 of the CCR is the California Fire Code (CFC), which includes provisions and standards for emergency planning and preparedness, fire service features, fire protection systems, hazardous materials, fire flow requirements, and fire hydrant locations and distribution. The Los Angeles County Fire Department (LACoFD) provides fire protection services for the unincorporated areas of Los Angeles County and implements and enforces the CFC onsite. The CFC is updated on a three-year cycle; the 2016 CFC took effect on January 1, 2017.

Asbestos-Containing Materials Regulations

State agencies, in conjunction with the federal EPA and the Occupational Safety and Health Administration, regulate removal, abatement, and transport procedures for asbestos-containing materials. Releases of asbestos from industrial, demolition, or construction activities are prohibited by these regulations; medical evaluation and monitoring are required for employees performing activities that could expose them to asbestos. The regulations include warnings and practices that must be followed to reduce the risk for asbestos emissions and exposure. Finally, federal, state, and local agencies must be notified prior to the onset of demolition or construction activities with the potential to release asbestos. Requirements for limiting asbestos emissions from building demolition and renovation activities are specified in SCAQMD Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities).

California Government Code Sections 1529 and 1532.1 provide for exposure limits, exposure monitoring, respiratory protection and good working practice by workers exposed to lead and asbestos-containing materials (ACM).

Polychlorinated Biphenyls

The EPA prohibited the use of polychlorinated biphenyls (PCBs) in the majority of new electrical equipment starting in 1979, and initiated a phase-out for much of the existing PCB-containing equipment. The inclusion of PCBs in electrical equipment and their handling are regulated by the provisions of the Toxic Substances Control Act (U.S. Code, Title 15, Sections 2601 et seq.). Relevant regulations include labeling and periodic inspection requirements for certain types of PCB-containing equipment and outline highly specific safety procedures for their disposal. The State likewise regulates PCB-laden electrical equipment and materials contaminated above a certain threshold as hazardous waste; these regulations require that such materials be treated, transported, and disposed accordingly.

Lead-Based Paint

Cal/OSHA's "lead in construction" standard is in 8 CCR Section 1532.1. The regulations address all of the following areas: permissible exposure limits; exposure assessment; compliance methods; respiratory protection; protective clothing and equipment; housekeeping; medical surveillance; medical removal protection; employee information, training, and certification; signage; record keeping; monitoring; and agency notification.

5.5.1.2 REGULATORY AGENCIES

United States Environmental Protection Agency

The EPA is the primary federal agency that regulates hazardous materials and waste. In general, the EPA works to develop and enforce regulations that implement environmental laws enacted by Congress. The agency is responsible for researching and setting national standards for a variety of environmental programs, and it delegates to states and Native American tribes the responsibility for issuing permits and for monitoring and enforcing compliance. EPA programs promote handling hazardous wastes safely, cleaning up contaminated land, and reducing waste volumes through such strategies as recycling. California falls under the jurisdiction of EPA Region 9. Under the authority of the RCRA and in cooperation with state and tribal partners, the EPA Region 9 Waste Management and Superfund Divisions manage programs for site environmental assessment and cleanup, hazardous and solid waste management, and underground storage tanks.

California Environmental Protection Agency

CalEPA was created in 1991 by Governor Executive Order W-5-91. Several state regulatory boards, departments, and offices were placed under the CalEPA umbrella to create a cabinet-level voice for the protection of human health and the environment and to assure the coordinated deployment of state resources. Among those responsible for hazardous materials and waste management are the DTSC, Department of Pesticide Regulation, and Office of Environmental Health Hazard Assessment. CalEPA also

oversees the unified hazardous waste and hazardous materials management regulatory program (Unified Program), which consolidates, coordinates, and makes consistent the following six programs:

- Hazardous Materials Release Response Plans and Inventories (Business Plans)
- Underground Storage Tank Program
- Aboveground Petroleum Storage Tank Act
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs
- California Uniform Fire Code: Hazardous Material Management Plans and Inventory Statements
- California Accidental Release Prevention (CalARP) Program

California Department of Toxic Substances Control

DTSC, which is a department of CalEPA, is authorized to carry out the federal RCRA hazardous waste program in California to protect people from exposure to hazardous wastes. The department regulates hazardous waste, cleans up existing contamination, and looks for ways to control and reduce the hazardous waste produced in California, primarily under the authority of the RCRA and in accordance with the California Hazardous Waste Control Law (Cal. Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste Control Regulations (22 CCR Divisions 4 and 4.5). Permitting, inspection, compliance, and corrective action programs ensure that people who manage hazardous waste follow state and federal requirements and other laws that affect hazardous waste specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning.

Certified Unified Program Agency

A CUPA is a local agency that has been certified by CalEPA to implement the local Unified Program. The CUPA can be a county, city, or joint powers authority. A participating agency is a local agency that has been designated by the local CUPA to administer one or more Unified Programs within their jurisdiction on behalf of the CUPA. The Health Hazardous Materials Division (HHMD) of LACoFD is the certified CUPA for unincorporated areas of Los Angeles County, including the project site, as well as many cities throughout the County.

Hazardous Materials Business Plans

Both the federal government (Code of Federal Regulations) and the State of California (Cal. Health and Safety Code) require all businesses that handle more than a specific amount—or "reporting quantity"—of hazardous or extremely hazardous materials to submit a hazardous materials business plan to its CUPA. The preparation, submittal, and implementation of a business plan are required by any business that handles a hazardous material or a mixture containing a hazardous material in specified quantities.

Business plans must include an inventory of the hazardous materials at the facility. Businesses must update their business plan at least every three years and the chemical portion every year. Also, business plans must include emergency response plans and procedures to be used in the event of a significant or threatened significant release of a hazardous material. These plans need to identify: the procedures for immediate

notification of all appropriate agencies and personnel, local emergency medical assistance appropriate for potential accident scenarios, contact information for all company emergency coordinators, location of emergency equipment at the business, an evacuation plan, and a training program for business personnel.

California Accidental Release Prevention Program

CalARP became effective on January 1, 1997, in response to Senate Bill 1889 (Chapter 715, Statutes of 1996). CalARP aims to be proactive and therefore requires businesses to prepare risk management plans, which are detailed engineering analyses of the potential accident factors at a business and the mitigation measures that can be implemented to reduce this accident potential. This requirement is coupled with the requirements for preparation of hazardous materials business plans under the Unified Program, implemented by the CUPA.

5.5.1.3 EXISTING CONDITIONS

Regulatory Agency Environmental Database Listings

An environmental database search for the project site and surroundings was conducted by Environmental Data Resources (EDR) on April 3, 2017; a complete copy of this report is included as Appendix E of this DEIR. EDR searches a target site and its surroundings at distances up to a mile from the project site, depending on type of hazardous materials site. The project site is slightly longer east-west, by about 300 feet, than the maximum site size for the type of search performed. The surrounding area search radius was increased by one-eighth mile (660 feet) to compensate for the small portion of the project site excluded from the site searched. The listings in Table 5.5-1, below, are those onsite and up to 1.125 miles from the site, depending on the type of hazardous materials site.

Table 5.5-1 Environmental Database Listings, EDR

Database Acronym: Name	Number of Sites Listed
KNOWN RELEASES AND INVESTIGATIONS FOR SUSPECT RELEASES	
Federal Databases	
SEMS: Superfund Enterprise Management System: hazardous waste sites, potentially hazardous waste sites, and remedial activities	2
CERCLIS-NFRAP: CERCLIS- No Further Remedial Action Planned	4
RCRA CORRACTS: Corrective Action Activity; Resource Conservation and Recovery Act	2
ERNS: Emergency Response Notification System: Reported releases of oil and hazardous substances	4
HMIRS: Hazardous Materials Incident Report System: hazardous material spill incidents reported to the US Department of Transportation.	2
US Brownfields: Use/reuse constrained by presence or potential presence of hazardous materials	4
State and Local Databases	
CA Response: confirmed release sites where DTSC is involved in remediation	3
CA Hist Cal-Sites: known and potential hazardous substance sites	3
CA SCH: School site evaluations by Department of Toxic Substances Control (DTSC)	6
CA Cortese: Hazardous waste & substances sites list	3
CA HIST Cortese: Historical Cortese database	22
CA LUST: Leaking Underground Storage Tanks	51
CA SLIC: Spills, Leaks, Investigations and Cleanup	11

Table 5.5-1 Environmental Database Listings, EDR

Database Acronym: Name	Number of Sites Listed
CA CDL: Clandestine Drug Labs	3
CA VCP: Voluntary Cleanup Program	1
CA CHMIRS: California Hazardous Material Incident Report System	13
CA Notify 65: Proposition 65 incidents	4
CA ENF: Enforcement actions, State Water Resources Control Board	1
CA DEED: Properties with deed restrictions in response to hazardous materials releases	3
CA EMI: Emissions Inventory Data: Toxic and criteria pollutant emissions data	5
CA ENVIROSTOR: Sites with known contamination or reason for further investigation	43
CA HWP: Permitted hazardous waste facilities and cleanups	9
CA RGA LUST: Historical listing of Leaking Underground Storage Tanks	15
Los Angeles County Site Mitigation List	2
Subtotal	216 (51 onsite, 165 offsite)
FACILITIES, ACTIVITIES, AND/OR PERMITS Databases listing **facilities** that generate, treat, store, transport, and/or dispose of hazardous materials, including storage facilities such as underground and aboveground storage tanks; other **activities** such as hazardous waste shipment manifests; and facilities **permitted** for certain types of activities involving hazardous materials.[1]	
Federal Databases	
RCRA-LQG: Large Quantity Generators of hazardous wastes; Resource Conservation and Recovery Act	9
RCRA-SQG: Small Quantity Generators of hazardous wastes (RCRA)	11
RCRA-TSDF: Treatment, Storage, and Disposal Facilities	1
RCRA NonGen: Non-generators of hazardous waste (sites on the RCRAInfo database that do not currently generate hazardous waste)	4
FINDS: Facility Index System: contains sites listed on any of several other federal databases	28
FTTS: FIFRA/TSCA Tracking System: tracks compliance with Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA)	1
HIST FTTS: Historical FTTS	1
ECHO: Enforcement & Compliance History Information	14
State, Local, and Proprietary Databases	
CA SWF/LF: Solid Waste Facilities/Landfill Sites	7
CA LDS: Land Disposal Sites	2
CA RGA LF: Historical landfill database	1
CA WDS: Water Discharge System: Sites which have been issued waste discharge requirements	5
CA NPDES: National Pollution Discharge Elimination System (NPDES) permits, including stormwater	8
CA SWRCY: Recycling facilities	3
CA FID UST: Active and inactive Underground Storage Tank locations	11
CA UST: Underground Storage Tanks	5
CA HIST UST: Historical listing of UST sites	24
CA SWEEPS UST: Historical listing of UST sites	21
CA AST: Aboveground storage tanks	4
CA DRYCLEANERS:	2
CA HAZNET: hazardous waste shipment manifests	102
CA HAULERS: waste tire haulers	1
CA PEST LIC: Licenses and certificates issued by Department of Pesticide Regulation	1

Table 5.5-1 Environmental Database Listings, EDR

Database Acronym: Name	Number of Sites Listed
CA WMUDS/SWAT: Waste Management Unit Database System	7
Los Angeles County HMS: Industrial Waste and Underground Storage Tank Sites	102
EDR Hist Auto: Historical gasoline stations and other automotive service businesses	32
EDR Hist Cleaners: Historical dry cleaners	15
Subtotal	422 (229 onsite, 193 offsite)
Total	638 (280 onsite, 358 offsite)

Source: EDR 2017.
[1] Some of these databases include listings of permit violations and/or enforcement actions, and thus may include some listings of hazardous materials releases.

Contaminated sites or open case files listed in Table 5.5-1 are described in further detail below.

- Exxon #7-3591 (former) at 1377 Imperial Highway is listed on the GeoTracker database as a leaking underground storage tank (LUST) site. A gasoline release affected the drinking water aquifer. The case is open; remediation was ongoing in 2014.

- Former George Manor Auto & RV Repair at 1360 Imperial Highway is listed on the GeoTracker database as a LUST site. A release of waste oil/motor/hydraulic/lubricating oil was discovered and stopped in 2002. Site assessment was conducted in 2009; the case is open (SWRCB 2017).

- Proposed South Region High School #6 Site 13 at 1600 West Imperial Highway is listed on the EnviroStor database maintained by the DTSC as a school site investigation. The case is inactive and needed evaluation as of 2007.

- West Imperial Highway Charter School At 1256 West Imperial Highway is listed on EnviroStor as a school site investigation. The case is inactive and needed evaluation as of 2010 (DTSC 2017).

- Los Angeles Southwest College: an investigation of an abandoned elevator pit, listed on EnviroStor, was transferred to LACoFD in 2006.

- Normandie Mound Caltrans Site No. 16 immediately north of the I-105 freeway and southeast of the intersection of Normandie Avenue and Imperial Highway. The site is listed on the Superfund Enterprise Management System database pursuant to CERCLA, or Superfund. The site consists of several former landfills. Potential contaminants are benzene, methane, and vinyl chloride. Potential media of concern are soil, soil vapor, and indoor air. Needed remedial action has been completed; deed restrictions are in place on part of the site (SWRCB 2017).

- Caltrans I-105 Freeway Project 3, Parcel 15 northeast of the intersection of Western Avenue and 120th Street, is listed on the EnviroStor database. Chemicals of concern are metals, petroleum, and polynuclear

aromatic hydrocarbons. Potential media affected are soil, surface water, and groundwater other than drinking water. Site remediation was certified complete in 1994; deed restrictions are in place on the site.

- California Hazardous Materials Incident Reporting System listings onsite:
  - 11259 South Vermont Street: an unknown amount of gasoline was discharged from a service station pump to a storm drain on January 19, 2003.
  - 11404 South Western Avenue: gasoline soil contamination found during boring (soil investigation) on January 4, 1993.
  - 11700 South Normandy Avenue: report of hazardous waste release from broken storm drains on April 16, 2013. This site is also listed on the federal Emergency Response Notification System database.
  - Mobil Oil, 1769 W Imperial Highway: gasoline soil contamination reported during site investigation.[1]

Historical Uses of the Site

Topographic Maps

1896: The site is vacant except for a few roadways, including north-south roadways near present-day Vermont and Western avenues; an east-west roadway near present-day Imperial Highway; and a northwest-southeast roadway passing through the south-central part of the site. A railway passes north-south near present-day Vermont Avenue.

1923/1924: The part of the site east of Normandie Avenue is sparsely developed; much of the present-day roadway network is in place. The western half of the site is vacant except for Western Avenue, present-day Imperial Highway (named Belleview Avenue), and one building offsite abutting the west site boundary. A Pacific Electric (electric interurban trolley) railroad track passes east-west one block south of the east end of the site.

1937: (east of Normandie Avenue only): Somewhat more development is present, including two large buildings near 120th Street. The north-south railway line near Vermont Avenue is absent (it is still shown south of the project site); the Pacific Electric railway line just south of the site is still present.

1950: The parts of the site north of Imperial Highway; the southeastern part of the site east of Raymond Avenue; and the southwestern part of the site between St. Andrews Place and Wilton Place are all built out. The remainder of the southern half of the site is vacant except for three buildings where St. Francis Cabrini Church is today (near the present-day southwest corner of Normandie Avenue and Imperial Highway) and one building near the southwest corner of Western Avenue and Imperial Highway. The Pacific Electric railway just south of the project site is still shown.

[1] One onsite CHMIRS listing was omitted from this list due to the small quantity of hazardous material released and limited hazard.

Historic Aerial Photographs

1952: The part of the site north of Imperial Highway is built out, mostly with residential uses, and with some commercial and/or industrial uses along Vermont and Western avenues. Most of the part of the site south of Imperial Highway between Budlong Avenue on the east and St. Andrews Place on the west appears vacant; some of that part of the site appears to be farmland. The Pacific Electric Railway right-of-way still appears south of the site, but the tracks are not shown.

1972: Conditions on the parts of the site shown as developed in the 1952 photographs are generally similar. In the parts of the site shown as vacant or farmland in the 1952 photographs, one large building—such as commercial or industrial use—is shown near the southeast corner of Imperial Highway and Normandie Avenue. Several buildings are shown on the west side of Normandie Avenue south of Imperial Highway and St. Francis Cabrini Church. The western part of the Southwest Los Angeles College campus is shown at the southeast corner of Western Avenue and Imperial Highway.

1994: The I-105 freeway passes through the southern half of the site. The Southwest Los Angeles College campus has been built out similar to present-day conditions. Otherwise, conditions are generally similar to current conditions.

Schools within 0.25 Mile of the Project Site

There are eight schools within 0.25 miles of the site.

Onsite

- Animo South Los Angeles Charter High School, 11100 South Western Avenue
- Middle College High School, 11750 South Western Ave
- West Athens Elementary School, 1110 West 119th Street

Offsite

- Washington Primary Center, 860 West 112th Street, City of Los Angeles
- Woodcrest Elementary School, 1151 West 109th Street, Westmont
- Woodcrest Nazarene Christian School, 10936 Normandie Avenue, Westmont
- George Washington Preparatory High School, 10860 South Denker Avenue, Westmont
- Duke Ellington Continuation High School, 1541 West 110th Street, Westmont(USGS 2017)

Airport-Related Hazards

The project site is outside of the airport influence areas for Los Angeles International Airport, about 3.1 miles west of the site; and for Hawthorne Municipal Airport, about 0.8 mile southwest of the site (Los Angeles County 2017.

Emergency Response Planning

The Los Angeles County Office of Emergency Management maintains the Los Angeles County Operational Area Emergency Response Plan and the County of Los Angeles All-Hazard Mitigation Plan. The Office of Emergency Management leads and coordinates disaster plans and disaster preparedness exercises for all cities and special districts in Los Angeles County.

Disaster Routes are designated by the Los Angeles County Department of Public Works; they are freeway, highway, or arterial routes preidentified for use during times of crisis. These routes bring in emergency personnel, equipment, and supplies to impacted areas in order to save lives, protect property, and minimize impact to the environment. During a disaster, these routes have priority over all other roads for clearing, repairing, and restoration. Western Avenue and Imperial Highway are designated secondary disaster routes, and I-105 is designated a primary disaster route (DPW 2012).

Wildfire Hazards

No fire hazard severity zones are mapped on or near the project site by the California Department of Forestry and Fire Prevention; the nearest such zone to the project site is in the Baldwin Hills about 4.9 miles to the northwest (CAL FIRE 2012).

5.5.2 Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, a project would normally have a significant effect on the environment if the project would:

H-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

H-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

H-3 Emit hazardous emissions or handle hazardous or acutely hazardous materials, substance, or waste within one-quarter mile of sensitive land uses.

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

H-5 For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would result in a safety hazard for people residing or working in the project area.

H-6 For a project in the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area.

H-7 Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

H-8 Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, because the project is located:

(i) within a Very High Fire Hazard Severity Zone (Zone 4)?

(ii) within a high fire hazard area with inadequate access?

(iii) within an area with inadequate water and pressure to meet fire flow standards?

(iv) within proximity to land uses that have the potential for dangerous fire hazard?

H-9 Does the proposed use constitute a potentially dangerous fire hazard?

5.5.3 Plan, Programs, and Policies

5.5.3.1 REGULATORY REQUIREMENTS

RR HAZ-1 Any project-related hazardous materials and hazardous wastes will be transported to and/or from the project in compliance with any applicable state and federal requirements, including the U.S. Department of Transportation regulations in the Code of Federal Regulations (Title 49, Hazardous Materials Transportation Act); California Department of Transportation standards; and the California Occupational Safety and Health Administration standards.

RR HAZ-2 Any project-related hazardous waste generation, transportation, treatment, storage, and disposal will be conducted in compliance with the Subtitle C of the Resource Conservation and Recovery Act (Code of Federal Regulations, Title 40, Part 263), including the management of non-hazardous solid wastes and underground tanks storing petroleum and other hazardous substances. The project will be designed and constructed in accordance with the regulations of the Los Angeles County Fire Department, which serves as the designated Certified Unified Program Agency and implements state and federal regulations for the following programs: (1) Hazardous Waste Generator, (2) Hazardous Materials Release Response Plans and Inventory Program, (3) California Accidental Release Prevention Program, (4) Aboveground Storage Tack Program, and (5) Underground Storage Tank Program.

RR HAZ-3 Any project-related underground storage tank repairs and/or removals will be conducted in accordance with the California Underground Storage Tank Regulations (Title 23, Chapter 16 of the California Code of Regulations). Any unauthorized release of hazardous materials will require release reporting, initial abatement, and corrective actions that will be completed with oversight from the Regional Water Quality Control Board, Department of Toxic Substances Control, LA County Fire Department, South Coast Air Quality Management District, and/or other regulatory agencies, as necessary. Any project-related use of existing

underground storage tanks will also have to be conducted (i.e., used, maintained, and monitored) in accordance with the California Underground Storage Tank Regulations.

RR HAZ-4 Any project-related new construction, excavations, and/or new utility lines within 10 feet or crossing existing high pressure pipelines, natural gas/petroleum pipelines, or electrical lines greater than 60,000 volts will be designed and constructed in accordance with the California Code of Regulations, Title 8, Section 1541.

RR HAZ-5 Any project-related demolition activities that have the potential to expose construction workers and/or the public to asbestos-containing materials or lead-based paint will be conducted in accordance with applicable regulations, including, but not limited to:

- South Coast Air Quality Management District's Rule 1403
- California Health and Safety Code (Sections 39650 et seq.)
- California Code of Regulations (Title 8, Section 1529)
- California Occupational Safety and Health Administration regulations (California Code of Regulations, Title 8, Section 1529 [Asbestos] and Section 1532.1 [Lead])

5.5.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.5-1: Project construction and operations would involve the transport, use, and/or disposal of hazardous materials. [Thresholds H-1 (part), H-2 (part), and H-3]

Impact Analysis:

Routine Transport, Use, Storage, and Disposal of Hazardous Materials

The Specific Plan would permit commercial development in the two Mixed Use zones, Neighborhood Commercial Zone, and Civic Center Zone; permit residential uses in all but the Neighborhood Commercial, Public-Institutional, and Buffer Strip zones; and permit civic uses in the Civic Center and Public-Institutional zones. Commercial uses in two zones, Neighborhood Commercial and Mixed Use 1, would be mostly neighborhood-serving uses..

Construction

Construction in accordance with the Specific Plan would involve demolition, grading, and construction of new buildings. Potentially hazardous materials used during construction include substances such as paints, sealants, solvents, adhesives, cleaners, and diesel fuel. There is potential for these materials to spill or to create hazardous conditions. However, the materials used would not be in such quantities or stored in such a

manner as to pose a significant safety hazard. These activities would also be short term or one time in nature. Project construction workers would be trained in safe handling and hazardous materials use.

To prevent hazardous conditions, existing local, state, and federal laws—such as those listed under Section 5.5.1.1, *Regulatory Background*—are to be enforced at the construction sites. For example, compliance with existing regulations would ensure that construction workers and the general public are not exposed to any risks related to hazardous materials during demolition and construction activities. Cal/OSHA has regulations concerning the use of hazardous materials, including requirements for safety training, exposure warnings, availability of safety equipment, and preparation of emergency action/prevention plans. For example, all spills or leakage of petroleum products during construction activities are required to be immediately contained, the hazardous material identified, and the material remediated in compliance with applicable state and local regulations for the cleanup and disposal of that contaminant. All contaminated waste encountered would be required to be collected and disposed of at an appropriately licensed disposal or treatment facility.

Furthermore, strict adherence to all emergency response plan requirements set forth by LACoFD would be required throughout the duration of project construction. Construction activities would be in and near existing sensitive uses, including Harbor-UCLA Medical Center and four schools.

Regulatory requirement RR HAZ-1 also ensures compliance with the US Department of Transportation and Cal/OSHA standards for hazardous materials and hazardous waste transportation. RR HAZ-2 requires all hazardous waste generation, transportation, treatment, storage, and disposal to be in compliance with the RCRA and the LACoFD as the designated CUPA. RR HAZ-3 requires all underground storage tank repairs or removals to be conducted in accordance with the California Underground Storage Tank Regulations with oversight from the Regional Water Quality Control Board, DTSC, LACoFD, South Coast Air Quality Management District (SCAQMD), and/or other regulatory agencies, as needed. RR HAZ-4 ensures any project construction within 10 feet or crossing existing high pressure pipelines, natural gas/petroleum pipelines, or electrical lines greater than 60,000 volts are designed in accordance with California Code of Regulations (Title 9, Section 1541).

Upon compliance with federal, state, and County regulatory requirements RR HAZ-1 through RR HAZ-4, construction activities in accordance with the proposed project would not pose substantial hazards to the public or the environment, and impacts would be less than significant.

Operation

The proposed Project would allow for the development of a variety of land uses, including residential, commercial, office, civic, and open space uses. Operation of the future residential uses that would be accommodated under the proposed Project would involve the use of small quantities of hazardous materials for cleaning and maintenance purposes, such as paints, household cleaners, fertilizers, and pesticides. Operation of the future commercial uses would also involve use of small amounts of hazardous materials. The types of commercial uses, and thus the types of hazardous materials to be used, are not yet known. However, the use of commercial-grade chemicals, cleaners, and solvents would be anticipated from the proposed retail/commercial uses.

The use, storage, transport, and disposal of hazardous materials by future residents and commercial and industrial tenants/owners of the proposed Project would be required to comply with existing regulations of several agencies, including the California Department of Toxic Substances Control, US Environmental Protection Agency, California Division of Occupational Safety and Health, California Department of Transportation, and Los Angeles County Fire Department. Regulations that would be required of those uses that involve transporting, using, or disposing of hazardous materials include RCRA, which provides the "cradle to grave" regulation of hazardous wastes; CERCLA, which regulates closed and abandoned hazardous waste sites; the Hazardous Materials Transportation Act, which governs hazardous materials transportation on U.S. roadways; International Fire Code (IFC), which creates procedures and mechanisms to ensure the safe handling and storage of hazardous materials; CCR Title 22, which regulates the generation, transportation, treatment, storage and disposal of hazardous waste; and CCR Title 27, which regulates the treatment, storage, and disposal of solid wastes. For development in California, Government Code Section 65850.2 requires that no final certificate of occupancy or its substantial equivalent be issued unless there is verification that the owner or authorized agent has met, or is meeting, the applicable requirements of the Health and Safety Code, Division 20, Chapter 6.95, Article 2, Sections 25500 through 25520.

The Los Angeles County Fire Department (LACoFD) is the CUPA for the County and most cities in the County, and is responsible for enforcing Chapter 6.95 (Hazardous Materials Release Response Plans and Inventory) of the Health and Safety Code. As the CUPA, LACoFD is required to regulate hazardous materials business plans and chemical inventory, hazardous waste and tiered permitting, underground storage tanks, and risk-management plans. The Hazardous Materials Business Plan is required to contain basic information on the location, type, quantity, and health risks of hazardous materials stored, used, or disposed of on development sites. The plan also contains an emergency-response plan, which describes the procedures for mitigating a hazardous release, procedures, and equipment for minimizing the potential damage of a hazardous materials release, and provisions for immediate notification of the LACoFD, the Office of Emergency Services, and other emergency-response personnel. Implementation of the emergency response plan facilitates rapid response in the event of an accidental spill or release, thereby reducing potential adverse impacts. Furthermore, LACoFD is required to conduct ongoing routine inspections to ensure compliance with existing laws and regulations; to identify safety hazards that could cause or contribute to an accidental spill or release; and to suggest preventative measures to minimize the risk of a spill or release of hazardous substances.

Compliance with applicable laws and regulations governing the use, storage, transport, and disposal of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts. Additionally, future residential and nonresidential uses of the proposed Project would be constructed and operated with strict adherence to all emergency response plan requirements set forth by Los Angeles County and LACoFD.

Any future development projects that would be accommodated by the proposed Specific Plan would be subject to the County's development review process upon a formal request for a development permit. The County's development review process would include verification of land use compatibility compliance in accordance with the development standards of the Specific Plan and County zoning regulations (Title 22 of the Code of Ordinances). Additionally, the proposed Specific Plan and County zoning regulations provide a

list of allowable uses that are customized for highly urbanized areas of the County, such as the Project area, thereby minimizing the exposure of future residents to potential impacts. For example, uses permitted by right in a mixed-use development are considered compatible with residential uses on the same development site.

Therefore, hazards to the public or the environment arising from the routine use, storage, transport, and disposal of hazardous materials during Project operation would not occur. Impacts would be less than significant, and no mitigation measures are necessary.

Accidental Release of Hazardous Materials

The use, storage, and transport of hazardous materials and hazardous wastes in compliance with the laws and regulations mentioned above would minimize the potential for releases of hazardous materials that could pose substantial hazards to the public or the environment and would entail prompt containment and cleanup of spills.

Residential uses, some civic uses such as schools and parks, and some commercial uses utilize only small amounts of hazardous materials—such as cleansers, paints, fertilizers, and pesticides—and mostly or entirely for cleaning and maintenance purposes. Use of such small amounts of hazardous materials would not pose substantial hazards to the public or the environment through accidental releases.

Businesses handling reporting quantities of hazardous or extremely hazardous materials would maintain business plans including: procedures in the event of a hazardous materials release, procedures for immediate notification of all appropriate agencies and personnel, identification of local emergency medical assistance, contact information for company emergency coordinators, a listing and location of emergency equipment at the business, an evacuation plan, and a training program for business personnel.

The LACoFD Health Hazardous Materials Division Emergency Operations Section provides emergency responses to hazardous materials within LACoFD's CUPA jurisdiction.

In addition, regulatory requirements RR HAZ-1 and RR HAZ-2 would further enforce compliance with the U.S. Department of Transportation, Cal/OSHA, and LACoFD pertaining to hazardous materials and wastes.

Hazards to Sensitive Land Uses

Sensitive land uses include retirement facilities, hospitals, and schools. Project buildout would result in increased usage and storage of hazardous materials onsite and increased transportation of hazardous materials to and from the site. Thus, project operation could subject people within the project area, including at eight schools within a one-quarter mile of the Specific Plan area, to increased hazards from hazardous materials. Compliance with the regulations described above would reduce hazards from hazardous materials emissions and handling such that no substantial health risks to sensitive land uses would occur, and impacts would be less than significant.

Level of Significance before Mitigation: Upon implementation of regulatory requirements, Impact 5.5-1 would be less than significant.

Impact 5.5-2: Demolition of existing buildings could expose construction workers to asbestos containing materials and/or lead-based paint. [Thresholds H-1 (part), H-2 (part)]

Impact Analysis: Portions of the site were built out by 1950. Thus, many buildings onsite could contain asbestos containing materials (ACMs) and lead-based paint (LBP). Demolition of buildings has the potential to expose and disturb ACMs and lead-based paint LBP. Demolition can cause encapsulated ACMs (if present) to become friable and, once airborne, they are considered a carcinogen.[2] Demolition of the existing buildings and structures can also release lead into the air if LPB is not properly removed and handled. The EPA has classified lead and inorganic lead compounds as "probable human carcinogens" (USEPA 2015). Such releases could pose significant risks to persons living and working in and around project site, including project construction workers.

Abatement of all ACM and LBP encountered during any future building demolition would be required to follow all applicable laws and regulations, including those of the EPA (which regulates disposal), OSHA, US Department of Housing and Urban Development, Cal/OSHA (which regulates employee exposure), and SCAQMD. County regulatory requirement RR HAZ-5 also enforces any demolition activities that have the potential to release ACMs and LBP to be conducted in accordance with SCAQMD, California Health and Safety Code Section 39650 et seq., CCR (Title 8, Section 1529), and Cal/OSHA regulations.

The EPA requires that all asbestos work performed within regulated areas be supervised by a competent person who is trained as an asbestos supervisor (EPA Asbestos Hazard Emergency Response Act, 40 CFR 763). SCAQMD's Rule 1403 requires that buildings undergoing demolition or renovation be surveyed for ACMs prior to any demolition or renovation activities. Should ACMs be identified, Rule 1403 requires them to be safely removed and disposed of at a regulated site, if possible. If it is not possible to safely remove ACMs, Rule 1403 requires that safe procedures be used to demolish the building with asbestos in place without resulting in a significant release of asbestos. Additionally, during demolition, grading, and excavation, all construction workers would be required to comply with the requirements of CCR Title 8, Section 1529 (Asbestos), which provides for exposure limits, exposure monitoring, respiratory protection, and good working practices by workers exposed to asbestos.

Cal/OSHA regulates the demolition, renovation, or construction of buildings involving lead-based materials. It includes requirements for the safe removal and disposal of lead, and the safe demolition of buildings containing LBP or other lead materials. Additionally, during demolition, grading, and excavation, all construction workers would be required to comply with the requirements of CCR Title 8, Section 1532.1 (Lead), which provides for exposure limits, exposure monitoring, respiratory protection, and good working practice by workers exposed to lead.

Hazards from ACM and LBP to workers, the public, and the environment would be less than significant after compliance with the above-described regulations.

[2] When dry, an ACM is considered friable if it can be crumbled, pulverized, or reduced to powder by hand pressure. If it cannot, it is considered a nonfriable ACM. It is possible for nonfriable ACMs to become friable when subjected to unusual conditions, such as when demolishing a building or removing an ACM that has been glued into place.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.5-2 would be less than significant.

Impact 5.5-3:	The project site is on a list of hazardous materials sites and future development activities could result in exposure of persons to hazardous materials. [Threshold H-4]

Impact Analysis: Table 5.5-1 above lists 638 hazardous materials sites: 280 within the Specific Plan area, and 358 within 1.125 mile of the Specific Plan area. Eleven sites within the Specific Plan area that could be more significant to the project site than the other listings are described above in Section 5.5.1.3. Further investigation and/or remediation is required for four of the sites; required remediation has been completed for two of the sites; one case has been transferred to the LACoFD; and four cases document past hazardous materials releases that do not require further investigation or remediation.

At five of the sites (the sites requiring additional investigation and/or remediation, and the site transferred to the LACoFD), hazardous materials may remain in soil and/or groundwater that could pose substantial hazards to the public and/or the environment should those materials be disturbed during earthmoving activities by projects developed under the Specific Plan.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.5-3 would be potentially significant.

Impact 5.5-4:	The project site is outside of the airport influence areas for public-use airports. There are no heliports within one mile of the project site. Specific Plan buildout would not cause airport-related hazards to persons onsite. [Thresholds H-5 and H-6]

Impact Analysis: The project site is outside of the Airport Influence Areas for Los Angeles International Airport, about 3.1 miles west of the site; and for Hawthorne Municipal Airport, about 0.8 mile southwest of the site (LACALUC 2003). There are no heliports within one mile of the project site (Airnav.com 2017). Specific Plan buildout would not cause airport-related hazards to persons onsite.

Level of Significance before Mitigation: Based on the preceding analysis, Impact 5.5-4 would be less than significant.

Impact 5.5-5:	Project development could affect the implementation of an emergency responder or evacuation plan. [Threshold H-7]

Impact Analysis:

Construction

Specific Plan buildout would involve construction activities and construction traffic that could impede emergency access to the project site and surrounding neighborhoods. I-105 is designated a primary disaster route, and Western Avenue and Imperial Highway are designated secondary disaster routes, by the County Department of Public Works (DPW). Los Angeles County Road Permit Standard Conditions issued by DPW

requires that encroachments into roadways interfering with future use of the roadways by the general public be removed; and prohibits temporary stockpiling of material or debris in roadways except under a Road Permit issued by DPW (DPW 2017).

Three schools are onsite—two high schools and an elementary school. The schools' emergency plans include plans for offsite evacuation as needed. The Traffic and Lighting Division would ensure that construction activities and construction staging do not block emergency evacuation from the schools.

Operation

DPW requires removal of encroachments into roadways obstructing future use of the roadway by the general public; and prohibits temporary stockpiling of material or debris in roadways except under a DPW-issued permit. Operation of projects built under the Specific Plan would not block emergency access to the site or surroundings.

Level of Significance before Mitigation: Based on the preceding analysis, Impact 5.5-5 would be less than significant.

Impact 5.5-6:	Specific Plan buildout would not expose people or structures to wildfire hazards nor are the proposed land uses potentially dangerous fire hazards. [Threshold H-8(i) through (iv) and H-9]

Impact Analysis: No fire hazard severity zones are mapped on or near the project site by the California Department of Forestry and Fire Prevention; the nearest such zone to the project site is in the Baldwin Hills about 4.9 miles to the northwest (CAL FIRE 2012).

The proposed land uses would be similar to existing uses (e.g., single and multifamily residences, commercial and office uses, industrial, and institutional uses). These proposed uses do not constitute potentially dangerous fire hazards and would be compatible with the existing residential and nonresidential buildings.

Overall, Specific Plan buildout would not expose people or structures to dangerous fire hazards.

Level of Significance before Mitigation: Based on the preceding analysis, Impact 5.5-6 would be less than significant.

5.5.5 Cumulative Impacts

Hazardous Materials

The area considered for cumulative impacts is the service area of the LACoFD CUPA's West County Office, which extends from south-central Los Angeles and areas just west of downtown Los Angeles west and northwest to the west County boundary (LACoFD 2017).

Cumulative impacts occur when the potential impacts of one project are compounded with impacts of other development projects or from growth in the area. Hazards and hazardous materials impacts are compounded

when multiple development projects would increase the presence of hazardous materials near the proposed project or the potential for hazardous accidents to occur.

However, use, transport, storage, and disposal of hazardous materials by other projects in the project area would be governed by the same regulations and agencies governing such uses by the proposed project. Implementation of existing regulations would minimize potential hazards from accidental release of hazardous materials. Other cumulative projects would be subject to independent CEQA review, and projects that could expose persons at schools within one-quarter mile of a project to substantial hazards through emissions of hazardous substances would be required to implement feasible mitigation measures to reduce those hazards.

Other projects may be proposed on sites listed on environmental databases. CEQA review for such projects would include environmental site assessments (e.g., Phase I, II, or III ESAs). Where contaminated soil, soil vapor, or water are discovered on a site, cleanup to appropriate regulatory levels would be required before proposed land uses could be approved where people could come into contact with the contaminated material.

Soil and groundwater contamination is usually localized; thus, potential impacts onsite are not likely to pose substantial hazards to the public and/or the environment offsite, and vice-versa.

Overall, compliance with laws and regulations governing hazardous materials and hazardous wastes described above in Section 5.5.1.1 and with regulatory requirements RR HAZ-1 through HAZ-5 would ensure impacts on hazards and hazardous materials are cumulatively considerable.

Emergency Response Planning

Other projects in the region would involve grading and construction operations entailing staging of trucks and construction materials, trucks and construction equipment entering and exiting roadways, and soil haul truck trips. Thus, other projects could affect emergency access to properties and neighborhoods surrounding their project sites. One primary disaster route (I-105) and two secondary routes (Western Avenue and Imperial Highway) pass through the project site (DPW 2012). Other projects would be required to submit construction traffic management plans to the Los Angeles County Public Works Traffic and Lighting Division for review and approval prior to construction activities. The Traffic and Lighting Division would ensure that emergency access to surrounding neighborhoods would be maintained. Cumulative impacts to emergency response plans would be less than significant.

5.5.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, some impacts would be less than significant: 5.5-1, 5.5-2 5.5-4, 5.5-5, and 5.5-6.

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

- **Impact 5.5-3** The project site is listed on databases of hazardous materials sites.

5.5.7 Mitigation Measures

Impact 5.5-3

HAZ-1 Prior to issuance of grading permits for individual development projects pursuant to the Specific Plan, the project applicant shall prepare and submit a Phase I Environmental Site Assessment (ESA) to the County of Los Angeles to identify environmental conditions of the development site and determine whether contamination is present. The Phase I ESA shall be prepared by an Environmental Professional in accordance with the American Society for Testing and Materials (ASTM) Standard E 1527.13, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process." If recognized environmental conditions related to soils or groundwater are identified in the Phase I ESA, the project applicant shall have soil and soil gas sampling performed, as required, as a part of a Phase II ESA. If contamination is found at significant levels, the project applicant shall remediate all contaminated soils with the oversight and in accordance with state and local agency requirements, including the California Department of Toxic Substances Control, Regional Water Quality Control Board, and Los Angeles County Fire Department. All contaminated soils and/or material encountered shall be disposed of at a regulated site and in accordance with applicable laws and regulations prior to the completion of grading. Each Phase I ESA conducted for projects that involve demolition activities shall include an inspection for lead-based paint conducted by a licensed or certified lead inspector/assessor and a survey for asbestos-containing materials conducted by a California Certified Asbestos Consultant. Prior to the issuance of building permits, a report documenting the completion, results, and follow-up remediation on the recommendations, if any, shall be provided to the Los Angeles County Department of Regional Planning evidencing that all site remediation activities have been completed.

5.5.8 Level of Significance After Mitigation

The mitigation measure identified above would reduce potential impacts associated with hazards and hazardous materials to less than significant. Therefore, no significant unavoidable adverse impacts relating to hazards and hazardous materials have been identified for the proposed project.

5.5.9 References

California Department of Forestry and Fire Prevention (CAL FIRE). 2012, May. Very High Fire Hazard Severity Zones in LRA: Los Angeles County. http://www.fire.ca.gov/fire_prevention/fhsz_maps_losangeles.php.

Department of Public Works, Los Angeles County (DPW). 2012, September 24. Disaster Routes with Road Districts: South Los Angeles County. http://dpw.lacounty.gov/dsg/disasterroutes/map/disaster_rdm-South.pdf.

Department of Public Works, Los Angeles County (DPW). 2017, September 27. Los Angeles County Road Permit Standard Conditions. http://dpw.lacounty.gov/general/forms/download/694.pdf.

Los Angeles County. 2017, September 26. A-NET. http://planning.lacounty.gov/assets/obj/anet/Main.html.

Los Angeles County Airport Land Use Commission (LACALUC). 2003, May 13. Los Angeles County Airport Land Use Plan. http://planning.lacounty.gov/assets/upl/data/pd_alup.pdf.

Los Angeles County Fire Department (LACoFD). Health Hazardous Materials Division. Contact Us. https://www.fire.lacounty.gov/hhmd/hhmd-contact-us-2/.

5.6 HYDROLOGY AND WATER QUALITY

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential impacts of the proposed Project Title to hydrology and water quality conditions in the Community of West Athens. Hydrology deals with the distribution and circulation of water, both on land and underground. Water quality deals with the quality of surface- and groundwater. Surface water includes lakes, rivers, streams, and creeks; groundwater is under the earth's surface.

- *West Athens-Westmont Storm Water Area Study*, IBI Group, April 13, 2018

Complete copies of these studies are included in Appendix I to this Draft EIR).

5.6.1 Environmental Setting

5.6.1.1 REGULATORY FRAMEWORK

Safe Drinking Water Act

The federal Safe Drinking Water Act (SDWA) regulates drinking water quality nationwide and gives the US Environmental Protection Agency (EPA) the authority to set drinking water standards, such as the National Primary Drinking Water regulations (NPDWRs or primary standards). The NPDWRs protect drinking water by limiting the levels of specific contaminants that can adversely affect public health. All public water systems that provide service to 25 or more individuals must meet these standards. Water purveyors must monitor for contaminants on fixed schedules and report to the EPA when a maximum contaminant level (MCL) is exceeded. MCL is the maximum permissible level of a contaminant in water that is delivered to any user of a public water system. Contaminants include organic and inorganic chemicals (e.g., minerals), substances that are known to cause cancer, radionuclides (e.g., uranium and radon), and microbial contaminants (e.g., coliform and E. coli). The MCL list typically changes every three years as the EPA adds new contaminants or revises MCLs. The California Department of Public Health's Division of Drinking Water and Environmental Management is responsible for implementation of the SDWA in California.

Clean Water Act

The federal Water Pollution Control Act (or Clean Water Act [CWA]) is the principal statute governing water quality. It establishes the basic structure for regulating discharges of pollutants into the waters of the United States and gives the EPA authority to implement pollution control programs, such as setting wastewater standards for industry. The statute's goal is to completely end all discharges and to restore, maintain, and preserve the integrity of the nation's waters. The CWA regulates direct and indirect discharge of pollutants; sets water quality standards for all contaminants in surface waters; and makes it unlawful for any person to discharge any pollutant from a point source into navigable waters unless a permit is obtained under its provisions. The CWA mandates permits for wastewater and stormwater discharges; requires states to establish site-specific water quality standards for navigable bodies of water; and regulates other activities that affect water quality, such as dredging and the filling of wetlands. The CWA funds the construction of sewage treatment plants and recognizes the need for planning to address nonpoint sources of pollution. Section 402

of the CWA requires a permit for all point source (a discernible, confined, and discrete conveyance, such as a pipe, ditch, or channel) discharges of any pollutant (except dredge or fill material) into waters of the United States.

National Pollutant Discharge Elimination System

Under the National Pollutant Discharge Elimination System (NPDES) program (under Section 402 of the CWA), all facilities that discharge pollutants from any point source into waters of the United States must have a NPDES permit. The term "pollutant" broadly applies to any type of industrial, municipal, and agricultural waste discharged into water. Point sources can be publicly owned treatment works (POTWs), industrial facilities, and urban runoff. (The NPDES program addresses certain agricultural activities, but the majority are considered nonpoint sources and are exempt from NPDES regulation.) Direct sources discharge directly to receiving waters, and indirect sources discharge to POTWs, which in turn discharge to receiving waters. Under the national program, NPDES permits are issued only for direct, point-source discharges. The National Pretreatment Program addresses industrial and commercial indirect dischargers. Municipal sources are POTWs that receive primarily domestic sewage from residential and commercial customers. Specific NPDES program areas applicable to municipal sources are the National Pretreatment Program, the Municipal Sewage Sludge Program, Combined Sewer Overflows (CSOs), and the Municipal Storm Water Program. Nonmunicipal sources include industrial and commercial facilities. Specific NPDES program areas applicable to these industrial/commercial sources are: Process Wastewater Discharges, Non-Process Wastewater Discharges, and the Industrial Storm Water Program. NPDES issues two basic permit types: individual and general. Also, the EPA has recently focused on integrating the NPDES program further into watershed planning and permitting (USEPA 2012).

The NPDES has a variety of measures designed to minimize and reduce pollutant discharges. All counties with storm drain systems that serve a population of 50,000 or more, as well construction sites one acre or more in size, must file for and obtain an NPDES permit. Another measure for minimizing and reducing pollutant discharges to a publicly owned conveyance or system of conveyances (including roadways, catch basins, curbs, gutters, ditches, man-made channels and storm drains, designed or used for collecting and conveying stormwater) is the EPA's Storm Water Phase I Final Rule. The Phase I Final Rule requires an operator (such as a City) of a regulated municipal separate storm sewer system (MS4) to develop, implement, and enforce a program (e.g., Best Management Practices [BMPs], ordinances, or other regulatory mechanisms) to reduce pollutants in post-construction runoff to the County's storm drain system from new development and redevelopment projects that result in the land disturbance of greater than or equal to one acre. The MS4 Permit in effect for West Athens is Order No. R4-2012-0175 issued by the Los Angeles Regional Water Quality Control Board in 2012.The Los Angeles County Public Works Department enforces conditions of the MS4 NPDES permit on development and redevelopment projects in the County's jurisdiction

Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Act (Water Code sections 13000 et seq.) is the basic water quality control law for California. Under this Act, the State Water Resources Control Board (SWRCB) has ultimate control

over state water rights and water quality policy. In California, the EPA has delegated authority to issue NPDES permits to the SWRCB. The state is divided into nine regions related to water quality and quantity characteristics. The SWRCB, through its nine Regional Water Quality Control Boards (RWQCBs) carries out the regulation, protection, and administration of water quality in each region. Each regional board is required to adopt a Water Quality Control Plan or Basin Plan that recognizes and reflects the regional differences in existing water quality, the beneficial uses of the region's ground and surface water, and local water quality conditions and problems. The project region is located in the Los Angeles Basin, Region 4. Most of the project site is in the Dominguez Watershed, while the northeast corner of the site is in the Lower Los Angeles River Watershed. The Water Quality Control Plan for the Los Angeles Basin (4) was adopted in 1995 and updated in 2011. This Basin Plan gives direction on the beneficial uses of the state waters within Region 4, describes the water quality that must be maintained to support such uses, and provides programs, projects, and other actions necessary to achieve the standards established in the Basin Plan.

5.6.1.2 APPLICABLE PLANS AND PROGRAMS

Storm Water Pollution Prevention Plans

Pursuant to the CWA, in 2001, the SWRCB issued a statewide general NPDES Permit for storm water discharges from construction sites (NPDES No. CAS000002). Under this Statewide General Construction Activity permit, discharges of storm water from construction sites with a disturbed area of one or more acres are required to either obtain individual NPDES permits for storm water discharges or to be covered by the General Permit. Coverage by the General Permit is accomplished by completing and filing a Notice of Intent with the SWRCB and developing and implementing a Storm Water Pollution Prevention Plan (SWPPP). Each applicant under the General Construction Activity Permit must ensure that a SWPPP is prepared prior to grading and is implemented during construction. The SWPPP must list BMPs implemented on the construction site to protect storm water runoff, and 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 monitoring plan if the site discharges directly to a water body listed on the state's 303(d) list of impaired waters.

National Flood Insurance Program

The National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 mandate the Federal Emergency Management Agency (FEMA) to evaluate flood hazards. FEMA provides Flood Insurance Rate Maps (FIRMs) for local and regional planners to promote sound land use and floodplain development, identifying potential flood areas based on the current conditions. To delineate a FIRM, FEMA conducts engineering studies referred to as Flood Insurance Studies (FISs). The most recent FIS and FIRM was completed and published for City on Date. Using information gathered in these studies, FEMA engineers and cartographers delineate Special Flood Hazard Areas (SFHAs) on FIRMs.

The Flood Disaster Protection Act (FDPA) requires owners of all structures in identified SFHAs to purchase and maintain flood insurance as a condition of receiving federal or federally related financial assistance, such as mortgage loans from federally insured lending institutions. Community members within designated areas are able to participate in the National Flood Insurance Program (NFIP) afforded by FEMA. The NFIP is required to offer federally subsidized flood insurance to property owners in those communities that adopt

and enforce floodplain management ordinances that meet minimum criteria established by FEMA. The National Flood Insurance Reform Act of 1994 further strengthened the NFIP by providing a grant program for state and community flood mitigation projects. The act also established the Community Rating System (CRS), a system for crediting communities that implement measures to protect the natural and beneficial functions of their floodplains, as well as managing erosion hazards.

Los Angeles County, under NFIP, has created standards and policies to ensure flood protection. These policies address development and redevelopment, compatibility of uses, required predevelopment drainage studies, compliance with discharge permits, enhancement of existing waterways, cooperation with the U.S. Army Corps of Engineers (Corps) and the SBCFCD for updating, and method consistency with the RWQCB and proposed BMPs.

Local

NPDES Permit No. CAS004001 (Municipal Separate Storm Sewer System Permit)

The project area is subject to the waste discharge requirements of the NPDES Permit No. CAS004001 and the Los Angeles County MS4 Permit (Order No. R4-2012-0175), as amended by Order WQ 2015-0075. The Los Angeles County Flood Control District, the County of Los Angeles, and 84 incorporated cities in Los Angeles County (except Long Beach) are permittees under the MS4 Permit. The permit covers approximately 3,100 square miles and serves a population of about 10 million. Permittees are required to comply with applicable water-quality-based effluent limitations, develop and implement procedures necessary to reduce the discharge of pollutants into the MS4s to the maximum extent practicable, and implement BMPs. The proposed project is required to comply with the Los Angeles County MS4 Permit and the County's stormwater management program.

Los Angeles County's MS4 permit also requires new development and redevelopment projects to retain onsite a specified volume of stormwater runoff from a design storm event. The County has adopted a low impact development (LID) ordinance and prepared a Low-Impact Development (LID) manual as a guideline for implementation of these requirements.

Los Angeles County Low Impact Development Standards Manual

The County prepared the 2014 Low Impact Development Standards Manual (LID Manual) to comply with the requirements of the MS4 permit. The LID manual is an update and compilation of the following documents:

- Development Planning for Storm Water Management: A Manual for the Standard Urban Storm Water Mitigation Plan (SUSMP Manual, September 2002)
- Technical Manual for Stormwater Best Management Practices in the County of Los Angeles (2004 Design Manual, February 2004)
- Stormwater Best Management Practice Design and Maintenance Manual (2010 Design Manual, August 2010)

- Low Impact Development Standards Manual (2009 LID Manual, January 2009)

The LID manual addresses the following objectives and goals:

- 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.
- Minimize erosion and other hydrologic impacts on all projects located within natural drainage systems that have not been improved by requiring projects to incorporate properly designed, technically appropriate hydromodification control development principles and technologies.

The use of LID BMPs in project planning and design is intended to preserve a site's predevelopment hydrology by minimizing the loss of natural hydrologic processes such as infiltration, evapotranspiration, and runoff detention. LID BMPs try to offset these losses by introducing structural and non-structural design components that restore these water quality functions into the project's land plan.

Best Management Practices

Best management practices for minimizing water pollution are termed *measures* in the LID Standards Manual and *Best Management Practices (BMPs)* in the MS4 Permit; they are referred to as BMPs here.

Site Assessment

The design of the Proposed project drainage system and water quality components is based on an assessment of site layout, geotechnical conditions, local groundwater conditions, and existing drainage.

Site Design

Site design BMPs reduce or eliminate post-project runoff. Site design BMPs include protecting and restoring natural areas; minimizing land disturbance, and minimizing impervious area.

Source Control BMPs

Source control BMPs reduce the potential for pollutants to enter runoff. Source control BMPs are classified in two categories:

Structural source control measures: examples include roof runoff controls, protection of slopes and channels, efficient irrigation, and storm drain system signage.

Nonstructural source control measures: reduce the potential for pollutants resulting from activities onsite to enter runoff. Examples include education of owners and employees; activity restrictions, such as requiring that trash can lids be closed at all times and prohibiting outdoor cooking; and periodic inspections of water quality features such as catch basins and filters.

Treatment control BMPs

Treatment control BMPs remove pollutants from contaminated stormwater before the water is discharged offsite. Examples include biofiltration through constructed project landscape elements such as bioswales, infiltration trenches, and/or infiltration basins; and filters.

5.6.1.3 EXISTING CONDITIONS

Regional Drainage

Most of the project site is in the Dominguez Watershed, which spans 133 square miles in the southwestern Los Angeles Basin (MEC 2004; see Figure 5.6-1, *Watersheds Map*). The primary drainage channel in the watershed is Dominguez Channel, which extends for about 16 miles and discharges into the Los Angeles/Long Beach Harbor. The Dominguez Channel passes about 0.7 mile southwest of the project site.

The northeast corner of the project site is in the Lower Los Angeles River Watershed, which encompasses about 140 square miles in the central and south-central Los Angeles Basin (see Figure 5.6-1). The primary channel in the Lower Los Angeles River Watershed is the Los Angeles River, which extends 48 miles from the confluence of Bell Creek and the Arroyo Calabasas in the southwest San Fernando Valley to the Pacific Ocean at the City of Long Beach. The Los Angeles River passes about 6.6 miles southeast of the project site.

Local Surface Waters and Drainage

The storm drainage network onsite consists of a Caltrans storm drain in the I-105 freeway and several Los Angeles County Public Works Department (DPW) storm drains, most of which discharge into the Caltrans storm drain. Drainage flow onsite is generally toward the southwest. The Caltrans storm drain and some of the DPW storm drains discharge into the Dominguez Channel (see Figure 5.6-3, *Storm Drains Onsite*). Drainage in the northeast corner of the project site is collected by storm drains that discharge to Compton Creek to the east; Compton Creek is tributary to the Los Angeles River. The project site is about 82.4 percent impervious.

Surface Water Quality

The receiving water for most of the project site is the Dominguez Channel and the Los Angeles/Long Beahc Harbor dowstream; the receiving water for the northeast corner of the site is Compton Creek and the Los Angeles River downstream. Each of those water bodies is listed on the Clean Water Act Section 303(d) List of Water Quality Limited Segments; listings are shown below in Table 5.6-1.

Table 5.6-1 Pollutants in Receiving Water Bodies Listed on Section 303(d) List

Water Body *Watershed*	Segment	Pollutant	Total Maximum Daily Load (TMDL) Status
Dominguez Channel *Dominguez*	Above Vermont Avenue	Ammonia	Estimated completion 2019
		Copper	Estimated completion 2019
		Diazinon	Estimated completion 2021
		Indicator Bacteria	Estimated Completion 2007

		Lead	Estimated completion 2019
		Sediment toxicity	Estimated completion 2021
		Zinc	Estimated completion 2019
Los Angeles/ Long Beach Inner Harbor *Alamitos Bay-San Pedro Bay*	Entire	Beach closures	Estimated completion 2004
		Benthic community effects	Estimated completion 2019
		Benzo(a)pyrene	Estimated completion 2021
		Chrysene[1]	Estimated completion 2021
		Copper	Estimated completion 2019
		DDT[2]	Estimated completion 2019
		Polychlorinated biphenyls (PCBs)	Estimated completion 2019
		Sediment Toxicity	Estimated completion 2009
		Zinc	Estimated completion 2008
Compton Creek *Lower Los Angeles River*	Entire	Benthic-macroinvertebrate bioassessments[3]	Estimated completion 2019
		Coliform bacteria	Estimated completion 2009
		Copper	Approved 2005
		Lead	Approved 2005
		pH	Approved 2004
		Trash	Approved 2008
Los Angeles River *Lower Los Angeles River*	Reach 1: Estuary north to Carson Street	Ammonia	Approved 2004
		Cadmium	Approved 2005
		Coliform bacteria	Estimated completion 2009
		Copper, dissolved	Approved 2005
		Cyanide	Estimated completion 2019
		Diazinon[2]	Estimated completion 2019
		Lead	Approved 2005
		Nutrients	Approved 2004
		pH	Approved 2003
		Trash	Approved 2008
		Zinc, dissolved	Approved 2005

[1] Chrysene, a polycyclic aromatic hydrocarbon, is listed as a human carcinogen by the State of California. See Office of Environmental Health Hazard Assessment (OEHHA). 2017, September 12. Chrysene. https://oehha.ca.gov/chemicals/chrysene.
[2] DDT (Dichlorodiphenyltrichloroethane) and diazinon are organochlorine insecticides.
[3] Benthic macroinvertebrate bioassessments are surveys of the species of invertebrate animals visible to the naked eye ("macroinvertebrate") compared to surveys at a reference site to determine whether water quality is impairing species richness at a site. See Virginia Cooperative Extension. 2009. TMDLs (Total Maximum Daily Loads) for Benthic Impairments. https://pubs.ext.vt.edu/442/442-556/442-556.html.
Source: SWRCB 2017.

Groundwater

Most of the project site is in the Central Subbasin of the Coastal Plain of Los Angeles Groundwater Basin; the Central Subbasin underlies about 277 square miles in the northeast half of the Los Angeles Basin. The southwest corner of the site is in the West Coast Subbasin of the Coastal Plain of Los Angeles Basin; the West Coast Subbasin spans about 142 square miles in the southwest part of the Los Angeles Basin (see Figure 5.6-2, *Groundwater Subbasins*).

Groundwater Quality

Central Subbasin

A groundwater treatment facility, the Water Quality Protection Project, treats groundwater for volatile organic compound (VOC) contamination in the City of Pico Rivera in the Central subbasin; the contamination is a plume originating from the San Gabriel Valley to the north. The facility uses granular-activated carbon and has capacity of 3,600 gallons per minute (CBWMD 2016).

West Coast Subbasin

Wellhead treatment is used at some wells in the West Coast Subbasin to remove volatile organic compound (VOC) contaminants. Brackish groundwater—slightly salty due to seawater intrusion into the groundwater basin—is treated at two facilities. The Brewer Desalting Facility in Torrance has a capacity of 2.1 million gallons per day (mgd) capacity and is operated by the West Basin Municipal Water District. The Goldsworthy Desalter, also in Torrance, is operated by the Water Replenishment District of Southern California; an expansion of that facility to 5 mgd capacity is scheduled for completion in 2017 (WBMWD 2016).

5.6.1.4 FLOOD HAZARDS

Designated Flood Zones

The project site is outside of 100-year and 500-year flood zones.

Seismically Induced Dam Inundation

The project site is not in a dam inundation zone (OES 2016).

Inundation from Aboveground Water Storage Reservoirs

No aboveground water storage reservoirs pose a flood hazard to the site.

Seiches

A seiche is a surface wave created when an inland water body is shaken, usually by an earthquake. No surface water bodies pose a flood hazard to the site due to a seiche.

Tsunamis

A tsunami is an ocean wave caused by a sudden displacement of the ocean floor, most often due to earthquakes. The project site is not at risk of flooding due to tsunami due to its distance from the ocean – about 6.6 miles – and elevation, ranging from about 125 feet above mean sea level (amsl) at the west end of the site to approximately 225 feet amsl in the Southwest Los Angeles College campus.

Figure 5.6-1 - Watesheds Map
5. Environmental Analysis

Watershed Boundaries

Source: US Geological Survey 2017. Watersheds reference layer on Biogeographic Information and Observation System maintained by the California Department of Fish and Wildlife.

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Scale (Miles)

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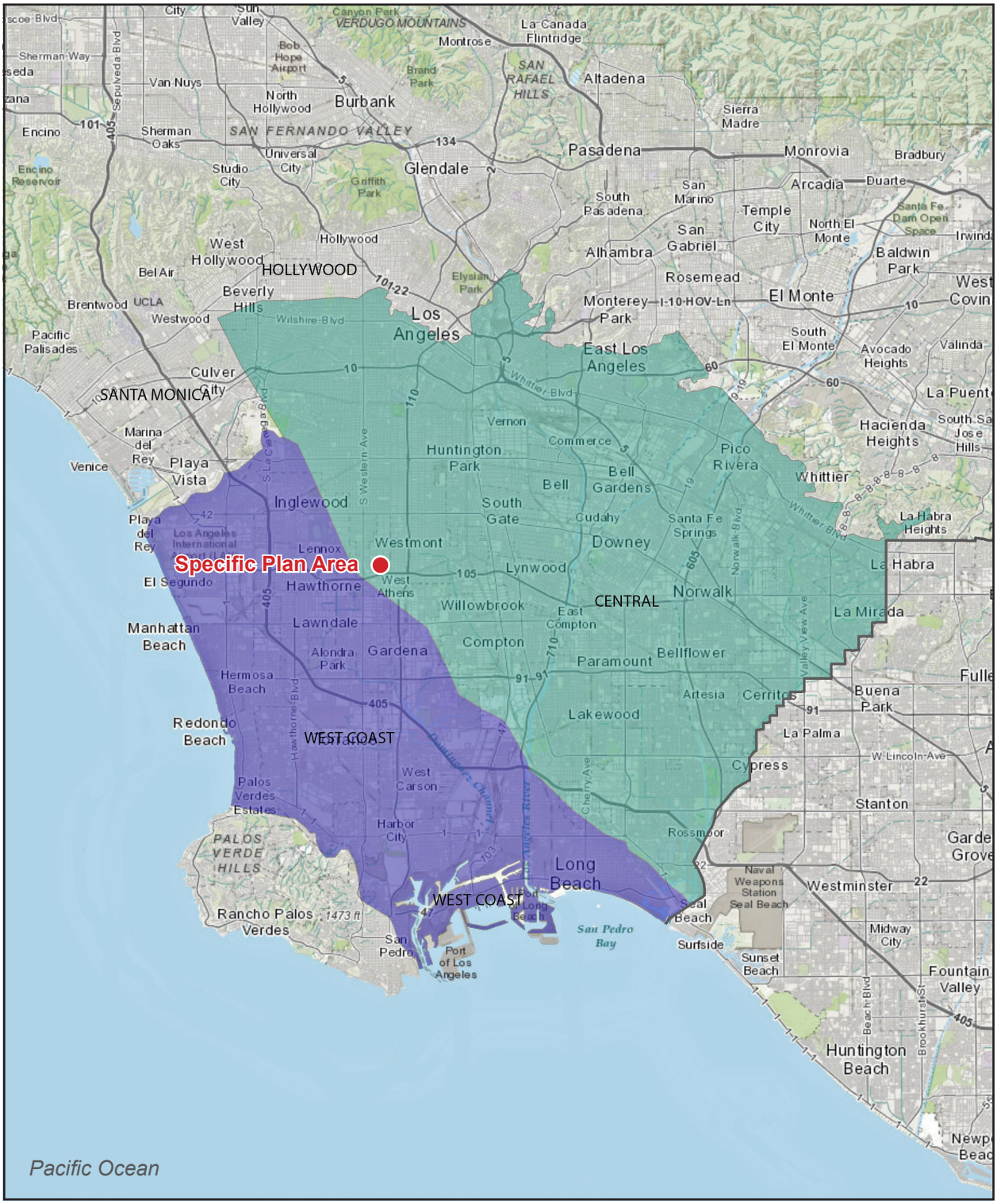
Figure 5.6-2 - Groundwater Subbasins Map

5. Environmental Analysis



Source: USGS, 2017

5. Environmental Analysis
HYDROLOGY AND WATER QUALITY

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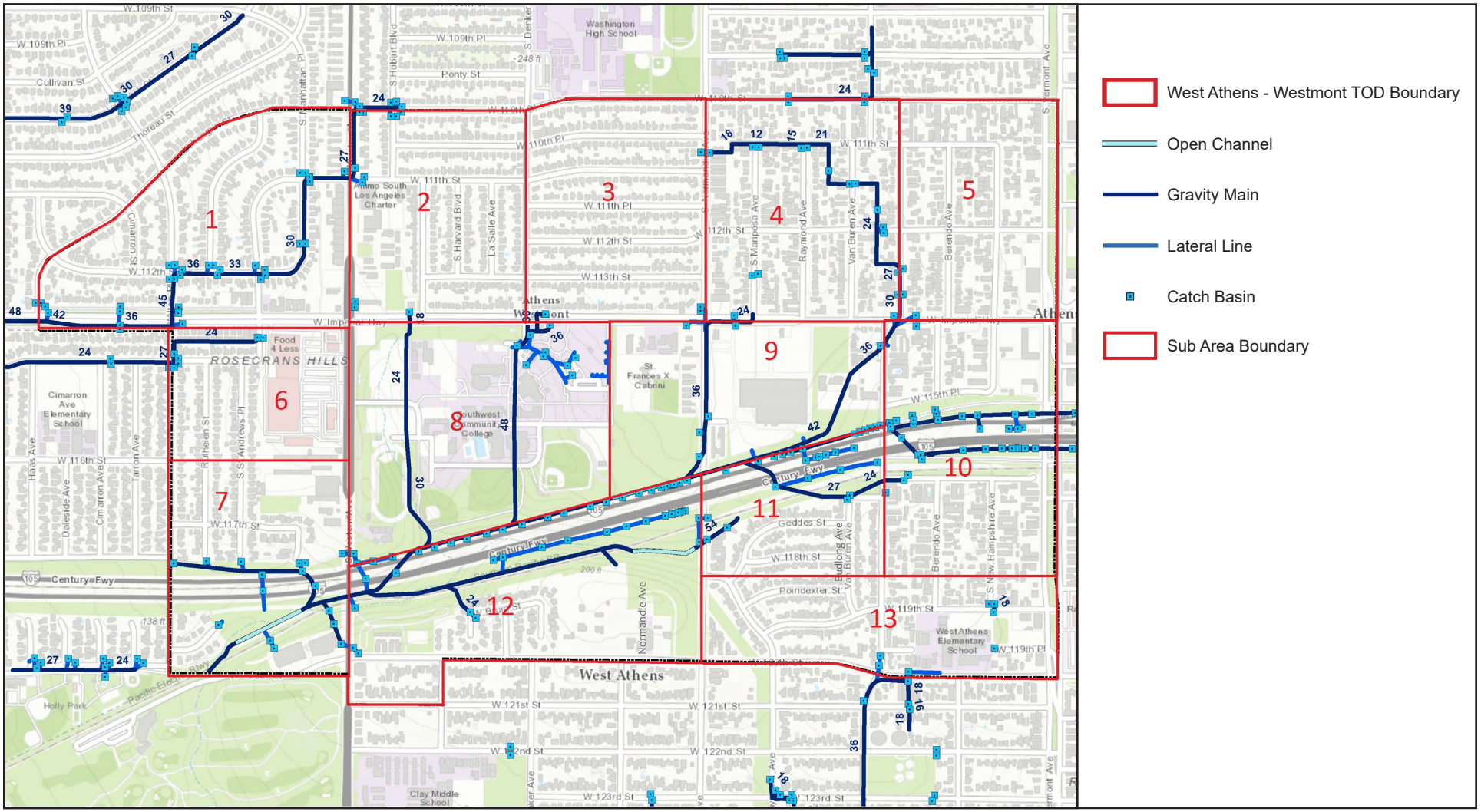
Figure 5.6-3 - Storm Drains Onsite

5. Environmental Analysis



Source: IBI, 2018

5. Environmental Analysis
HYDROLOGY AND WATER QUALITY

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Mudflows and Debris Flows

A mudflow is a landslide composed of saturated rock debris and soil with a consistency of wet cement. There are no slopes on or next to the site that could generate a mudflow.

5.6.2 Thresholds of Significance

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

HYD-1 Violate any water quality standards or waste discharge requirements.

HYD-2 Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted.

HYD-3 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in a substantial erosion or siltation on- or off-site.

HYD-4 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.

HYD-5 Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

HYD-6 Otherwise substantially degrade water quality.

HYD-7 Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

HYD-8 Place within a 100-year flood hazard area structures which would impede or redirect flood flows.

HYD-9 Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

HYD-10 Be subject to inundation by seiche, tsunami, or mudflow.

5.6.3 Plans, Programs, and Policies

Regulatory Requirements

RR HYD-2 The project will be constructed and operated in accordance with the Los Angeles County MS4 Permit (Order No. R4-2012-0175), as amended by Order WQ 2015-0075. The MS4 Permit requires new development and redevelopment projects to retain on-site a specified volume of stormwater runoff from a design storm event. The Low Impact Development Standards Manual provides the guidance on how new development and redevelopment projects can meet these on-site retention requirements through the use of stormwater quality control measures.

5.6.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Initial Study disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.6-1: Development pursuant to the proposed project would increase the amount of impervious surfaces on the site and would therefore increase surface water flows into drainage systems within the watershed. [Thresholds HYD-3, HYD-4 and HYD-5]

Impact Analysis: Nearly the entire project site is built out; only 17 acres, or about 2.6 percent, of the 658-acre site is vacant.

Impervious Areas

Specific Plan buildout would increase impervious areas by 8.74 acres in some portions of the project site and decrease such areas by 8.68 acres in other portions, for a net increase of 0.06 acre, that is, about 0.01 percent of the site (see Table 5.6-2 below). The project site is divided into 13 drainage sub-areas (see Figure 5.6-3, Storm Drains Onsite). The increase in impervious areas would mainly be in sub-areas 9 and 12 in the central and southern parts of the project site, respectively. The proposed zoning designations in portions of those areas where zoning designations would change are Civic Center (CC) and Limited Density Multiple Residence (R-3) in sub-area 9; and Residential Planned Development (RPD) and Mixed Use 1 (MXD-1) in sub-area 12 (see Figure 3.6, *Proposed Zoning Areas of Change*). Those areas are relatively close to existing storm drains that would have adequate capacity to convey stormwater from those areas.

The decrease in impervious areas would be mostly in sub-areas 7 and 10 in the southwest and east parts of the project site, respectively. Proposed zoning designations in portions of those sub-areas where zoning would change are Mixed Use 2 (MXD-2) and Public-Institutional (IT) in sub-area 7; and mixed use (MXD-1 and MXD-2) in sub-area 10 (see Figure 3.6).

No specific development plans have been proposed; thus, impervious area in buildout condition is estimated based on development in accordance with the proposed zoning and use of common measures for minimizing runoff.

Overall, Specific Plan buildout would not require the construction of new or expanded storm drains and would not substantially change the drainage pattern onsite.

Each development or redevelopment project under the Specific Plan would be required to have site-specific hydrology and hydraulic studies to determine capacity of the existing storm drain systems and project impacts on such systems prior to approval by the Los Angeles County Department of Public Works. Each project would be required to comply with site-specific "allowable discharge rates," as identified by the Department of Public Works, that limit peak flow discharges compared to existing conditions, thus minimizing potential for flooding on- or off-site.

As required by regulatory requirement RR HYD-2, future projects in accordance with the Specific Plan must be constructed and operated in accordance with the Los Angeles County MS4 Permit (Order No. R4-2012-0175), as amended by Order WQ 2015-0075. The MS4 Permit requires new development and redevelopment projects to retain on-site a specified volume of stormwater runoff from a design storm event. The LID Standards Manual provides guidance on how new development and redevelopment projects can meet these on-site retention requirements through the use of stormwater quality control measures.

Table 5.6-2 Impervious Areas Onsite: Existing, Proposed, and Net Change

Drainage Subarea	Acres	Existing Conditions		Specific Plan Buildout		Net Change, Impervious Acres
		Percent Impervious	Impervious Acres	Percent Impervious	Impervious Acres	
1	61.0	81.55%	49.75	81.55%	49.75	0.00
2	46.4	82.70%	38.38	82.51%	37.10	-.09
3	50.4	80.12%	40.38	80.12%	40.47	0.00
4	56.4	85.11%	48.00	85.11%	45.27	0.00
5	41.6	86.61%	36.03	88.17%	35.25	0.65
6	32.4	87.73%	28.43	87.61%	29.12	-.04
7	45.3	87.03%	39.43	77.80%	33.74	-4.18
8	71.5	80.04%	57.23	78.00%	55.77	-1.46
9	52.5	77.94%	40.92	84.33%	45.16	3.36
10	63.2	84.80%	53.60	80.26%	49.61	-2.87
11	33.5	91.37%	30.61	91.27%	25.32	-0.04
12	64.2	74.74%	47.99	81.97%	55.84	4.64
13	34.9	78.28%	27.32	78.54%	28.91	0.09
Total	653.3	82.36%	538.04	82.37%	538.10	0.06

Source: IBI 2018

LID Plan

Applicants for most projects would be required to submit an LID Plan to the Director of the Los Angeles County Public Works Department. The LID Plan must include the following information:

- Identification of whether the proposed project is a Designated Project or not. If the proposed project is a Designated Project, identification of the project category.

- Feasibility of infiltration, including a percolation report as part of a geotechnical report prepared by a geotechnical engineer.
- Source control measure(s) proposed to be implemented.
- Calculation of the stormwater quality design volume.
- Discussion on whether stormwater runoff harvest and use are feasible.
- Stormwater quality control measure(s) proposed to be implemented.
- Discussion of how the applicable water quality standards and total maximum daily loads will be addressed (off-site mitigation projects only).
- Proposed hydromodification controls and calculations (if necessary).
- Proposed maintenance plan (if necessary).

The LID Plan can be a section of or appendix to the hydrology report that must be submitted to the Los Angeles County Land Development Division; a section of or appendix to the grading report submitted to the Los Angeles County Building and Safety Division; or a separate plan.

Best Management Practices

In addition, projects that are identified as Designated Projects (categories of which are identified above in Section 5.6.1.1, *Regulatory Framework*) are required to implement site design/LID and source control BMPs applicable to their specific Designated Project categories and treatment control BMPs where necessary. Selection of LID and additional treatment control BMPs is based on the pollutants of concern for the specific project site and the BMP's ability to effectively treat those pollutants.

Site Design/LID BMPs reduce or eliminate post-project runoff. Site design BMPs include protecting and restoring natural areas; minimizing land disturbance, and minimizing impervious area.

Source control BMPs reduce the potential for pollutants to enter runoff. Source control BMPs are classified in two categories:

Structural source control measures: examples include roof runoff controls, protection of slopes and channels, efficient irrigation, and storm drain system signage.

Nonstructural source control measures: reduce the potential for pollutants resulting from activities onsite to enter runoff. Examples include education of owners and employees; activity restrictions, such as requiring that trash can lids be closed at all times and prohibiting outdoor cooking; and periodic inspections of water quality features such as catch basins and filters.

Treatment control BMPs remove pollutants from contaminated stormwater before the water is discharged offsite. Examples include biofiltration through constructed project landscape elements such as bioswales, infiltration trenches, and/or infiltration basins; and filters.

Specific Plan buildout would not cause a substantial increase in stormwater runoff and would not result in flooding on- or off-site after implementation of regulatory requirement RR HYD-2, LID BMPs, and compliance with site-specific allowable discharge rates.

Level of Significance before Mitigation: Upon implementation of regulatory requirements RR HYD-2, Impact 5.7-1 would be less than significant.

Impact 5.6-2:	Development pursuant to the proposed project would not substantially increase impervious surfaces on the site and therefore would not impact groundwater recharge. [Threshold HYD-2]

Impact Analysis: The project site is about 82.4 percent impervious. There are no groundwater recharge basins onsite. Specific Plan buildout would increase impervious areas onsite by a net 0.06 acre, that is, about 0.01 percent of the project site. Impacts respecting impervious areas are described further under Impact 5.6-1 above.

Projects developed under the Specific Plan would be required to minimize impervious areas and would be required to implement treatment BMPs which may include BMPs infiltrating some stormwater into soil, such as bioswales, infiltration trenches, and/or infiltration basins. Specific Plan buildout would not cause a substantial decrease in groundwater recharge.

Level of Significance before Mitigation: Upon implementation of regulatory requirements RR HYD-2, Impact 5.7-2 would be less than significant.

Impact 5.6-3:	The project site is not located within a 100-year flood hazard area. [Thresholds HYD-7 and HYD-8]

Impact Analysis: The project site is outside of 100-year and 500-year flood zones. Specific Plan buildout would not place housing or other structures for human occupancy in a 100-year flood zone, and would not involve construction of buildings that would change flood flows. No impact would occur.

Impact 5.6-4:	During the construction phase of the proposed project, there is the potential for short-term unquantifiable increases in pollutant concentrations from the site. After project development, the quality of storm runoff may be altered. [Thresholds HYD-1 and HYD-6]

Impact Analysis:

Urban runoff resulting from storms or nuisance flows (runoff during dry periods) from development projects can carry pollutants to receiving waters. Runoff can contain pollutants such as oil, fertilizers, pesticides, trash, soil, and animal waste. This runoff can flow directly into local streams or lakes or into storm drains and be released untreated into a local waterway and eventually the ocean. Untreated stormwater runoff

degrades water quality in surface waters and groundwater and can affect drinking water, human health, and plant and animal habitats. Additionally, increased runoff from urban surfaces can increase the intensity of flooding and erosion. Construction activities could also degrade water quality, releasing sediment, oil and greases, and other chemicals to nearby water bodies. Finally, site preparation and grading may result in the exposure of soils to erosion and could release sediment into off-site drainage systems.

Construction

Construction activities, including clearing, grading, and excavation, can impact water quality through soil erosion and increasing the amount of silt and debris carried in runoff. Construction materials, such as solvents, paints, oils, and grease, may also present risks to surface water quality.

Construction projects under the Specific Plan must provide evidence that the development of projects disturbing one acre or more of soil comply with the most current Statewide General Construction Permit and associated local NPDES regulations to ensure that the potential for soil erosion is minimized. In accordance with the updated General Construction Permit (Order No. 2012-0006-DWQ) and regulatory requirement RR HYD-1, the following permit registration documents are to be submitted to the SWRCB prior to commencement of construction activities:

- Notice of Intent
- Risk Assessment (standard or site specific)
- Particle Size Analysis (if site-specific risk assessment is performed)
- Site Map
- Stormwater Pollution Prevention Plan
- Active Treatment System Design Documentation (if determined necessary)
- Annual Fee and Certification

Prior to the issuance of a grading permit, the project applicant is required to provide proof of filing of the permit registration documents with the SWRCB, including preparation of a SWPPP describing the BMPs to be implemented during the project's construction activities. The SWPPP's construction BMPs shall address pollutant source reduction and provide measures/controls necessary to minimize potential pollutants. These include, but are not limited to: erosion controls, sediment controls, tracking controls, nonstorm water management, materials and waste management, and good housekeeping practices.

- **Erosion controls** cover and/or bind soil surface, to prevent soil particles from being detached and transported by water or wind; examples include mulch, geotextiles, mats, hydroseeding, earth dikes, and swales.

- **Sediment controls** filter out soil particles that have been detached and transported in water; examples include barriers such as straw bales, sandbags, fiber rolls, and gravel bag berms; desilting basins; and cleaning measures such as street sweeping.

- **Tracking controls** minimize the tracking of soil offsite by vehicles; examples include stabilized construction roadways and construction entrances/exits, and entrance/outlet tire washes.

- **Non-storm Water Management Controls** prohibit discharge of materials other than stormwater, such as discharges from the cleaning, maintenance, and fueling of vehicles and equipment. Examples include BMPs for specifying methods for: paving and grinding operations; cleaning, fueling, and maintenance of vehicles and equipment; and concrete curing and finishing.

- **Waste Management and Controls** include spill prevention and control, stockpile management, and management of solid wastes and hazardous wastes. (CASQA 2003)

The SWPPP must be implemented at the project site and revised as necessary as administrative or physical conditions change. With the implementation of the SWPPP and BMPs pursuant to regulatory requirement RR HYD-1, impacts to water quality during construction activities would be less than significant.

Operations

Operations of projects developed under the Specific Plan could generate the same categories of pollutants as construction activities. For example, runoff from buildings and parking lots typically contain oils, grease, fuel, antifreeze, byproducts of combustion (such as lead, cadmium, nickel, and other metals), fertilizers, herbicides, pesticides, and other pollutants. Precipitation at the beginning of the rainy season may result in an initial stormwater runoff (first flush) with high pollutant concentrations.

Project applicants are required under regulatory requirement RR HYD-2 and the County's LID Standards Manual to submit an LID plan for review and approval by the Los Angeles County Department of Public Works and to implement the LID plan during project design and operations (see further discussion of LID plans under Impact 5.6-1).

Water quality impacts from operations of projects under the Specific Plan would be less than significant.

Impact 5.6-5: The project site is not located within a dam inundation area. [Threshold HYD-9]

Impact Analysis: The project site is not in a dam inundation area, and Specific Plan buildout would not place developments at risk from dam inundation. No impact would occur.

Impact 5.6-6: The site would not be subject to inundation by seiche, tsunami, or mudflow. [Threshold HYD-10]

Impact Analysis: The project site is not subject to flooding due to tsunami; there are no inland water bodies on or near the slope that could cause flooding onsite due to a seiche; and there are no slopes on or next to the site that could generate a mudflow. No impact would occur.

5.6.5 Cumulative Impacts

Surface Water, Drainage, and Flood Hazards

The area considered for cumulative impacts to surface water, drainage, and flood hazards is the Dominguez and Lower Los Angeles River watersheds. Other projects would increase impervious areas and thus could generate increased runoff. Other projects would be required to implement site design/LID and source control BMPs—in compliance with the MS4 permit and the LID Manual—minimizing impervious areas and infiltrating, evapotranspiring, and/or biotreating stormwater. Cumulative drainage impacts would be less than significant after implementation of such BMPs, and project impacts would not be cumulatively considerable.

Groundwater

The area considered for cumulative impacts to groundwater is the Central and West Coast Subbasins of the Coastal Plain of Los Angeles Subbasin. Other projects could reduce incidental groundwater recharge by increasing impervious areas. Some of the stormwater that would be generated by other projects would be infiltrated into soil through the BMPs mentioned above. Cumulative groundwater impacts would be less than significant, and project impacts would not be cumulatively considerable.

Water Quality

The area considered for cumulative water quality impacts is the Los Angeles RWQCB Region, the area subject to MS4 Permit R4-2012-0175. Other projects would generate increased pollutants that could contaminate stormwater. Other projects would implement BMPs for minimizing water pollution, as described above, pursuant to the MS4 Permit and LID Manual. Cumulative water quality impacts would be less than significant after implementation of such BMPs, and project impacts would not be cumulatively considerable.

5.6.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.6-1, 5.6-2, 5.6-3, 5.6-4, 5.6-5, and 5.6-6.

5.6.7 Mitigation Measures

No mitigation measures are required.

5.6.8 Level of Significance After Mitigation

Impacts would be less than significant.

5.6.9 References

Central Basin Municipal Water District (CBWMD). 2016, June. 2015 Urban Water Management Plan. https://wuedata.water.ca.gov/public/uwmp_attachments/7950879752/FINAL%20CBMWD%20UWMP%20June%202016.pdf.

State Water Resources Control Board (SWRCB). 2017, September 12. Impaired Water Bodies. http://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2012.shtml.

US Environmental Protection Agency (USEPA). 2012, September 26. Water Permitting 101. http://www.epa.gov/npdes/pubs/101pape.pdf.

Virginia Cooperative Extension. 2009. TMDLs (Total Maximum Daily Loads) for Benthic Impairments. https://pubs.ext.vt.edu/442/442-556/442-556.html.

West Basin Municipal Water District (WBMWD). 2016, June 30. 2015 Urban Water Management Plan. https://wuedata.water.ca.gov/public/uwmp_attachments/1460981070/HiRes.UrbanWaterPlanBook.6.30.16.pdf.

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5.7 LAND USE AND PLANNING

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Connect Southwest LA project to impact land use and planning in the County of Los Angeles.

Land use impacts can be either direct or indirect. Direct impacts are those that result in land use incompatibilities, division of neighborhoods or communities, or interference with other land use plans, including habitat and wildlife conservation plans. This section focuses on direct land use impacts. Indirect impacts are secondary effects resulting from land use policy implementation, such as an increase in demand for public utilities or services, or increased traffic on roadways. Indirect impacts are addressed in other sections throughout this DEIR.

5.7.1 Environmental Setting

5.7.1.1 RELEVANT PROGRAMS AND REGULATIONS

Regional

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is a council of governments representing Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. SCAG is the federally recognized metropolitan planning organization for this region, which encompasses over 38,000 square miles. SCAG is a regional planning agency and a forum for addressing regional issues concerning transportation, the economy, community development, and the environment. SCAG is also the regional clearinghouse for projects requiring environmental documentation under federal and state law. In this role, SCAG reviews proposed development and infrastructure projects to analyze their impacts on regional planning programs.

The proposed project is considered a project of regionwide significance pursuant to the criteria in SCAG's Intergovernmental Review Procedures Handbook (November 1995) and Section 15206 of the California Environmental Quality Act (CEQA) Guidelines, because it requires an amendment to the County of Los Angeles 2035 General Plan, for which an EIR was prepared. Therefore, the project's consistency with the applicable regional planning guidelines and policies is analyzed in Section 5.7.4.

Regional Transportation Plan/Sustainable Communities Strategy

The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted in November 2016 (SCAG 2016). Major themes in the 2016 RTP/SCS include integrating strategies for land use and transportation; striving for sustainability; protecting and preserving existing transportation infrastructure; increasing capacity through improved systems managements; providing more transportation choices; leveraging technology; responding to demographic and housing market changes; supporting commerce, economic growth, and opportunity; promoting the links between public health, environmental protection, and economic opportunity; and incorporating the principles of social equity and environmental justice.

The RTP/SCS outlines a development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, would reduce GHG emissions from transportation (excluding goods movement). The SCS is meant to provide growth strategies that will achieve the regional GHG emissions reduction targets. However, the SCS does not require that local general plans, specific plans, or zoning be consistent with the SCS; instead, it provides incentives to governments and developers for consistency. The proposed project's consistency with the applicable RTP/SCS goals is analyzed in detail in Table 5.7-3, *2016-2040 RTP/SCS Consistency Analysis*.

Local

County of Los Angeles General Plan

The 2035 General Plan provides a policy framework for the future and guides growth and development in the County. A series of state-mandated and optional elements direct the County's physical, social, and economic growth. The General Plan has elements for land use, mobility, air quality, conservation and natural resources, parks and recreation, noise, safety, public services and facilities, economic development, and housing.

- **Land Use Element**. The land use element designates land uses and provides strategies and planning tools to facilitate and guide future development and revitalization efforts.
- **Mobility Element.** The mobility element provides an overview of the transportation infrastructure and strategies for developing an efficient and multimodal transportation network. The highway plan and the bicycle master plan are components of the mobility element.
- **Air Quality Element.** The air quality element summarizes air quality issues and outlines the goals and policies that will improve air quality and reduce greenhouse gas emissions. The community climate action plan is a component of the air quality element.
- **Conservation and Natural Resources Element.** The conservation and natural resources element guides the long-term conservation of natural resources and preservation of available open space areas.
- **Parks and Recreation Element.** The parks and recreation element plans and provides for an integrated parks and recreation system that meets the needs of residents.
- **Noise Element.** The noise element reduces and limits the exposure of the general public to excessive noise levels. The noise element sets the goals and policy direction for the management of noise.
- **Safety Element.** The purpose of the safety element is to reduce the potential risk of death, injuries, and economic damage resulting from natural and man-made hazards.
- **Public Services and Facilities Element.** The public services and facilities element promotes the orderly and efficient planning of public services and facilities and infrastructure in conjunction with development and growth.

- **Economic Development Element.** The economic development element outlines economic development goals and provides strategies that contribute to economic well-being.

- **Housing Element.** The housing element analyzes and plans for existing and future housing needs. The housing element addresses the housing needs of all income levels and accommodates a diversity of housing types and special needs.

The policies in each of the elements that are relevant to the proposed project are listed in Table 5.7-1, *General Plan Consistency Analysis*, which analyzes the proposed project's consistency with these policies.

Metro Planning Area

The General Plan identifies 11 planning areas and provides goals and objectives for all of the unincorporated areas in the County (see Figure 5.7-1, *County of Los Angeles Planning Areas*). The purpose of the planning areas framework is to provide a mechanism for local communities to work with the County to develop plans that respond to their unique and diverse character.

The communities of West Athens and Westmont are within the Metro Planning Area, which is in the geographic center of Los Angeles County. The Metro Planning Area is heavily defined by its proximity to downtown Los Angeles and is characterized by major businesses and professional firms, tourist and convention hotels, restaurants, retail, and a large concentration of government offices (Los Angeles 2015). Due to its proximity to the Metro Green Line Vermont Station, the West Athens-Westmont area is identified as an opportunity area for transit-oriented development.

West Athens-Westmont Community Plan

The West Athens-Westmont Community Plan was last updated in 1990. Its policies to preserve and improve the quality of life in the community were based on input from local residents during the plan's preparation. The land use policies recommend infill development and redevelopment to improve the economic base, precluding intensification of existing residential neighborhoods. In summary, the Community Plan policies support:

- Mixed-use development, particularly near the Vermont/Athens Green Line Station, that bolsters economic activity and employment opportunities for the community.
- The preservation of the existing residential neighborhoods and the renovation of deteriorated housing stock to provide safety and affordability for residents.
- Economic incentives for small businesses that improve job opportunities for local residents.
- Multimodal transit infrastructure to support the transit-dependent population.
- Improved parks and open space in the neighborhood, while mitigating the impacts of environmental pollutants.

5.7.1.2 EXISTING CONDITIONS

The Connect Southwest LA project site encompasses 658 acres; 473 acres are designated for land use development and the remaining acres for rights-of-way (i.e., roadways, utility easements, and drainage). The

project site encompasses portions of the West Athens and Westmont communities. The project area is bounded generally by Lohengrin Street/West 110th Street to the north; West 120th Street/West 121st Street to the south; Vermont Avenue to the east; and Lohengrin Street/Imperial Highway/South Wilton Place/Western Avenue to the west. I-105 runs east-west through the Specific Plan area and divides it into northern and southern sections.

Existing land uses on the project site include 198 acres of single-family residential uses, 85 acres of institutional uses, 53 acres of commercial use, 46 acres of multifamily residential use, 36 acres of duplex/triplex residential use, 19 acres of occupied right-of-way, 17 acres of vacant land, and 15 acres of miscellaneous use (see Figure 4-1, *Existing Land Uses*).

Single-family residences encompass the majority of existing uses to the north and south of I-105, and the majority of multifamily residences are in the northeastern and eastern parts of the Specific Plan area. Commercial uses are primarily along Imperial Highway, Vermont Avenue, and Western Avenue. Institutional uses include Los Angeles Southwest College, the Los Angeles County Sheriff's Station, St. Francis Xavier Cabrini Catholic School and Church, West Athens Elementary School, and Southside Christian Baptist Church.

The Metro Green Line runs along the median of I-105 for the majority of its route, extending from Norwalk to Redondo Beach. The Vermont/Athens Green Line station platform sits at freeway level and is under the Vermont Avenue overpass.

5.7.2 Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, a project would normally have a significant effect on the environment if the project would:

LU-1 Physically divide an established community.

LU-2 Be inconsistent with the applicable County plans for the subject property including, but not limited to, the General Plan, specific plan, local coastal plans, area plans, and community/neighborhood plans?

LU-3 Be inconsistent with the County zoning ordinance as applicable to the subject property?

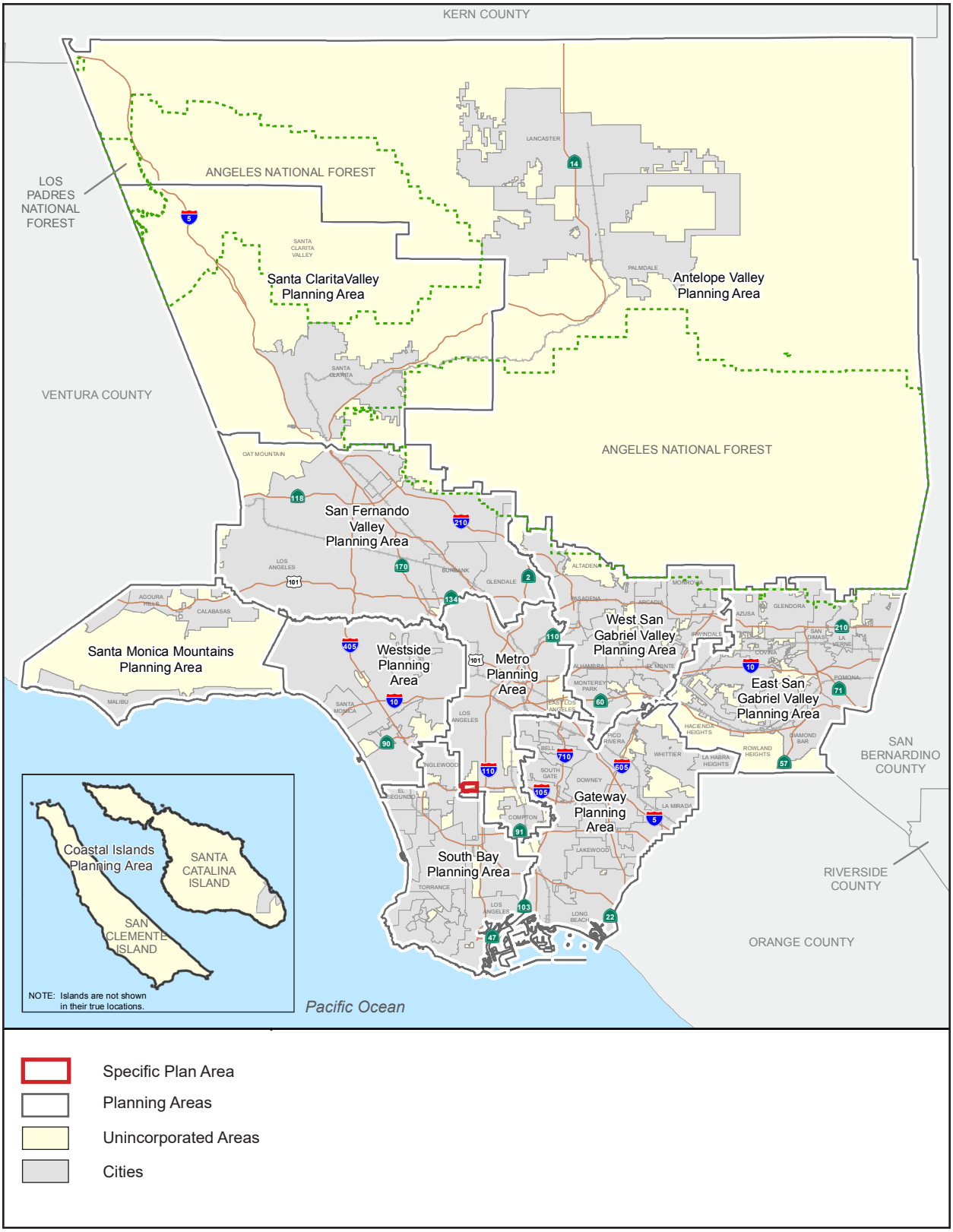
LU-4 Conflict with Hillside Management Area Ordinance, Significant Ecological Areas Ordinance, or other applicable land use criteria?

5.7.3 Plans, Programs, and Policies

There are no applicable project design features or regulatory requirements related to land use and planning.

Figure 5.7-1 - County of Los Angeles Planning Areas

5. Environmental Analysis



0 12
Scale (Miles)

Source: Los Angeles County DRP, 2014

5. Environmental Analysis
LAND USE AND PLANNING

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5.7.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.7-1: Project implementation would not divide an established community. [Threshold LU-1]

Impact Analysis: As shown on Figure 3-3, *Aerial Photograph*, the project site and surrounding areas are nearly entirely built out with urban land uses. The Specific Plan proposes land uses that are compatible with existing uses. No new major infrastructure is proposed, and pedestrian, transit, and bicycle amenities would crease enhanced connectivity. Therefore, development in accordance with the Specific Plan would not physically divide an established community.

Design guidelines from the proposed Specific Plan would include community amenities that can improve the existing community character. The design guidelines are intended to promote aesthetically pleasing and viable, site-compatible development and to enhance the built environment. For example, design guidelines related to frontage types, architectural design, building entrances and fenestrations, open space, lighting, streetscape design, and public art would all enhance the existing community character. Thus, implementation of the Specific Plan would not divide any established communities in the project area.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.7-1 would be less than significant.

Impact 5.7-2: The Connect Southwest LA Specific Plan would not conflict with any applicable plans. [Threshold LU-2]

Impact Analysis: The proposed project is under the jurisdictions of the County of Los Angeles and SCAG and their land use plans and policies. Therefore, the following analysis will determine the project's consistency with the goals and policies of the County of Los Angeles 2035 General Plan, West Athens-Westmont Community Plan, and SCAG 2016-2040 Regional Transportation Plan/Sustainable Communities Strategies (RTP/SCS).

County of Los Angeles General Plan Consistency

A detailed summary of the proposed project's consistency with the applicable goals and policies of the various elements of the County's General Plan is provided in Table 5.7-1.

Table 5.7-1 Los Angeles County General Plan Consistency Analysis

Applicable General Plan Goals and Policies	Project Consistency Analysis
Land Use Element	
Goal LU 1 A General Plan that serves as the constitution for development, and a Land Use Policy Map that implements the General Plan's Goals, Policies and Guiding Principles.	
Policy LU 1.10: Require the intensity, density, and uses allowed in a	Consistent: The Specific Plan would be used in conjunction with the

Table 5.7-1 Los Angeles County General Plan Consistency Analysis

Applicable General Plan Goals and Policies	Project Consistency Analysis
new specific plan to be determined using the General Plan, including the Land Use Policy Map and Land Use Legend. Policy LU 1.11: Require a General Plan amendment for any deviation from the intensities, densities, and uses allowed by the General Plan (to apply the appropriate designation from the General Plan Land Use Legend), unless allowances for flexibility are specified in the specific plan. Policy LU 1.12: Require development regulations and zoning for new specific plans to be consistent with their corresponding General Plan land use designation.	2035 General Plan and County Code to provide more detailed design and development criteria. The General Plan identifies the West Athens-Westmont community as a priority policy area for infill development and transit-oriented development given its proximity to major transit and commercial corridors (i.e., the Metro Green Line Vermont Station). In order to spur this type of development, the General Plan established the Transit Oriented District (TOD) Program, which provides guidance for the preparation of TOD specific plans, including the proposed project. The overall purpose of the Connect Southwest LA Specific Plan is to provide comprehensive direction for the development of the project area and facilitate implementation of the goals and policies of the General Plan, including the vision for the TOD priority areas. Therefore, the proposed project is consistent with the policy framework of the General Plan. As shown on Figure 3-5, *Proposed Zoning Districts*, the project proposes zoning districts that deviate from the intensities, densities, and uses allowed by the General Plan. A general plan amendment and zone change would be required. Upon approval of the project, the new zoning districts would be consistent with the General Plan.
Policy LU 1.13: Allow specific plans to include implementation procedures for flexibility, such as development phasing, and redistribution of intensities and uses, as appropriate.	Consistent: Chapter 8, *Implementation and Administration*, of the Specific Plan includes implementation and financing strategies and phasing for realizing the goals of the Specific Plan; it also describes project review and administrative procedures required for amendments and/or modifications to the plan.
Goal LU 2 Community-based planning efforts that implement the General Plan and incorporate public input, and regional and community level collaboration.	
Policy LU 2.1: Ensure that all community-based plans are consistent with the General Plan.	Consistent: See response to Policy LU 1.10, above.
Policy LU 2.2: Ensure broad outreach, public participation, and opportunities for community input in community-based planning efforts. Policy LU 2.3: Consult with and ensure that applicable County departments, adjacent cities and other stakeholders are involved in community-based planning efforts. Policy LU 2.7: Set priorities for Planning Area-specific issues, including transportation, housing, open space, and public safety as part of community-based planning efforts.	Consistent: As part of the planning process for the proposed project, County staff from the Department of Regional Planning (DRP) facilitated community outreach events that helped shape the Specific Plan. The Connect Southwest LA Task Force was assembled by the DRP for the purpose of guiding the preparation of the Specific Plan. The task force acted as a technical advisory committee to assist the planning process and consisted of DRP staff; representatives from other County agencies, including the Departments of Public Health, Parks and Recreation, Public Works, and the Community Development Commission; and other key stakeholders, including LA Metro and the cities of Hawthorne and Los Angeles. Two public workshops were held on April 7 and May 14, 2016, to introduce the policy objectives of the project and review the existing assets in the project area. Community members provided insight and local knowledge about the challenges and opportunities in the community. A follow-up workshop was conducted on October 6, 2016, for DRP staff to present and discuss the draft vision statement, guiding principles, goals and objectives, and themes for the Specific Plan. A final workshop was held on December 8, 2016, to discuss the existing conditions report, a refined vision statement, guiding principles, goals and objectives, opportunity areas map, proposed zone descriptions, and zoning map.

Table 5.7-1 Los Angeles County General Plan Consistency Analysis

Applicable General Plan Goals and Policies	Project Consistency Analysis
	DRP staff conducted additional stakeholder outreach by meeting with and receiving input from the following community groups and stakeholders—Connect Southwest LA Task Force, West Athens-Westmont Best Start, Southwest Community Association, Los Angeles County Second District Board Office, West Athens Victory Garden, California Department of Transportation, LA Metro, Los Angeles Southwest College, and residents of West Athens and Westmont. DRP staff also hosted a table that distributed project information at the Weingart YMCA Wellness & Aquatic Center Healthy Kids Community Day on April 30, 2016, and the Juneteenth Community Celebration in Willowbrook on June 25, 2016. As a proposed TOD project, the Specific Plan focuses on allowing new housing and mixed-use development opportunities, introducing multimodal transportation improvements, creating a strong identity for the community, and allowing development flexibility responsive to the needs of the West Athens-Westmont community.
Policy LU 2.8: Coordinate with the Los Angeles County Department of Public Works and other infrastructure providers to analyze and assess infrastructure improvements that are necessary for plan implementation.	Consistent: Section 5.14, *Utilities and Service Systems*, of this DEIR analyzes existing infrastructure systems in the project area and evaluates project impacts on sewer, water, storm drain, and dry utilities. As part of the analysis, the Los Angeles County Department of Public Works and infrastructure service providers were contacted to identify existing deficiencies and potential project impacts.
Policy LU 2.10: Ensure consistency between land use policy and zoning by undergoing a comprehensive zoning consistency analysis that includes zoning map changes and Zoning Code amendments, as needed.	Consistent: The proposed Specific Plan would require zone changes to adopt the new zoning districts illustrated in Figure 3-5, *Proposed Zoning Districts*. Upon approval of the project, the Specific Plan would be consistent with the County's General Plan and County Code.
Goal LU 4 Infill development and redevelopment that strengthens and enhances communities.	
Policy LU 4.3: Encourage transit-oriented development in urban and suburban areas with the appropriate residential density along transit corridors and within station areas.	Consistent: The project is a TOD specific plan for the West Athens-Westmont community in the County's Metro Planning Area. The main purpose of the proposed Specific Plan is to provide opportunities for transit oriented development and improve multimodal connections within the community by increasing access to transit and establishing pedestrian and bicycle networks that link residential neighborhoods, schools, retail corridors, and employment centers together. The proposed zoning map includes opportunities for residential uses of various densities along transit corridors and within the Metro Green Line Vermont Station area under the Mixed Use 1 and 2 Zones.
Policy LU 4.4: Encourage mixed use development along major commercial corridors in urban and suburban areas.	Consistent: Major commercial corridors within the Specific Plan include Vermont Avenue, Western Avenue, and Imperial Highway. The project proposes Mixed Use 1 and 2 Zones along these corridors, which would encourage a mix of commercial, office, and residential development.
Goal LU 5 Vibrant, livable and healthy communities with a mix of land uses, services and amenities.	
Policy LU 5.1: Encourage a mix of residential land use designations and development regulations that accommodate various densities, building types and styles.	Consistent: The Specific Plan includes four different residential districts and three nonresidential districts (i.e., Mixed Use 1 Zone, Mixed Use 2 Zone, and Civic Center) that would accommodate a variety of housing densities, building types, and styles.
Policy LU 5.2: Encourage a diversity of commercial and retail services, and public facilities at various scales to meet regional	Consistent: The following proposed zoning districts would encourage commercial, retail, and public facility developments to

Table 5.7-1 Los Angeles County General Plan Consistency Analysis

Applicable General Plan Goals and Policies	Project Consistency Analysis
and local needs.	meet local and regional needs—Neighborhood Commercial, Mixed Use 1 Zone, Mixed Use 3 Zone, Civic Center, and Public/Institutional. For example, the Neighborhood Commercial Zone would serve local retail and service needs of residents, employees, and students in the project area, and Mixed Use 2 Zone is intended to be developed over time as a regional transit-supportive environment with a high-intensity mix of retail, office, restaurant, and residential use in a compact, walkable setting.
Policy LU 5.3: Support a mix of land uses that promote bicycling and walking, and reduce VMTs.	Consistent: The Specific Plan is designed to develop the West Athens-Westmont community into a TOD. Therefore, the proposed zoning districts include a mix of commercial, retail, residential, and office uses along major transit corridors. Additionally, pedestrian and bicycle infrastructure and amenities are proposed in the Specific Plan to encourage multimodal transportation and access to transit. Improvements to the project area's multimodal transportation would help reduce overall VMT per capita (see Table 5.12-23).
Policy LU 5.4: Encourage community-serving uses, such as early care and education facilities, grocery stores, farmers markets, restaurants, and banks to locate near employment centers.	Consistent: The proposed zoning districts for major employment areas would be the Mixed Use 1 and 2 Zones, Neighborhood Commercial, and Public/Institutional. These zoning districts, with the exception of Public/Institutional, would allow a variety of neighborhood-serving commercial developments, such as grocery stores, restaurants, banks, markets, etc.
Policy LU 5.10: Encourage employment opportunities and housing to be developed in proximity to one another.	Consistent: The proposed employment-generating districts in the Specific Plan (i.e., Neighborhood Commercial, Unlimited Commercial, Mixed Use 1 and 2 Zones, Civic Center, and Public/Institutional) are surrounded by existing and zoned residential neighborhoods (see Figure 3-5, *Proposed Zoning Districts*).
Goal LU 9 Land use patterns and community infrastructure that promote health and wellness.	
Policy LU 9.1: Promote community health for all neighborhoods. Policy LU 9.2: Encourage patterns of development that promote physical activity.	Consistent: Many of the proposed Specific Plan's guiding principles are related to improving the community's connections through multimodal transportation improvements. For example, Guiding Principle 2 encourages improving the public right-of-way to increase mobility options for bicyclists and pedestrians. By creating new and expanded sidewalks, installing amenities and streetscape designs for pedestrians and bicyclists, and designing safe routes throughout the community, the Specific Plan encourages walking and bicycling and directly promotes community health and physical activity. More specifically, Goal 5 of the Specific Plan is related to creating a safe and healthy community. Objectives include installing better lighting and visibility along streets and sidewalks; implementing traffic-calming features; supporting safe routes to schools and parks; locating transit stops in visible and safe areas; supporting programs aimed at promoting physical fitness and access to healthy foods; and promoting production and distribution of locally grown foods.
Goal LU 10 Well-designed and healthy places that support a diversity of built environments.	
Policy LU 10.1: Encourage community outreach and stakeholder agency input early and often in the design of projects.	Consistent: See response to Policy LU 2.2 above.
Policy LU 10.3: Consider the built environment of the surrounding area and location in the design and scale of new or remodeled buildings, architectural styles, and reflect appropriate features such as massing, materials, color, detailing or ornament.	Consistent: Chapter 5, *Design Guidelines*, of the Specific Plan is intended to promote aesthetically pleasing and site-compatible development within the project area. The design guidelines are meant to enhance the built environment by guiding changes for

Table 5.7-1 Los Angeles County General Plan Consistency Analysis

Applicable General Plan Goals and Policies	Project Consistency Analysis
Policy LU 10.4: Promote environmentally-sensitive and sustainable design. Policy LU 10.5: Encourage the use of distinctive landscaping, signage and other features to define the unique character of districts, neighborhoods or communities, and engender community identity, pride and community interaction.	existing and new development. The guidelines are established to create a distinct character for the community and to ensure new development is designed with a pedestrian emphasis that will cultivate a vital and active street life. The Specific Plan details scale and mass, site organization and orientation, frontage types, building modulation/articulations, architectural designs, building entrances, fenestrations, open space, fences/walls/hedges, streetscape design, public art, and sustainability and resource conservation strategies. Sustainable strategies include using energy efficient and sustainable building materials; installing green roofs; planting shade trees; maximizing daylighting; implementing passive solar design; incorporating water conservation irrigation systems; installing permeable parking areas; and orienting buildings for energy efficiency.
Policy LU 10.6: Encourage pedestrian activity through the following: o Designing the main entrance of buildings to front the street; o Incorporating landscaping features; o Limiting masonry walls and parking lots along commercial corridors and other public spaces; o Incorporating street furniture, signage, and public events and activities; and o Using wayfinding strategies to highlight community points of interest.	Consistent: See response to Policy LU 10.3 above. The Specific Plan includes design guidelines and standards related to building frontage, landscaping features, screening (with fences, walls and gates), streetscape design, and wayfinding and signage standards. These design guidelines are intended to create a transit-oriented community that encourages pedestrian and bike activity.
Policy LU 10.7: Promote public spaces, such as plazas that enhance the pedestrian environment, and, where appropriate, continuity along commercial corridors with active transportation activities. Policy LU 10.10: Promote architecturally distinctive buildings and focal points at prominent locations, such as major commercial intersections and near transit stations or open spaces. Policy LU 10.11: Facilitate the use of streets as public space for activities that promote civic engagement, such as farmers markets, parades, etc.	Consistent: Proposed Neighborhood Commercial and Mixed Use 1 and 2 Zones have open space requirements that can be met by developing pedestrian walkways, plazas, and outdoor dining areas. As previously stated, a major guiding principle and goal of the Specific Plan is to create a safe, healthy, and connected community with multimodal transportation. Additionally, the urban design guidelines of the proposed Specific Plan encourage plazas with seating and landscape elements at the corners of buildings adjacent to transit station areas to provide public open space for residents, visitors, and transit users. Other urban design guidelines encourage buildings to provide edges or enclosures (i.e., plazas) to streets and open space, creating linkages, gateways, and gathering nodes in areas of attraction. Additionally, the proposed pedestrian network creates a vibrant public space that encourages social activity while creating a sense of place and community. Pedestrian amenities may include street trees, seating, street lights, signage, and public art. Proposed bicycle amenities also facilitate the use of streets as public space and can include multiuse paths, bicycle parking, crossing signals, and wayfinding signage.
Goal LU 11 Development that utilize sustainable design techniques.	
Policy LU 11.1: Encourage new development to employ sustainable energy practices, such as utilizing passive solar techniques and/or active solar technologies. Policy LU 11.2: Support the design of developments that provide substantial tree canopy cover, and utilize light-colored paving	Consistent: The proposed Specific Plan includes sustainability and resource conservation strategies as part of the design guidelines. Strategies include designing and constructing buildings using sustainable, energy-efficient materials; installing white and green roofs as much as possible; planting shade trees in parking lots, open spaces, and along streets; utilizing energy-efficient and natural

Table 5.7-1 Los Angeles County General Plan Consistency Analysis

Applicable General Plan Goals and Policies	Project Consistency Analysis
materials and energy-efficient roofing materials to reduce the urban heat island effect. Policy LU 11.3: Encourage development to optimize the solar orientation of buildings to maximize passive and active solar design techniques.	lighting; maximizing daylighting through window placement and building orientation; installing water conserving irrigation systems; and including photovoltaic arrays on parking structure decks.
Mobility Element	
Goal M 1 Street designs that incorporate the needs of all users.	
Policy M 1.1: Provide for the accommodation of all users, including pedestrians, motorists, bicyclists, equestrians, users of public transit, seniors, children, and persons with disabilities when requiring or planning for new, or retrofitting existing, transportation corridors/networks whenever appropriate and feasible. Policy M 1.2: Ensure that streets are safe for sensitive users, such as seniors and children.	Consistent: The Specific Plan's mobility element includes strategies relevant to this goal. Strategy 1 aims to improve accessibility to transit through streetscape improvements, high-quality bicycle and pedestrian infrastructure, wayfinding signage, and other enhancements. Strategy 2 aims to design streets that facilitate safe and accessible connections between major destinations for multiple modes of transportation.
Goal M 2 Interconnected and safe bicycle- and pedestrian-friendly streets, sidewalks, paths and trails that promote active transportation and transit use.	
Policy M 2.1: Provide transportation corridors/networks that accommodate pedestrians, equestrians and bicyclists, and reduce motor vehicle accidents through a context-sensitive process that addresses the unique characteristics of urban, suburban, and rural communities whenever appropriate and feasible.	Consistent: See response to Policy M 1.1 above. In Strategy 2 of the mobility element, safe and accessible modes of transportation can be achieved by implementing complete street designs that prioritize safety and multimodal networks; providing safe and comfortable pedestrian and bicycle connections between the Metro Green Line and Los Angeles Southwest College; creating safe and comfortable transit waiting areas; incorporating streetscape improvements and bicycle/pedestrian facilities that support transit operations; locating transit stops in areas that are active and visible; and prioritizing roadway improvement projects that improve access to transit and the Metro Green Line Station.
Policy M 2.2: Accommodate pedestrians and bicyclists, and reduce motor vehicle accidents by implementing the following street designs, whenever appropriate and feasible: o Lane width reductions to 10 or 11 feet in low speed environments with a low volume of heavy vehicles. o Wider lanes may still be required for lanes adjacent to the curb, and where buses and trucks are expected. o Low-speed designs. o Access management practices developed through a community-driven process. o Back in angle parking at locations that have available roadway width and bike lanes, where appropriate.	Consistent: Much of the street network in the Specific Plan area would remain the same in order to support new development and growth in the area. However, some streetscape improvements are proposed along key arterials within the Specific Plan area to transform the existing auto-oriented streetscape into a more sustainable multimodal design. For example, proposed additional landscaping along Imperial Highway would provide a buffer between the sidewalk and the busy corridor; Vermont Avenue would be improved with wider sidewalks, extended bike lanes and striped buffers, and reduced vehicle travel lane widths. Normandie would be improved with pedestrian amenities and landscaping (i.e., street trees) on each side of the corridor. Western Avenue would be improved with extended buffered bike lanes by reducing the width of travel and turn lanes. Lastly, a road diet is proposed along 120th Street south of West Athens Elementary School and west of Vermont Avenue to slow vehicle traffic and improve safety for students walking or biking to school.
Policy M 2.3: Accommodate pedestrians and bicyclists, and reduce motor vehicle accidents by implementing the following intersection designs, whenever appropriate and feasible: o Right angle intersections that reduce intersection skew. o Smaller corner radii to reduce crossing distances and slow	Consistent: See response to Policy M 2.2 above.

Table 5.7-1 Los Angeles County General Plan Consistency Analysis

Applicable General Plan Goals and Policies	Project Consistency Analysis
turning vehicles. o Traffic calming measures, such as bulb-outs, sharrows, medians, roundabouts, and narrowing or reducing the number of lanes (road diets) on streets. o Crossings at all legs of an intersection. o Shorter crossing distances for pedestrians. o Right-turn channelization islands. Sharper angles of slip lanes may also be utilized. o Signal progression at speeds that support the target speed of the corridor. o Pedestrian push buttons when pedestrian signals are not automatically recalled. o Walk interval on recall for short crossings. o Left-turn phasing. o Prohibit right turn on red. o Signs to remind drivers to yield to pedestrians.	
Policy M 2.4: Ensure a comfortable walking environment for pedestrians by implementing the following, whenever appropriate and feasible: o Designs that limit dead-end streets and dead-end sidewalks. o Adequate lighting on pedestrian paths, particularly around building entrances and exits, and transit stops. o Designs for curb ramps, which are pedestrian friendly and compliant with the American Disability Act (ADA). o Perpendicular curb ramps at locations where it is feasible. o Pedestrian walking speed based on the latest standard for signal timing. Slower speeds should be used when appropriate (i.e., near senior housing, rehabilitation centers, etc.) o Approved devices to extend the pedestrian clearance times at signalized intersections. o Accessible Pedestrian Signals (APS) at signalized intersections. o Pedestrian crossings at signalized intersections without double or triple left or right turn lanes. o Pedestrian signal heads, countdown pedestrian heads, pedestrian phasing and leading pedestrian intervals at signalized intersections. o Exclusive pedestrian phases (pedestrian scrambles) where turning volume conflicts with very high pedestrian volumes. o Advance stop lines at signalized intersections. o Pedestrian Hybrid Beacons. o Medians or crossing islands to divide long crossings. o High visibility crosswalks. o Pedestrian signage. o Advanced yield lines for uncontrolled crosswalks. o Rectangular Rapid Flashing Beacon or other similar approved technology at locations of high pedestrian traffic. o Safe and convenient crossing locations at transit stations and transit stops located at safe intersections	Consistent: Although sidewalks exist along major streets within the Specific Plan area, most sidewalks are narrow and do not support high levels of pedestrian activity. The Specific Plan proposes a sidewalk hierarchy to establish a physical framework for sidewalk design and facilitate the most appropriate allocation of space that encourages people to walk as a part of their everyday routine. The Specific Plan proposes a three-level sidewalk hierarchy with varying allocations of space between the frontage zone, pedestrian zone, furniture zone, and curb zone. Figure 5.9, *Pedestrian Network Map*, in the Specific Plan shows the suggested locations of various sidewalk levels. Level 1 sidewalks would be widest with a minimum width of 10 feet to support the highest pedestrian volumes and to accommodate street furniture and bike/transit amenities. Level 2 sidewalks would be slightly narrower, with a minimum width of 7 feet. Level 3 sidewalks would be narrowest and along low-density residential streets. They should have a minimum width of 5 feet in order to meet ADA standards and be accessible for all pedestrians. Proposed pedestrian network improvements include marked crosswalks, pedestrian safety islands, curb extensions, curb ramps, crossing signage, street trees, seating, street lights, and public art.
Policy M 2.5: Ensure a comfortable bicycling environment by implementing the following, whenever appropriate and feasible:	Consistent: See response to Policy M 2.2 above.

Table 5.7-1 Los Angeles County General Plan Consistency Analysis

Applicable General Plan Goals and Policies	Project Consistency Analysis
o Bicycle signal heads at intersections. o Bicycle signal detection at all signalized intersections. o Wayfinding signage. o Road diet techniques, such as lane narrowing, lane removal, and parking removal/restriction. o Appropriate lighting on all bikeways, including those in rural areas. o Designs, or other similar features, such as: shoulder bikeways, cycle tracks, contra flow bike lanes, shared use paths, buffered bike lanes, raised bike lanes, and bicycle boulevards.	The Specific Plan proposes to add approximately 11 miles of bikeways to the existing network and construct a multiuse path from Los Angles Southwest College to the Metro Green Line station at Vermont Avenue. The multiuse path would follow I-105 and provide a safe path for students to access transit in the area. Additional proposed bicycle infrastructure amenities include bicycle parking, crossing signals, and wayfinding signage.
Policy M 2.7: Require sidewalks, trails and bikeways to accommodate the existing and projected volume of pedestrian, equestrian and bicycle activity, considering both the paved width and the unobstructed width available for walking.	Consistent: See responses to Policies M 2.2 and M 2.4 above.
Policy M 2.8: Connect trails and pedestrian and bicycle paths to schools, public transportation, major employment centers, shopping centers, government buildings, residential neighborhoods, and other destinations.	Consistent: See responses to Policies M 2.2 and M 2.4 above. Additionally, the Specific Plan proposes the following design guidelines to promote safer routes to West Athens Elementary School through the Safe Routes to School Program: • Appropriate levels of street lighting along both sides of wide streets. • Appropriate traffic controls (e.g., marked crosswalks, traffic signals, warning signs/flashers) at pedestrian crossing locations. • Curb ramps with warning strips (e.g., truncated domes) at pedestrian street crossings.
Policy M 2.9: Encourage the planting of trees along streets and other forms of landscaping to enliven streetscapes by blending natural features with built features. Policy M 2.10: Encourage the provision of amenities, such as benches, shelters, secure bicycle storage, and street furniture, and comfortable, safe waiting areas near transit stops.	Consistent: See responses to Policies M 2.1 through M 2.5 above.
Goal M 4 An efficient multimodal transportation system that serves the needs of all residents.	
Policy M 4.1: Expand transportation options that reduce automobile dependence.	Consistent: See responses to Policies M 1.1 and M 2.1 through M 2.5 above.
Policy M 4.2: Expand shuttle services to connect major transit centers to community points of interest. Policy M 4.3: Maintain transit services within the unincorporated areas that are affordable, timely, cost-effective, and responsive to growth patterns and community input. Policy M 4.4: Ensure expanded mobility and increase transit access for underserved transit users, such as seniors, students, low income households, and persons with disabilities.	Consistent: The Specific Plan area has access to an extensive network of public transportation. The study area encompasses several local bus routes operated by Torrance Transit, Gardena Municipal, and Metro. The Specific Plan area is serviced by eight local bus routes. Additionally, the Metro Green Line operates in the project area and provides light rail services connecting the South Bay, Harbor Gateway, and Norwalk communities. Seven bus routes travel along Imperial Highway (Metro bus routes 120, 206, 207, 209, 757, and City of Gardena bus route 2), five bus routes travel along Vermont Avenue (Metro bus routes 204, 206, 209, 754, and City of Gardena bus route 2), and three bus routes travel along Western Avenue (Metro bus routes 207, 209, and City of Gardena bus route 2). The Specific Plan recommends coordinating operating schedules between local feeder bus routes and the Metro Green Line to improve the overall transit service and multioperator transit trips. Schedule improvements, such as minimizing passenger

Table 5.7-1 Los Angeles County General Plan Consistency Analysis

Applicable General Plan Goals and Policies	Project Consistency Analysis
	wait times between transfers, can help improve efficiency and encourage more transit ridership. Although existing sidewalks along the Vermont Avenue corridor are approximately 10 feet wide, the number and width of vehicular travel lanes make the corridor feel unsafe for pedestrians and bicyclists. The Specific Plan proposes widening the sidewalk along the corridor, reducing the width of the travel lanes, adding buffered bike lanes, and introducing additional wayfinding to the station to improve visibility and encourage walking, biking, and transit use. Transit stop amenities, including shelters, benches, lighting, transit information, bicycle racks, and public art are also proposed under the Specific Plan to create well-designed, safe, and convenient transit travel for existing and new transit users.
Policy M 4.7: Maintain a minimum LOS D, where feasible; however, allow LOS below D on a case by case basis in order to further other General Plan goals and policies, such as those related to environmental protection, infill development, and active transportation.	Consistent: As detailed in Section 5.12, *Transportation and Traffic*, buildout of the proposed project would result in significant impacts to several roadways, freeway main lines, and freeway on-ramps. However, the proposed project would improve the project area with infill development and active transportation improvements. Goals and policies in the proposed Specific Plan would help transform the project area into a TOD with a mix of land uses near the Metro station, major roadways, and commercial corridors.
Policy M 4.9: Ensure the participation of all potentially affected communities in the transportation planning and decision-making process.	Consistent: See response to Policy LU 2.2 above.
Policy M 4.10: Support the linkage of regional and community-level transportation systems, including multimodal networks. Policy M 4.11: Improve the efficiency of the public transportation system with bus lanes, signal prioritization, and connections to the larger regional transportation network.	Consistent: See responses to Policies M 1.1, M 2.1 through M 2.5, and M 4.2 above.
Goal M 5 Land use planning and transportation management that facilitates the use of transit.	
Policy M 5.1: Facilitate transit-oriented land uses and pedestrian-oriented design, particularly in the first-last mile connections to transit, to encourage transit ridership.	Consistent: Consistent with Metro's "First Last Mile Strategic Plan," the Specific Plan recommends street designs, such as bicycle and pedestrian infrastructure, and signage and wayfinding improvements.
Goal M 6 The safe and efficient movement of goods.	
Policy M 6.4: Minimize noise and other impacts of goods movement, truck traffic, deliveries, and staging in residential and mixed-use neighborhoods.	Consistent: This project would include limited goods deliveries associated with commercial and school uses. As analyzed in Section 5.8, *Noise*, operational noise associated with buildout of the Specific Plan from mobile and stationary sources would not exceed local noise standards, and the impact would be less than significant.
Goal M 7 Transportation networks that minimizes negative impacts to the environment and communities.	
Policy M 7.1: Minimize roadway runoff through the use of permeable surface materials, and other low impact designs, wherever feasible.	Consistent: The Specific Plan states that low-impact development strategies, including the installation of permeable surfaces and sustainable stormwater practices, should be incorporated wherever feasible to allow infiltration of rainfall and reduce runoff, replenish groundwater, and improve water quality. Additionally, the County of Los Angeles Department of Public Works' Green Infrastructure Guidelines provides a list of applications for permeable surfaces. Proper vegetation and landscaping elements, such as vegetated swales, vegetated buffers, planter/tree box filters, bioretention, and filter strips, can also reduce pollutant concentrations in stormwater

Table 5.7-1 Los Angeles County General Plan Consistency Analysis

Applicable General Plan Goals and Policies	Project Consistency Analysis
	runoff and reduce runoff rates.
Air Quality Element	
Goal AQ 1 Protection from exposure to harmful air pollutants.	
Policy AQ 1.1: Minimize health risks to people from industrial toxic or hazardous air pollutant emissions, with an emphasis on local hot spots, such as existing point sources affecting immediate sensitive receptors. Policy AQ 1.2: Encourage the use of low or no volatile organic compound (VOC) emitting materials. Policy AQ 1.3: Reduce particulate inorganic and biological emissions from construction, grading, excavation, and demolition to the maximum extent feasible. Policy AQ 1.4: Work with local air quality management districts to publicize air quality warnings, and to track potential sources of airborne toxics from identified mobile and stationary sources.	Consistent: Chapters 4, Regulating Code, and 5, Design Guidelines, of the Specific Plan detail development standards (e.g., allowable uses for each of the proposed land use districts) and recommended design guidelines for future projects related to protecting people from harmful air pollutant exposure. Section 4.4.6 of the Specific Plan, Fumes, Odors, and Other Forms of Air Pollution, states that if any use produces odors, toxic gases, or noxious matter in such quantities as may be readily detectable at any point outside the property lines of the premises, and/or may become a public nuisance or hazard, the use shall be modified to prevent such emissions. Emissions shall be in compliance with the South Coast Air Quality Management District (SCAQMD) standards. Additionally, SCAQMD's CEQA Guidelines require a health risk assessment that analyzes impacts of toxic air contaminants when a proposed project generates emissions near sensitive receptors in order to ensure that the proposed project does not expose sensitive receptors to substantial pollutant concentrations.
Goal AQ 2 The reduction of air pollution and mobile source emissions through coordinated land use, transportation and air quality planning.	
Policy AQ 2.1: Encourage the application of design and other appropriate measures when siting sensitive uses, such as residences, schools, senior centers, daycare centers, medical facilities, or parks with active recreational facilities within proximity to major sources of air pollution, such as freeways.	Consistent: See response to Policy AQ 1.1 above.
Goal AQ 3 Implementation of plans and programs to address the impacts of climate change.	
Policy AQ 3.1: Facilitate the implementation and maintenance of the Community Climate Action Plan to ensure that the County reaches its climate change and greenhouse gas emission reduction goals. Policy AQ 3.2: Reduce energy consumption in County operations by 20 percent by 2015. Policy AQ 3.4: Participate in local, regional and state programs to reduce greenhouse gas emissions.	Consistent: The proposed Specific Plan includes a number of policies related to energy conservation that would help the County reach its climate change and greenhouse gas emission reduction goals. For example, Policy 4.4 encourages designing sustainable and energy-efficient streetscapes with low-impact development strategies, including sustainable stormwater practices, permeable paved surfaces, drought-tolerant plant species, and solar lighting fixtures. The Specific Plan also encourages energy-conserving building design through the use of sustainable, energy-efficient materials; installing energy-efficient appliances and lighting; and proper building orientation. Buildout of the Specific Plan would help transform the project area into a TOD that, by nature, would reduce GHG emissions and vehicle miles traveled by providing a mix of land uses within a dense transit-oriented area.
Policy AQ 3.5: Encourage energy conservation in new development and municipal operations. Policy AQ 3.6: Support rooftop solar facilities on new and existing buildings.	Consistent: See response to Policy LU 11.1 above.
Conservation and Natural Resources Element	
Goal C/NR 5 Protected and useable local surface water resources.	
Policy C/NR 5.1: Support the LID philosophy, which seeks to plan	Consistent: The Specific Plan references the Los Angeles County

Table 5.7-1 Los Angeles County General Plan Consistency Analysis

Applicable General Plan Goals and Policies	Project Consistency Analysis
and design public and private development with hydrologic sensitivity, including limits to straightening and channelizing natural flow paths, removal of vegetative cover, compaction of soils, and distribution of naturalistic BMPs at regional, neighborhood, and parcel-level scales. Policy C/NR 5.2: Require compliance by all County departments with adopted Municipal Separate Storm Sewer System (MS4), General Construction, and point source NPDES permits. Policy C/NR 5.7: Minimize point and non-point source water pollution.	Department of Public Works' Green Infrastructure Guidelines, which guide new construction and reconstruction of road and flood projects. The goal of the guidelines is to incorporate sustainable practices into the design, construction, and operation of the department's infrastructure. The guidelines provide low-impact development (LID) design options to consider during planning or designing of road and flood projects intended to manage stormwater runoff. Additionally, compliance with National Pollutant Discharge Elimination System regulations related to storm drain runoff from construction sites is required by all future projects in accordance with the Specific Plan.
Goal C/NR 14 Protected historic, cultural, and paleontological resources.	
Policy C/NR 14.1: Mitigate all impacts from new development on or adjacent to historic, cultural, and paleontological resources to the greatest extent feasible.	Consistent: As analyzed in Section 5.3, *Cultural Resources*, of this DEIR, the project site is not sensitive for historic, archaeological, paleontological, or tribal cultural resources. However, new developments that require deeper excavation can potentially impact previously undiscovered resources. Therefore, implementation of Mitigation Measures CUL-1 through CUL-3 is required to minimize impacts to less than significant levels.
Policy C/NR 14.4: Ensure proper notification procedures to Native American tribes in accordance with Senate Bill 18 (2004).	Consistent: See response to Policy C/NR 14.1 above.
Policy C/NR 14.6: Ensure proper notification and recovery processes are carried out for development on or near historic, cultural, and paleontological resources.	Consistent: See response to Policy C/NR 14.1 above.
Parks and Recreation Element	
Goal P/R 1 Enhanced active and passive park and recreation opportunities for all users.	
Policy P/R 1.1: Provide opportunities for public participation in designing and planning parks and recreation programs. Policy P/R 1.2: Provide additional active and passive recreation opportunities based on a community's setting, and recreational needs and preferences.	Consistent: There is almost no vacant publicly owned land available to develop new parks in the Specific Plan area. However, the Specific Plan identifies the creation of pocket parks and neighborhood parks as an objective to increase recreational opportunities and redevelop underutilized properties. Parks and playgrounds are permitted uses under the residential zoning districts. Public plazas, urban pocket parks, promenades, and outdoor dining areas are allowed in the nonresidential zoning districts to meet each zoning district's open space requirement.
Policy P/R 1.6: Improve existing parks with needed amenities and address deficiencies identified through the park facility inventories. Policy P/R 1.7: Ensure adequate staffing, funding, and other resources to maintain satisfactory service levels at all County parks and recreational facilities. Policy P/R 1.8: Enhance existing parks to offer balanced passive and active recreation opportunities through more efficient use of space and the addition of new amenities. Policy P/R 1.10: Ensure a balance of passive and recreational activities in the development of new park facilities.	Consistent: See response to Policy P/R 1.1 above. As analyzed in Section 5.11, *Recreation*, the proposed Specific Plan would increase population in the project area and indirectly increase demand for parks and recreational opportunities. Future developers would be required to dedicate parkland or pay in-lieu fees per the County Code, Sections 21.24.340 and 21.28.140. Payment of in-lieu fees would ensure a funding mechanism to allow the County to acquire new park sites or expand existing parks and recreational facilities to meet the demands of the current and future residents.
Goal P/R 3 Acquisition and development of additional parkland.	
Policy P/R 3.1: Acquire and develop local and regional parkland to	Consistent: See responses to Policies P/R 1.1 and P/R 1.6 above.

Table 5.7-1 Los Angeles County General Plan Consistency Analysis

Applicable General Plan Goals and Policies	Project Consistency Analysis
meet the following County goals: 4 acres of local parkland per 1,000 residents in the unincorporated areas and 6 acres of regional parkland per 1,000 residents of the total population of Los Angeles County. Policy P/R 3.3: Provide additional parks in communities with insufficient local parkland as identified through the gap analysis. Policy P/R 3.8: Site new parks near schools, libraries, senior centers and other community facilities where possible.	
Goal P/R 4 Improved accessibility and connectivity to a comprehensive trail system including rivers, greenways, and community linkages.	
Policy P/R 4.1: Create multi-use trails to accommodate all users. Policy P/R 4.2: Develop staging areas and trail heads at strategic locations to accommodate multi-use trail users. Policy P/R 4.6: Create new multi-use trails that link community destinations including parks, schools and libraries.	Consistent: A multiuse trail is proposed that connects Los Angeles Southwest College to the Metro Green Line Vermont station. The multiuse path would provide students with a safe path to access transit in the area. Additionally, crosswalk and traffic signals should be added to facilitate crossing near major corridors. Construction of the multiuse path would comply with Caltrans' Design Guidelines for Class I bike lanes.
Noise Element	
Goal N 1 The reduction of excessive noise impacts.	
Policy N 1.1: Utilize land uses to buffer noise-sensitive uses from sources of adverse noise impacts. Policy N 1.2: Reduce exposure to noise impacts by promoting land use compatibility. Policy N 1.3: Minimize impacts to noise-sensitive land uses by ensuring adequate site design, acoustical construction, and use of barriers, berms, or additional engineering controls through Best Available Technologies (BAT).	Consistent: As analyzed in Section 5.8, *Noise*, operational noise impacts associated with buildout of the Specific Plan, including traffic and stationary noise sources, would be less than significant. Table 5.8-15 shows that traffic noise increases resulting from the project would be approximately 0.2 decibels (dB) at most roadways in the planning area, and overall increases due to both the project and regional growth would range from 0.2 to 0.5 dB. Thus, no segments would experience noise increases greater than 3 dBA over existing conditions; impacts would be less than significant, and no mitigation measures are necessary. Proposed land uses within the Specific Plan area would be noise compatible, and no significant adverse impacts would occur. Further, plans for noise attenuation of residential units near arterial highways and the freeway, which ensure that interior and exterior noise levels do not exceed state requirements and the Noise Control Ordinance in Title 12 (Environmental Protection) of the County Code, shall be submitted for review and approval prior to building permits being issued to accommodate reuse and/or subdivision approval for residential development, whichever occurs first. All uses shall also be subject to provisions of the Noise Control Ordinance in Title 12 (Environmental Protection) of the County Code.
Policy N 1.4: Enhance and promote noise abatement programs in an effort to maintain acceptable levels of noise as defined by the Los Angeles County Exterior Noise Standards and other applicable noise standards. Policy N 1.5: Ensure compliance with the jurisdictions of State Noise Insulation Standards (Title 24, California Code of Regulations and Chapter 35 of the Uniform Building Code), such as noise insulation of new multifamily dwellings constructed within the 60 dB (CNEL or Ldn) noise exposure contours.	Consistent: See response to Policies M 6.4 and N 1.1, above. Operational noise associated with buildout of the Specific Plan, including traffic and stationary noise sources, would not result in significant increases in noise levels. Therefore, interior noise standards defined by Title 24, California Code of Regulations and Chapter 35 of the Uniform Building Code would be met. Similarly, the project would not contribute to cumulative operational noise impacts that may exceed health-based safety margins; nor would traffic management and noise suppression techniques be required to

Table 5.7-1 Los Angeles County General Plan Consistency Analysis

Applicable General Plan Goals and Policies	Project Consistency Analysis
Policy N 1.6: Ensure cumulative impacts related to noise do not exceed health-based safety margins. Policy N 1.7: Utilize traffic management and noise suppression techniques to minimize noise from traffic and transportation systems.	minimize traffic noise.
Policy N 1.9: Require construction of suitable noise attenuation barriers on noise sensitive uses that would be exposed to exterior noise levels of 65 dBA CNEL and above, when unavoidable impacts are identified.	Consistent: Construction activities would result in a temporary increase in noise levels in the Specific Plan area. Therefore, mitigation measures are required to minimize these unavoidable impacts. Mitigation Measure N-1prohibits construction activities between the hours of 7 PM and 7 AM on weekdays and Saturdays, or any time on Sundays or holidays. Mitigation Measure N-2 requires a project-level construction noise analysis for all projects within 500 feet of noise-sensitive receptors (e.g., residences, hospitals, schools), which may conclude that best management practices related to noise reduction are required.
Policy N 1.11: Maximize buffer distances and design and orient sensitive receptor structures (hospitals, residential, etc.) to prevent noise and vibration transfer from commercial/light industrial uses.	Consistent: Chapters 4 and 5 of the Specific Plan include development standards and design guidelines that ensure land use compatibility based on setback and buffer requirements and site design and building orientation guidelines. Adhering to the proposed development standards and design guidelines would ensure sensitive receptors are not adversely impacted by noise generated by nearby commercial and industrial uses. Further, as analyzed in Section 5.8, *Noise*, operational noise associated with buildout of the Specific Plan from mobile and stationary sources would not exceed local noise standards, and the impact would be less than significant.
Policy N 1.12: Decisions on land adjacent to transportation facilities, such as the airports, freeways and other major highways, must consider both existing and future noise levels of these transportation facilities to assure the compatibility of proposed uses.	Consistent: The Specific Plan Area is less than 1 mile east of the Hawthorne Municipal Airport, and less than 4 miles east of the Los Angeles International Airport (LAX). However, based on the airport-related noise contour maps provided by each jurisdiction, the entire planning area is outside of the 65 dBA CNEL noise contours. While operations at these airport facilities may, at times, be audible within the planning area, due the distances between them and the planning area, aircraft flyovers are expected to be limited and sporadic. Additionally, there are no major private airport or heliport facilities within the vicinity of the project. Aircraft noise contributes negligible amounts of community noise to the project area and would not cause incompatible land use issues. Interstates 105 and 110 are within or close to the Specific Plan area. These freeways contribute to an existing noise environment similar to other urbanized and built-out areas. However, as analyzed in Section 5.8, *Noise*, operational noise associated with buildout of the Specific Plan from mobile and stationary sources would not contribute to existing and future noise conditions to a point that local noise standards would be exceeded. Thus, taking into account noise levels from existing and future noise levels of transportation facilities, project impacts would be less than significant.

Table 5.7-1 Los Angeles County General Plan Consistency Analysis

Applicable General Plan Goals and Policies	Project Consistency Analysis
Safety Element	
Goal S 4 Effective County emergency response management capabilities.	
Policy S 4.5: Ensure that there are adequate resources, such as sheriff and fire services, for emergency response.	Consistent: As analyzed in Section 5.10, *Public Services*, the project would generate increased demand for police and fire services. However, existing and future police and fire resources would be able to accommodate the increase in demand while maintaining an adequate level of service.
Public Services and Facilities Element	
Goal PS/F 1 A coordinated, reliable, and equitable network of public facilities that preserves resources, ensures public health and safety, and keeps pace with planned development.	
Policy PS/F 1.2: Ensure that adequate services and facilities are provided in conjunction with development through phasing or other mechanisms. Policy PS/F 1.4: Ensure the adequate maintenance of infrastructure. Policy PS/F 1.5: Focus infrastructure investment, maintenance and expansion efforts where the General Plan encourages development.	Consistent: The Specific Plan and Section 5.14, *Utilities and Service Systems*, of the DEIR identify existing infrastructure conditions for water, wastewater, storm drains, and dry utilities and required infrastructure improvements to accommodate buildout of the Specific Plan. As analyzed, the proposed project would not adversely impact existing infrastructure systems so long as the required mitigation related to wastewater and water conveyance is implemented. The Specific Plan also details a number of grant, loan, and value-capture funding mechanisms that could finance the infrastructure and community benefits identified in the Specific Plan, including local tax increment and special assessment districts, business improvement districts, landscape and lighting districts, development impact fees, revenue bonds, and general obligation bonds. Federal and state sources of funds include the U.S. and California Environmental Protection Agency, U.S. Department of Veterans Affairs, U.S. Department of Transportation's Innovative Transit Workforce Development Program, Affordable Housing and Sustainable Communities Program, and the State of California Strategic Growth Council's Transformative Climate Communities Program.
Goal PS/F 4 Reliable sewer and urban runoff conveyance treatment systems.	
Policy PS/F 4.1: Encourage the planning and continued development of efficient countywide sewer conveyance treatment systems. Policy PS/F 4.2: Support capital improvement plans to improve aging and deficient wastewater systems, particularly in areas where the General Plan encourages development, such as TODs.	Consistent: See response to Policy PS/F 1.2 above.
Goal PS/F 5 Adequate disposal capacity and minimal waste and pollution.	
Policy PS/F 5.2: Ensure adequate disposal capacity by providing for environmentally sound and technically feasible development of solid waste management facilities, such as landfills and transfer/processing facilities.	Consistent: As analyzed in Section 5.14, *Utilities and Service Systems*, of this DEIR, the project's solid waste impacts on existing landfill capacities would be less than significant. Existing landfills would have capacity to accommodate project-generated solid waste.
Economic Development Element	
Goal ED 1 An economic base and fiscal structures that attract and retain valuable industries and businesses.	
Policy ED 1.1: Encourage a diverse mix of industries and services in each Planning Area.	Consistent: See responses to Policies LU 4.3 and LU 4.4 above.
Goal ED 2 Land use practices and regulations that foster economic development and growth.	
Policy ED 2.5: Encourage employment opportunities to be located in proximity to housing.	Consistent: See response to Policy LU 5.10 above.
Policy ED 2.6: Encourage community-serving uses, such as child care centers and personal services, to be located in proximity to	Consistent: See response to Policy LU 5.4 above.

Table 5.7-1 Los Angeles County General Plan Consistency Analysis

Applicable General Plan Goals and Policies	Project Consistency Analysis
employment centers.	
Policy ED 2.7: Incentivize economic development and growth along existing transportation corridors and in urbanized areas.	Consistent: The Economic Development Strategy of the Specific Plan provides a framework for the practical implementation and realization of the project's economic development objectives, and includes specific action items for the County to take to achieve success in the project area. Several near-term strategies (<3–5 years) and medium- and long-term strategies (3–10 years) are detailed in the Specific Plan and include place-based initiatives and programmatic, policy-based interventions. For example, beginning brownfield remediation at Normandie and I-105; implementing bicycle, pedestrian, and placemaking improvements; developing small business incentives; encouraging a mix of job-providing tenants; and establishing a land banking or land trust strategy for the neighborhood are all strategies that would incentivize economic development in the Specific Plan area.

West Athens-Westmont Community Plan

Table 5.7-2 analyzes the proposed project's consistency with applicable goals from the West Athens-Westmont Community Plan.

Table 5.7-2 West Athens-Westmont Community Plan Goals Consistency Analysis

Applicable Community Plan Goals	Project Consistency Analysis
Land Use Goals	
Goal 1: To preserve and improve the residential character of the community. Goal 2: To reduce the allowable density of multi-family residential areas to reflect current land use patterns.	Consistent: The proposed Specific Plan provides ways to expand opportunities for compact and transit-oriented development around the Metro Green Line Vermont station, yet is sensitive to the existing development character. The project site is defined by five land use districts— the Vermont Station Corridor, Civic Center, Western Avenue Commercial, Single Family Residential, and Multifamily Residential (see Figure 5.1-1, *Land Use Districts Map*). The proposed design guidelines are intended to preserve and improve these subareas by enhancing their existing character while emphasizing multimodal transportation that will cultivate a vital and active street life and create a positive community aesthetic. Per the proposed design guidelines, new residential and nonresidential development should respect the scale and character of existing neighborhoods by providing appropriate height, mass, and setbacks and by limiting the general scale of development near existing residences. Although buildout of the project would allow development of more and increased density multifamily residences, these residences would be predominantly along the Western Avenue commercial corridor, Imperial Highway, and Vermont Station corridor. These areas either already have existing multifamily residences or have existing commercial uses that would benefit from higher density residences.
Goal 3: To formulate a set of design review standards which meet the special safety and aesthetic needs of the community.	Consistent: The Specific Plan's development standards and design guidelines are intended to achieve a specific pattern of development

Table 5.7-2 West Athens-Westmont Community Plan Goals Consistency Analysis

Applicable Community Plan Goals	Project Consistency Analysis
	envisioned for the future of the West Athens-Westmont area. The project's vision is to create a connected, comfortable, and thriving area that offers a blend of commercial uses that serve the neighborhoods of West Athens and Westmont. Street improvements are proposed to make access to transit, employment centers, shopping centers, and schools easier and safer. Improvements to the Metro Green Line station are proposed to create better connections into the community, increase ridership and reduce vehicle miles traveled. Proposed residential uses would include affordable housing options that provide stability, security and a sense of community. Overall, the development standards and design guidelines would ensure future development create a safe, cohesive, and aesthetically pleasing community.
Goal 4: To establish land use patterns which foster economic revitalization in the commercial and industrial areas which are suffering from deteriorated conditions. Goal 5: To create opportunities for increased employment for area residents.	Consistent: Goal 3 of the proposed Specific Plan is to create a diverse economy in the community. Objectives to achieve this goal include encouraging employment-generating uses by promoting commercial development along the major corridors; encouraging the expansion and retention of Los Angeles Southwest College and supportive educational and service industries; enhancing the street frontages of commercial corridors to encourage active pedestrian activity to support their economic activity; and working with Los Angeles Southwest College to offer job-training, continuing education courses, recreational opportunities, and programs for local residents. Additionally, the West Athens-Westmont community is connected to major employment centers via the existing Metro Green Line Vermont station, a future planned bus rapid transit line along Vermont Avenue that would terminate at the existing West Athens-Westmont station, and future planned extensions of the Green Line to Torrance to the west and the Norwalk Metrolink station to the east. There is also potential for the Green Line to extend to LAX, further increasing the connectivity of West Athens and Westmont with regional employment centers. Therefore, the development of the community into a TOD would connect it to increased employment opportunities both locally and regionally.
Goal 6: To fully exploit increased access opportunities associated with the Century Freeway and light rail station. Goal 7: To encourage the development of mixed-use facilities, particularly near the light rail station.	Consistent: The overall purpose of the Connect Southwest LA project is to create a more walkable, transit-oriented area with a mix of land uses that is accessible by all modes of transportation, including transit, walking, and bicycling. The County identified the West Athens-Westmont community specifically as a potential TOD to leverage the community's assets (i.e., the Metro Green Line Vermont station), connect uses and activities, and attract future investment to create a more engaging and vibrant place. Thus, the proposed zoning districts include mixed-use development along the community's commercial corridors and near the Metro Green Line station.
Goal 8: To provide land for clustered commercial development which could better and more safely serve community retail shopping needs. Goal 13: To strengthen existing, viable commercial centers. Goal 14: To improve the viability and usefulness of commercial areas through store front renovation programs and by employing safety design techniques tailored for high crime areas.	Consistent: See response to Land Use Goal 4 above. Additionally, Objective 3.3 of the Specific Plan requires that street frontages of commercial uses are located and designed to promote active pedestrian activity in order to bolster their economic activity. The proposed design guidelines also detail permitted frontage types for residential and nonresidential uses along Vermont Avenue, Imperial Highway, and Normandie Avenue. Frontage types can include shopfront, forecourt, terrace, and stoop frontages.

Table 5.7-2 West Athens-Westmont Community Plan Goals Consistency Analysis

Applicable Community Plan Goals	Project Consistency Analysis
Housing Goals	
Goal 1: To preserve existing stable residential neighborhoods.	**Consistent:** See response to Land Use Goal 1 above. Guiding Principle 4 of the Specific Plan is related to ensuring compatible development throughout the project site. New development should respect and respond to the existing scale and density of the neighborhood.
Goal 3: To provide a safe environment for residents.	**Consistent:** Several guiding principles of the Specific Plan are related to creating a safe environment for residents. Guiding Principle 2 strives to improve the public right-of-way by increasing mobility options for pedestrians and bicyclists and creating new sidewalks and bike facilities to provide safe and secure connections to destinations that are integrated into the transit system. Guiding Principle 3 strives to enhance the sense of safety through design and programmatic improvements that promote safety and decrease criminal activity.
Goal 4: To encourage infill and help the community form and appearance.	**Consistent:** See responses to Land Use Goals 3, 4, and 6 above.
Economic Goals	
Goal 1: To retain and expand the number of small businesses. Goal 3. To increase employment opportunities, particularly among minority populations. Goal 6: To promote economic revitalization of commercial and industrial areas through redevelopment and rehabilitation.	**Consistent:** See responses to Land Use Goals 4, 6, and 8 above.
Goal 7: To incorporate safety and aesthetic design standards in development and redevelopment projects.	**Consistent:** See response to Land Use Goal 3 above.
Circulation Goals	
Goal 1: To coordinate the future transportation needs with current community development policies. Goal 2: To coordinate the current transportation system with the planned light rail station. Goal 3: To develop viable transportation alternatives to serve the needs of the transit dependent. Goal 4: To improve the public transportation services to persons and areas not presently being adequately served by existing systems. Goal 5: To develop a transportation planning process which considers the level of access required by various land use activities.	**Consistent:** See responses to General Plan Policies M 1.1 and M 2.1 through M 2.5 in Table 5.7-1, and response to Land Use Goal 6 above.
Environmental Management Goals	
Goal 2: To minimize hazards to public health, safety and welfare and prevent loss of life, bodily injury and property damage resulting from natural and man-made phenomena.	**Consistent:** As analyzed in Section 5.5, *Hazards and Hazardous Materials*, of this DEIR, the proposed project would not create significant sources of hazards to the public through the transport, use, disposal, or accidental release of hazardous materials into the environment. The project also would not introduce new hazards or exacerbate existing hazards in the project area.

Table 5.7-2 West Athens-Westmont Community Plan Goals Consistency Analysis

Applicable Community Plan Goals	Project Consistency Analysis
Goal 3: To reduce noise levels produced by all types of motor vehicles. Goal 4: To reduce the impact of construction and industrial noise.	Consistent: As analyzed in Section 5.8, *Noise*, construction noise associated with buildout of the Specific Plan would result in temporary noise increases in the vicinity of the project; operational noise, including traffic and stationary sources, would have less than significant noise impacts. Mitigation to reduce construction noise impacts include prohibiting construction activities between the hours of 7 PM and 7 AM on weekdays and Saturdays, or any time on Sundays or holidays, and requiring a project-level construction noise analysis for all projects within 500 feet of noise-sensitive receptors (e.g., residences, hospitals, schools), which may conclude that best management practices related to noise reduction are required. Mitigation Measures N-1 and N-2 would reduce construction noise impacts to the extent feasible.
Goal 5: To minimize adverse environmental impacts.	Consistent: Chapter 5 of this DEIR analyzes the proposed project's environmental impacts and incorporates mitigation measures to minimize and reduce environmental impacts.

Source: Los Angeles County 1990.

SCAG 2016-2040 RTP/SCS Consistency

Table 5.7-3 provides an assessment of the proposed project's relationship to pertinent 2016-2040 SCAG RTP/SCS goals.

Table 5.7-3 SCAG 2016-2040 RTP/SCS Goals Consistency Analysis

RTP/SCS Goal	Project Consistency Analysis
RTP/SCS G1: Align the plan investments and policies with improving regional economic development and competitiveness.	Consistent: Goal 3 of the proposed Specific Plan is to create a diverse economy in the community. Strategies to achieve this goal include encouraging employment-generating uses by promoting commercial development along the major corridors; encouraging the expansion and retention of Los Angeles Southwest College and supportive educational and service industries; enhancing the street frontages of commercial corridors to encourage active pedestrian activity to support their economic activity; and working with the Los Angeles Southwest College to offer job training, continuing education courses, recreational opportunities and programs for local residents. Additionally, the West Athens-Westmont community is connected to major employment centers via the Metro Green Line Vermont station, a planned bus rapid transit line along Vermont Avenue that would terminate at the Metro Green Line Vermont station, Torrance to the west, and the Norwalk Metrolink station to the east. There is also potential for the Metro Green Line to extend to LAX, further increasing the connection of West Athens and Westmont with regional employment centers. Therefore, the development of the community into a TOD would connect it to increased employment opportunities both locally and regionally.
RTP/SCS G2: Maximize mobility and accessibility for all people and goods in the region.	Consistent: The Specific Plan's mobility element includes strategies for providing improvements and increased accessibility for all users. Strategy 1 aims to improve accessibility to transit

Table 5.7-3 SCAG 2016-2040 RTP/SCS Goals Consistency Analysis

RTP/SCS Goal	Project Consistency Analysis
	through streetscape improvements, high-quality bicycle and pedestrian infrastructure, wayfinding signage, and other enhancements, and Strategy 2 aims to design streets that facilitate safe and accessible connections between major destinations for multiple modes of transportation. In Strategy 2, safe and accessible modes of transportation can be achieved by implementing complete street designs that prioritize safety and multimodal networks; providing safe and comfortable pedestrian and bicycle connections between the Metro Green Line and Los Angeles Southwest College; creating safe and comfortable transit waiting areas; incorporating streetscape improvements and bicycle/pedestrian facilities that support transit operations; locating transit stops in areas that are active and visible; and prioritizing roadway improvement projects that improve access to transit and the Metro Green Line Station.
RTP/SCS G3: Ensure travel safety and reliability for all people and goods in the region.	Consistent: Several guiding principles of the Specific Plan are related to creating a safe environment. Guiding Principle 2 strives to improve the public right-of-way by increasing mobility options for pedestrians and bicyclists and creating new sidewalks and bike facilities that are safe and secure connections to destinations that are integrated with the transit system. Guiding Principle 3 strives to enhance the sense of safety through design and programmatic improvements that promote safety and decrease criminal activity.
RTP/SCS G4: Preserve and ensure a sustainable regional transportation system.	Consistent: See responses to RTP/SCS G1 through G3 above. The Specific Plan's mobility strategies are intended to provide a framework for establishing and maintaining a sustainable circulation network that supports both motorized and nonmotorized modes of transportation in an integrated system. This includes improving accessibility to transit through the provision of streetscape improvements, high-quality bicycle and pedestrian infrastructure, wayfinding signage, and other enhancements consistent with Metro's "First Last Mile Strategic Plan" and designing streets to facilitate safe, accessible, connections between major destinations for multiple modes of transportation.
RTP/SCS G5: Maximize the productivity of our transportation system.	Consistent: See responses to RTP/SCS G1 through G4 above. Overall, the proposed circulation network would connect to transit and maximize multimodal benefits and efficiencies.
RTP/SCS G6: Protect the environment and health of our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	Consistent: Many of the proposed Specific Plan's guiding principles are related to improving the community's connections through multimodal transportation improvements. For example, Guiding Principle 2 encourages improving the public right-of-way to increase mobility options for bicyclists and pedestrians. By creating new and expanded sidewalks, installing amenities and streetscape designs for pedestrians and bicyclists, and designing safe routes throughout the community, the Specific Plan directly promotes community health and physical activity. Goal 5 of the Specific Plan is related to creating a safe and healthy community. Objectives include installing better lighting and visibility along streets and sidewalks; implementing traffic-calming features; supporting safe routes to schools and parks; locating

Table 5.7-3 SCAG 2016-2040 RTP/SCS Goals Consistency Analysis

RTP/SCS Goal	Project Consistency Analysis
	transit stops in visible and safe areas; supporting programs aimed at promoting physical fitness and access to healthy foods; and promoting production and distribution of locally grown foods. Overall, the Specific Plan proposes mixed-use and higher density development along and adjacent to major commercial and transit corridors to lay the foundation for a more livable and sustainable corridor that works to improve air quality, traffic congestion, and mobility. The Specific Plan introduces wider sidewalks, landscaping, street trees, bicyclist/pedestrian amenities and improvements, and a multiuse trail connecting the Los Angeles Southwest College campus to the Metro Green Line Vermont station to support active modes of transportation. Overall, the Specific Plan substantially enhances the active transportation network in the project area.
RTP/SCS G7: Actively encourage and create incentives for energy efficiency, where possible.	Consistent: The proposed Specific Plan includes sustainability and resource conservation strategies as part of the design guidelines. Strategies include designing and constructing buildings using sustainable, energy-efficient materials; installing white and green roofs as much as possible; planting shade trees in parking lots, open spaces, and along streets; utilizing energy-efficient and natural lighting; maximizing daylighting through window placement and building orientation; installing water-conserving irrigation systems; and including photovoltaic arrays on parking structure decks.
RTP/SCS G8: Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	Consistent: The project is a transit-oriented district specific plan for the West Athens-Westmont community in the County's Metro Planning Area. Its main purpose is to provide opportunities for transit-oriented development and improve multimodal connections within the community by increasing access to transit and establishing pedestrian and bicycle networks that link residential neighborhoods, schools, retail corridors, and employment centers. The proposed zoning map includes opportunities for residential uses of various densities along transit corridors and within the Metro Green Line Vermont Station area under the Mixed Use 1 and 2 Zones.
RTP/SCS G9: Maximize the security of our transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	Consistent: Improvements along the transportation network, including landscaping, street lights, and street furnishings (e.g., wayfinding signage, transit signs, shelters, bicycle racks, and bus benches), not only improve the aesthetic appeal of the circulation network and street frontages but enhance public safety for pedestrians, bicyclists, and transit users. Implementation of additional crosswalks, pedestrian safety islands, curb extensions, curb ramps, and pedestrian signage encouraged in the Specific Plan would also enhance security, safety, and accessibility for pedestrians. Additionally, the Specific Plan proposes to add approximately 11 miles of bikeways to the existing network and construct a multiuse path from Los Angles Southwest College to the Metro Green Line station at Vermont Avenue. The multiuse path would follow I-105 and provide a safe path for students to access transit in the area. Additional proposed bicycle infrastructure includes bicycle parking, crossing signals,

Table 5.7-3 SCAG 2016-2040 RTP/SCS Goals Consistency Analysis

RTP/SCS Goal	Project Consistency Analysis
	and wayfinding signage.

Source: SCAG 2016.

Overall, the proposed project would be consistent with the County of Los Angeles General Plan, West Athens-Westmont Community Plan, and SCAG 2016-2040 RTP/SCS goals and policies.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.7-2 would be less than significant.

Impact 5.7-3: The proposed project would not conflict with current County zoning for the project site. [Threshold LU-3]

Impact Analysis: The Los Angeles County Code of Ordinances, Section 22, classifies and defines the Specific Plan area with the following zones (see Figure 4-3, *Existing Zoning*):

- Light Agriculture (A-1) – 93.7 acres
- Buffer Strip (B-1) – 3.0 acres
- Restricted Business (C-1) – 0.4 acre
- Neighborhood Business (C-2) – 60.5 acres
- General Commercial (C-3) – 7.3 acres
- Open Space (O-S) – 0.3 acre
- Single-Family Residence (R-1) – 186.9 acres
- Two-Family Residence (R-2) – 91.8 acres
- Limited Density Multiple Residence (R-3-U) – 18 acres
- Residential Planned Development (RPD) – 6.9 acres

In addition, Title 22 Section 44 (Community Standards District) of the County Code, adds the West Athens-Westmont Community Standards District as a zoning overlay to the Specific Plan area. This zoning overlay establishes a means of implementing special development standards necessary to ensure the goals and policies of the West Athens-Westmont Community Plan.

Upon adoption of Connect Southwest LA by the Los Angeles County Board of Supervisors, the existing zoning districts would be replaced by the following (see Figure 3-5, *Proposed Zoning Districts*):

- Single-Family Residence Zone
- Residential Planned Development Zone
- Two-Family Residence Zone
- Limited Multiple Residence Zone
- Mixed Use 1 Zone

- Mixed Use 2 Zone
- Neighborhood Commercial Zone
- Civic Center Zone
- Public-Institutional Zone
- Buffer Strip Zone

The proposed zoning districts would be compatible with current zoning onsite and in the project area. Most of the Specific Plan area would remain single- to two-family residential. As shown on Figure 3-6, *Proposed Zoning Areas of Change*, the areas of change would be predominantly along the commercial corridors of Western Avenue, Vermont Avenue, and Imperial Highway to allow for a mix of land uses that would help promote transit-oriented development. Additionally, some areas of zone changes would rezone the existing use to a more appropriate designation. For example, Los Angeles Southwest College and County facilities east of the college are currently zoned Light Agriculture and Commercial; they would be rezoned more appropriately to Public/Institutional and Civic Center (see Figures 4-3, *Existing Zoning*, and 3-6, *Proposed Zoning Areas of Change*). Thus, future development pursuant to the Specific Plan would be consistent with the project's zoning districts.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.7-3 would be less than significant.

Impact 5.7-4: The proposed project would not conflict with the County's Hillside Management Area Ordinance or Significant Ecological Areas Ordinance. [Threshold LU-4]

Impact Analysis: The project site is predominantly built out and located in the Metro Planning Area of Los Angeles County. The Metro Planning Area is in the geographic center of the County and defined by its urbanized environment and proximity to downtown Los Angles. The site is nearly flat, and there are no hillside management areas or significant ecological areas in or near the project site. Thus, development of the project would not conflict with these County ordinances.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.7-4 would be less than significant.

5.7.5 Cumulative Impacts

Implementation of the proposed project, in conjunction with other cumulative development in accordance with the County's General Plan, could cause countywide land use and planning impacts. However, upon adoption of Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont, the proposed project would be consistent with applicable plans, goals, policies, and regulations of the County's General Plan, West Athens-Westmont Community Plan, County Code, and SCAG's RTP/SCS, as shown in detail above. As with future development in accordance with the proposed project, cumulative development projects in accordance with the County's General Plan would be subject to compliance with the regional and local plans reviewed in this section. Therefore, implementation of cumulative development projects would not combine with the proposed project to result in cumulatively considerable land use impacts.

5.7.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.7-1, 5.7-2, 5.7-3, and 5.7-4.

5.7.7 Mitigation Measures

No mitigation measures are required.

5.7.8 Level of Significance After Mitigation

Impacts would be less than significant.

5.7.9 References

Los Angeles, County of. 1990, March 15. West Athens/Westmont Community Plan. http://planning.lacounty.gov/assets/upl/data/pd_west-athens.pdf.

———. 2015, October 6. Los Angeles County General Plan. http://planning.lacounty.gov/assets/upl/project/gp_final-general-plan.pdf.

Southern California Association of Governments (SCAG). 2016, April. The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): A Plan for Mobility, Accessibility, Sustainability, and a High Quality of Life. http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf.

5. Environmental Analysis
LAND USE AND PLANNING

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5.8 NOISE

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont (proposed project; Connect Southwest LA project) to result in noise impacts in the County of Los Angeles. This section discusses the fundamentals of sound; examines federal, state, and local noise guidelines, policies, and standards; reviews noise levels at existing receptor locations; evaluates potential noise impacts associated with the project; and provides mitigation to reduce noise impacts at sensitive residential locations. This evaluation uses procedures and methodologies as specified by Caltrans and the Federal Highway Administration (FHWA).

5.8.1 Environmental Setting

The following subsections describe noise and vibration fundamentals, existing regulations, and pertinent technical standards. Also, Appendix F of this DEIR provides supplementary, project-specific background information, construction effects calculation worksheets, and project-generated traffic operations noise modeling results.

5.8.1.1 SOUND FUNDAMENTALS

When an object vibrates, it radiates part of its energy in the form of a pressure wave. Sound is that pressure wave transmitted through the air. Technically, airborne sound is a rapid fluctuation or oscillation of air pressure above and below atmospheric pressure that creates sound waves. Sound is described in terms of loudness or amplitude (measured in dB), frequency or pitch (measured in Hertz [Hz] or cycles per second), and duration or time variations (measured in seconds or minutes).

Amplitude

The range of pressures that causes airborne vibrations (i.e., sound) is quite large and would be cumbersome to measure lineally. Therefore, noise is measured on a logarithmic scale, which has a more manageable range of numbers, and a decibel (dB) is the standard unit for measuring sound pressure amplitude.[1] All noise levels in this study—reported in terms of dB—are relative to the industry-standard reference sound pressure of 20 micropascals.

On a logarithmic scale, an increase of 10 dB is 10 times more intense than 1 dB, 20 dB is 100 times more intense, and 30 dB is 1,000 times more intense. A sound as soft as human breathing is about 10 times greater than 0 dB. The decibel system of measuring sound gives a rough connection between the physical intensity of sound and its perceived loudness to the human ear. Ambient sounds generally range from 30 dBA (very quiet) to 100 dBA (very loud). Changes of 1 to 3 dB are detectable under quiet, controlled conditions, and changes of less than 1 dB are usually not discernible (even under ideal conditions). A 3 dB change in noise levels is considered the minimum change that is detectable with human hearing in outside environments. A

[1] The commonly held threshold of audibility is 20 micropascals, and the threshold of pain is around 200 million micropascals, a ratio of one to 10 million. By converting these pressures to a logarithmic scale (i.e., decibels), the range becomes a more convenient 0 dB to 140 dB.

change of 5 dB is readily discernible to most people in an exterior environment, and a 10 dB change is perceived as a doubling (or halving) of the sound. These relationships are summarized in Table 5.8-1.

Table 5.8-1 Noise Perceptibility

± 3 dB	Threshold of human perceptibility
± 5 dB	Clearly noticeable change in noise level
± 10 dB	Half or twice as loud
± 20 dB	Much quieter or louder

Source: Bies and Hansen 2009.

Frequency

The human ear is not equally sensitive to all frequencies. Sound waves below 16 Hz are not heard at all, but "felt" more as a vibration. Similarly, though people with extremely sensitive hearing can hear sounds as high as 20,000 Hz, most people cannot hear above 15,000 Hz. In all cases, hearing acuity falls off rapidly above about 10,000 Hz and below about 200 Hz.

When describing sound and its effect on a human population, A-weighted (dBA) sound levels are typically used to approximate the response of the human ear. The term "A-weighted" refers to a filtering of the noise signal in a manner corresponding to the way the human ear perceives the intensities of different frequencies of sound. The A-weighted noise level has been found to correlate well with people's judgments of the "noisiness" of different sounds and has been used for many years as a measure of community and industrial noise.

Since most people do not routinely work with decibels or A-weighted sound levels, it is often difficult to appreciate what a given sound pressure level number means. To help relate noise level values to common experience, Table 5.8-2 shows typical noise levels from noise sources.

Table 5.8-2 Typical Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Onset of physical discomfort	120+	
	110	Rock Band (near amplification system)
Jet Flyover at 1,000 feet		
	100	
Gas Lawn Mower at three feet		
	90	
Diesel Truck at 50 feet, at 50 mph		Food Blender at 3 feet
	80	Garbage Disposal at 3 feet
Noisy Urban Area, Daytime		
	70	Vacuum Cleaner at 10 feet
Commercial Area		Normal speech at 3 feet
Heavy Traffic at 300 feet	60	
		Large Business Office
Quiet Urban Daytime	50	Dishwasher Next Room
Quiet Urban Nighttime	40	Theater, Large Conference Room (background)
Quiet Suburban Nighttime		
	30	Library
Quiet Rural Nighttime		Bedroom at Night, Concert Hall (background)
	20	
		Broadcast/Recording Studio
	10	
Lowest Threshold of Human Hearing	0	Lowest Threshold of Human Hearing

Source: Caltrans 2009.

Although the A-weighted scale and the energy-equivalent metric are commonly used to quantify the range of human response to individual events or general community sound levels, the degree of annoyance or other response also depends on several other perceptibility factors, including:

- Ambient (background) sound level
- General nature of the existing conditions (e.g., quiet rural or busy urban)
- Difference between the magnitude of the sound event level and the ambient condition
- Duration of the sound event
- Number of event occurrences and their repetitiveness
- Time of day that the event occurs

Temporal Effects

Time variation in noise exposure is typically expressed in terms of a steady-state energy level equal to the energy content of the time varying period (called L_{eq}), or alternately, as a statistical description of the sound level that is exceeded over some fraction of a given observation period. For example, the L_{50} noise level represents the noise level that is exceeded 50 percent of the time; half the time the noise level exceeds this level and half the time the noise level is less than this level. This level is also representative of the level that is exceeded 30 minutes in an hour. Similarly, the L_2, L_8 and L_{25} values represent the noise levels that are exceeded 2, 8, and 25 percent of the time or 1, 5, and 15 minutes per hour, respectively. These "n" values are typically used to demonstrate compliance for stationary noise sources with many cities' noise ordinances. Other values typically noted during a noise survey are the L_{min} and L_{max}. These values represent the minimum and maximum root-mean-square noise levels obtained over the measurement period, respectively.

Because community receptors are more sensitive to unwanted noise intrusion during the evening and at night, state law and many local jurisdictions use an adjusted 24-hour noise descriptor called the Community Noise Equivalent Level (CNEL) or Day-Night Noise Level (L_{dn}). The CNEL descriptor requires that an artificial increment (or "penalty") of 5 dBA be added to the actual noise level for the hours from 7:00 PM to 10:00 PM and 10 dBA for the hours from 10:00 PM to 7:00 AM. The L_{dn} descriptor uses the same methodology except that there is no artificial increment added to the hours between 7:00 PM and 10:00 PM. Both descriptors give roughly the same 24-hour level, with the CNEL being only slightly more restrictive (i.e., higher). The CNEL or L_{dn} metrics are commonly applied to the assessment of roadway and airport-related noise sources.

Propagation

Sound dissipates exponentially with distance from the noise source. This phenomenon is known as "spreading loss." For a single-point source, sound levels decrease by approximately 6 dB for each doubling of distance from the source (conservatively neglecting ground attenuation effects, air absorption factors, and barrier shielding). For example, if a backhoe at 50 feet generates 84 dBA, at 100 feet the noise level would be 79 dBA, and at 200 feet it would be 73 dBA. This drop-off rate is conservative and is appropriate for noise generated by onsite operations from stationary equipment/activities at a project site. This approach is commonly used for construction equipment noise evaluations. For more detailed assessments, if ground-level absorptive vegetation or other "soft site" conditions are considered, the distance attenuation (drop-off) rate would be increased by 1.5 dB per distance doubling; for a total of 7.5 dB per propagation distance doubling.

If noise is produced by a line source, such as highway traffic, the sound decreases by 3 dB for each doubling of distance over a reflective ("hard site") surface such as concrete or asphalt. Line source noise in a relatively flat environment with ground-level absorptive vegetation decreases by 4.5 dB for each doubling of distance.

Psychological and Physiological Effects of Noise

Physical damage to human hearing begins at prolonged exposure to noise levels higher than 85 dBA. Exposure to high noise levels affects the entire system, with prolonged noise exposure in excess of 75 dBA increasing body tensions, thereby affecting blood pressure and functions of the heart and the nervous system.

Extended periods of noise exposure above 90 dBA results in permanent cell damage, which is the main driver for hearing protection regulations in the workplace. When the noise level reaches 120 dBA, an unpleasant "tickling" sensation occurs in the human ear; even with short-term exposure. This is called the threshold of feeling. As the sound reaches 140 dBA, the tickling sensation becomes painful, and this is called the threshold of pain. A sound level of 160 to 165 dBA will result in dizziness or loss of equilibrium. In community environments, the ambient or background noise problem is widespread, though generally worse in urban areas than in outlying, less-developed areas. Elevated ambient noise levels can result in noise interference (e.g., speech interruption/masking, sleep disturbance, disturbance of concentration) and cause annoyance.

Loud noise can be annoying and it can have negative health effects (USEPA 1978). The effects of noise on people fall into three general categories:

- Subjective effects, i.e., annoyance, nuisance, dissatisfaction.
- Interference with activities such as speech, sleep, learning.
- Physiological effects such as startling and hearing loss (temporary and permanent).

In most cases, environmental noise produces effects in the first two categories only. However, unprotected workers in some industrial work settings may experience noise effects in the last category.

5.8.1.2 VIBRATION FUNDAMENTALS

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration is normally associated with activities stemming from operations of railroads or vibration-intensive stationary sources, but can also be associated with construction equipment such as jackhammers, pile drivers, and hydraulic hammers.

Like noise, vibration is transmitted in waves, but through the earth or solid objects. Unlike noise, vibration is typically of a frequency that is felt rather than heard. Vibration can either be natural, as in earthquakes, volcanic eruptions, sea waves, and landslides, or man-made, as from explosions, the action of heavy machinery, or heavy vehicles such as trains. Both natural and man-made vibration may be continuous, such as from operating machinery, or transient, as from an explosion. As with noise, vibration can be described by both its amplitude and frequency. Amplitude may be characterized in three ways: displacement, velocity, and acceleration.

Vibration displacement is the distance that a point on a surface moves away from its original static position. The instantaneous speed that a point on a surface moves is the velocity, and the rate of change of the speed is the acceleration. Each of these descriptors can be used to correlate vibration to human response, building damage, and acceptable equipment vibration levels. During construction, the operation of construction equipment can cause groundborne vibration. During the operational phase of a project, receptors may be subject to levels of vibration that can cause annoyance due to noise generated from vibration of a structure or items within a structure.

Vibration amplitudes are usually described in terms of either the peak particle velocity (PPV) or the root mean square (RMS) velocity. PPV is the maximum instantaneous peak of the vibration signal, and RMS is the

square root of the average of the squared amplitude of the signal. PPV is more appropriate for evaluating potential building damage, and RMS is typically more suitable for evaluating human response.

The units for PPV and RMS velocity are normally inches per second (in/sec). However, vibration is often presented and discussed in dB units in order to compress the range of numbers. In this study, PPV and RMS velocities are in in/sec, and vibration levels are in dB relative to 1 microinch per second (abbreviated as VdB). Typically, groundborne vibration generated by human activities attenuates rapidly with distance from the source of the vibration. Man-made vibration problems are therefore usually confined to relatively short distances from the source (500 to 600 feet or less).

Vibrations also vary in frequency, and this affects perception. Typical construction vibrations fall in the 10 to 30 Hz range and usually occur around 15 Hz. Traffic vibrations exhibit a similar range of frequencies; however, buses often generate frequencies around 3 Hz at high vehicle speeds due to their suspension systems. It is less common, but possible, to measure traffic frequencies above 30 Hz.

The way in which vibration is transmitted through the earth is called propagation. Propagation of groundborne vibrations is complicated and difficult to predict because of the endless variations in the soil and rock through which waves travel. There are three main types of vibration propagation: surface, compression and shear waves. Surface waves, or Raleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wave front, similar to ripples produced by throwing a rock into a pool of water. Compression waves, or P-waves, are body waves that carry their energy along an expanding spherical wave front. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. Shear waves, or S-waves, are also body waves that carry energy along an expanding spherical wave front. However, unlike P-waves, the particle motion is transverse or side-to-side and perpendicular to the direction of propagation. As vibration waves propagate from a source, the energy is spread over an ever-increasing area so that the energy level striking a given point decreases with distance from the energy source. This geometric spreading loss is inversely proportional to the square of the distance. Wave energy is also reduced with distance as a result of material damping in the form of internal friction, soil layering, and void spaces. The amount of attenuation provided by material damping varies with soil type and condition as well as the frequency of the wave.

As with airborne sound, annoyance with vibrational energy is a subjective measure, depending on the level of activity and the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Persons accustomed to elevated ambient vibration levels, such as in an urban environment, may tolerate higher vibration levels. Table 5.8-3 displays the human response and the effects on buildings resulting from continuous vibration (in terms of various levels of PPV).

Table 5.8-3 Human Reaction to Typical Vibration Levels

Vibration Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.006–0.019	Threshold of perception, possibility of intrusion	Vibrations unlikely to cause damage of any type
0.08	Vibrations readily perceptible	Recommended upper level of vibration to which ruins and ancient monuments should be subjected
0.10	Level at which continuous vibration begins to annoy people	Virtually no risk of "architectural" (i.e. not structural) damage to normal buildings
0.20	Vibrations annoying to people in buildings	Threshold at which there is a risk to "architectural" damage to normal dwelling – houses with plastered walls and ceilings
0.4–0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage

Source: Caltrans 2004.

Human response to ground vibration has been correlated best with the velocity of the ground, typically expressed in terms of the vibration decibel or VdB.[2] The US Federal Transit Administration (FTA) has developed rational vibration limits that can be used to evaluate human annoyance to groundborne vibration. These criteria are primarily based on experience with rapid transit and commuter rail systems (FTA 2006). Railroad and transit operations are potential sources of substantial ground vibration depending on distance, the type and the speed of trains, and the type of track. Trains generate substantial vibration due to their engines, steel wheels, heavy loads, and wheel-rail interactions.

Similarly, construction operations generally include a wide range of activities that can generate groundborne vibration, which varies in intensity. In general, blasting and demolition as well as pile driving and vibratory compaction equipment generate the highest vibrations. Because of the impulsive nature of such activities, PPV is used to measure and assess groundborne vibration and assess the potential of vibration to induce structural damage and annoyance for humans. Vibratory compactors or rollers, pile drivers, and pavement breakers can generate perceptible amounts of vibration at up to 200 feet. Heavy trucks can also generate groundborne vibrations, which can vary depending on vehicle type, weight, and pavement conditions. Potholes, pavement joints, discontinuities, and differential settlement of pavement all increase the vibration levels from vehicles passing over a road surface. Construction vibration is normally of greater concern than vibration from normal traffic flows on streets and freeways with smooth pavement conditions (Caltrans 2004).

5.8.1.3 RELEVANT PROGRAMS AND REGULATIONS

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise.

[2] The reference velocity is 1 x 10^{-6} in/sec RMS, which equals 0 VdB, and 1 in/sec equals 120 VdB.

Federal

US Environmental Protection Agency

In addition to FHWA standards, the US Environmental Protection Agency (EPA) has identified the relationship between noise levels and human response. The EPA Office of Noise Abatement and Control was originally established to coordinate federal noise-control activities. The office issued the Federal Noise Control Act of 1972, which set programs and guidelines to identify and address the effects of noise on public health and welfare, and the environment. Although the primary responsibility of regulating noise was transferred to state and local governments in 1982, the EPA provided guidelines for noise levels that would be considered safe for community exposure without the risk of adverse health or welfare effects.

The EPA found that to prevent hearing loss over the lifetime of a receptor, the yearly average L_{eq} should not exceed 70 dBA. Interference with activity and annoyance will not occur if exterior levels are maintained at an L_{eq} of 55 dBA and interior levels at or below 45 dBA. While these levels are relevant for planning and design and useful for informational purposes, they are not land use planning criteria because they do not consider economic cost, technical feasibility, or the needs of the community.

The EPA also set 55 dBA L_{dn} as the basic goal for exterior residential noise intrusion. However, other federal agencies, in consideration of their own program requirements and goals, as well as the difficulty of actually achieving a goal of 55 dBA L_{dn}, have settled on the 65 dBA L_{dn} level as their standard. At 65 dBA L_{dn}, activity interference is kept to a minimum, and annoyance levels are still low. It is also a level that can realistically be achieved.

Occupational Health and Safety Administration

The federal government regulates occupational noise exposure common in the workplace through the Occupational Health and Safety Administration (OSHA) under the EPA. Such limitations would apply to the operation of construction equipment and could also apply to any proposed industrial land uses. Noise exposure of this type is dependent on work conditions and is addressed through a facility's Health and Safety Plan, as required under OSHA, and is therefore not addressed further in this analysis.

US Department of Housing and Urban Development

The US Department of Housing and Urban Development (HUD) has set a goal of 65 dBA L_{dn} as a desirable maximum exterior standard for residential units developed under HUD funding. (This level is also generally accepted within the State of California.) While HUD does not specify acceptable interior noise levels, residential dwellings constructed under Title 24 standards typically provide in excess of 20 dBA of attenuation with the windows closed. Based on this premise, the interior L_{dn} should not exceed 45 dBA.

Aircraft Noise Standards

Public Law 96 193 directs the Federal Aviation Administration (FAA) to identify land uses that are "normally compatible" with various levels of noise from aircraft operations. Because of the size and complexity of many major hub airports and their operations, FAR Part 150 identifies a large number of land uses and their

attendant noise levels. However, since the operations of most heliports and helistops tend to be much simpler and the impacts more restricted in area, Part 150 does not apply to heliports/helistops not located on airport property. Instead, the FAA recommends exterior noise criteria for individual heliports based on the types of surrounding land uses. These recommended noise levels are included in Table 5.8-4.

The maximum recommended cumulative sound level ($L_{eq(24)}$) from the operations of helicopters at any new site should not exceed the ambient noise already present in the community at the site of the proposed heliport or the sound levels in Table 5.8-4, whichever is lower.

Table 5.8-4 Normally Compatible Community Sound Levels

Type of Area	$L_{eq(24)}$
Residential	
Suburban	57
Urban	67
City	72
Commercial	72
Industrial	77

Source: FAA Advisory Circular Number 150-5020-2, 1983.

State

The California Department of Health Services' Office of Noise Control (ONC) has studied the correlation of noise levels and their effects on various land uses. As a result, a set of generalized exterior and interior noise standards was generated for residential, commercial, institutional/public, and open space land uses.[3] These noise standards, in terms of the CNEL noise metric, are summarized in Appendix F of this DEIR.

The ONC also prepared a land use compatibility chart for community noise which is intended to provide urban planners with a tool to gauge the compatibility of land uses relative to existing and future noise levels. The table identifies "normally acceptable," "conditionally acceptable," "normally unacceptable," and "clearly unacceptable" noise levels for various land use types. A conditionally acceptable or normally unacceptable designation implies new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use is made and needed noise insulation features are incorporated in the design. By comparison, a normally acceptable designation indicates that standard construction can occur with no special noise reduction requirements. These noise compatibility guidelines, also in terms of the CNEL noise metric, are shown in Table 5.8-5.

The California Building Code (CBC), Title 24, Part 2, Volume 1, Chapter 12, Interior Environment, Section 1207.11.2, Allowable Interior Noise Levels, requires that residences' interior noise levels attributable to exterior sources shall not exceed 45 dB in any habitable room. The noise metric is evaluated as either the day-

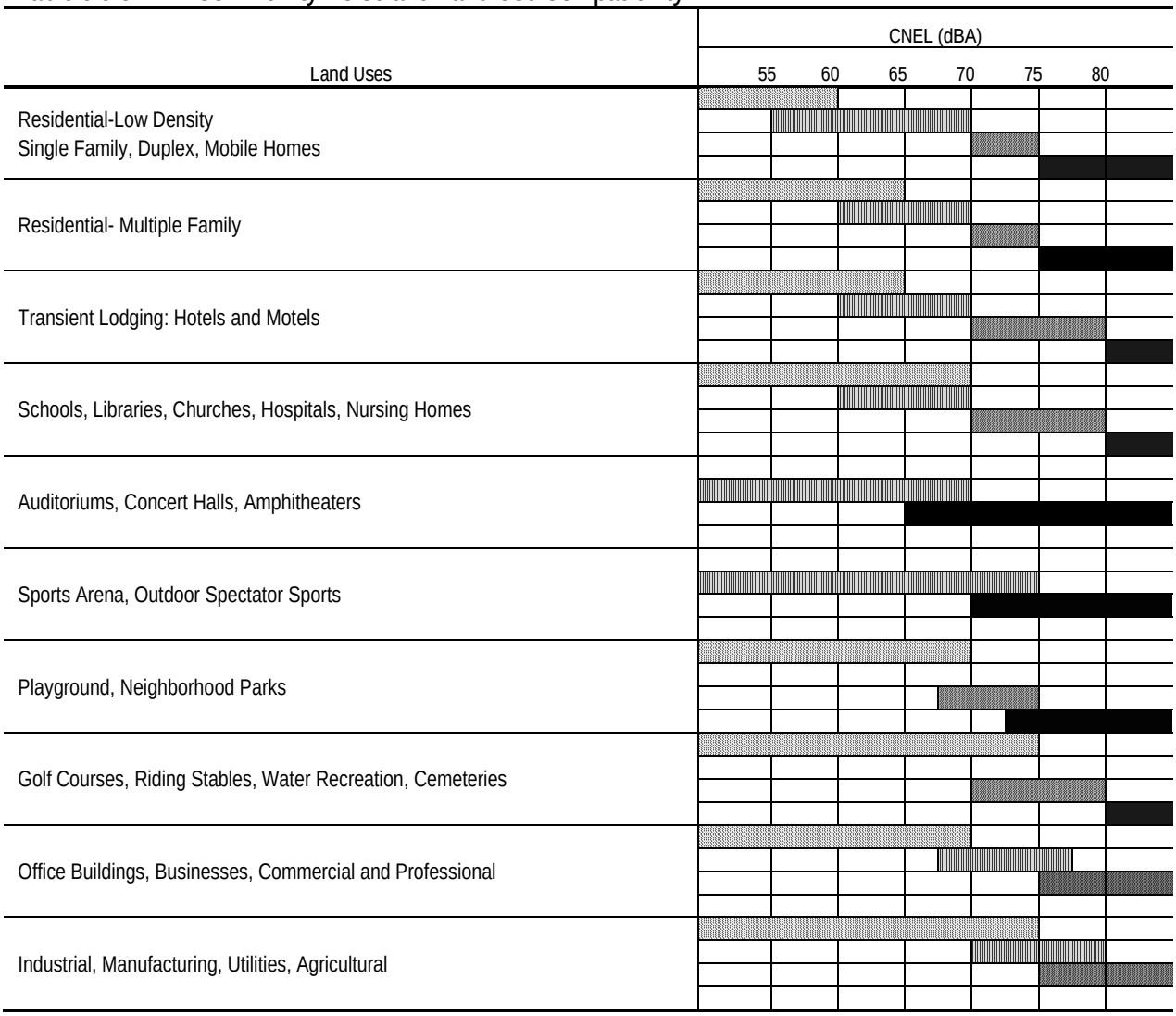
[3] Residential includes single and multifamily, duplex, and mobile homes; Commercial includes hotel, motel, transient housing, commercial retail, bank, restaurant, office building, research and development, professional offices, amphitheater, concert hall, auditorium, movie theater, gymnasium (multipurpose), sports club, manufacturing, warehouse, wholesale, utilities, and movie theaters uses; Institutional / Public includes, hospital, school classrooms/playground, church, and library uses; and Open Space includes parks.

night average sound level (L_{dn}) or the community noise equivalent level (CNEL), using the noise metric that is consistent with the noise element of the particular local general plan.

The California Green Building Standards Code, Chapter 5, Division 5.5, has additional requirements for insulation that affect exterior-interior noise transmission for nonresidential structures (which include multifamily structures 4 stories or greater). Pursuant to section 5.507.4.1, Exterior Noise Transmission, Prescriptive Method, wall and roof-ceiling assemblies exposed to the noise source and making up the building or addition envelope or altered envelope shall meet:

- A composite sound transmission class (STC) rating of at least 50, or
- A composite outdoor-indoor transmission class (OITC) rating of no less than 40 with exterior windows of a minimum STC of 40, or
- OITC of 30 if the project location is within the 65 dBA CNEL or L_{dn} noise contour of an airport (military, public, private, or heliport), freeway, expressway, railroad, industrial source, or fixed-guideway source (as determined by the noise element of the general plan).

Table 5.8-5 Community Noise and Land Use Compatibility



Explanatory Notes

	Normally Acceptable: With no special noise reduction requirements assuming standard construction.		Normally Unacceptable: New construction is discouraged. If new construction does not proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
	Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirement is made and needed noise insulation features included in the design.		Clearly Unacceptable: New construction or development should generally not be undertaken.

Source: California Office of Noise Control. *Guidelines for the Preparation and Content of Noise Elements of the General Plan.* February 1976. Adapted from the US EPA Office of Noise Abatement Control, Washington D.C. Community Noise. Prepared by Wyle Laboratories. December 1971.

Local

The entire Specific Plan area is in unincorporated Los Angeles County. However, one of its primary development areas surrounds the Vermont/Athens LA Metro Green Line station, which is bordered to the east by the City of Los Angeles. Throughout the development of the Specific Plan, operational and/or construction noise due to future development in the planning area could potentially affect receptors in the City of Los Angeles. Additionally, individual project development near the southwestern border of the planning area could potentially affect receptors in the City of Hawthorne. Therefore, for this project, the pertinent noise and vibration thresholds in this environmental assessment will include the County of Los Angeles, City of Los Angeles, and City of Hawthorne municipal code standards, as applicable.

County of Los Angeles Noise Standards

The County of Los Angeles includes noise standards and guidelines in its General Plan Noise Element, and the Code of Ordinances, as discussed below:

County General Plan Noise Element

The County of Los Angeles 2035 General Plan Noise Element is the guiding document for the County's noise policy. The purpose of the noise element is to reduce and limit the exposure of the general public to excessive noise levels. The noise element provides noise mitigation regulations and delineates federal, state and city jurisdictions relative to rail, automotive, aircraft, and nuisance noise. It also sets forth noise management goals, objectives, policies, and programs of the County of Los Angeles. The applicable Los Angeles County noise element standards are implemented and enforced by the County code.

Policies in the noise element promote land use compatibility (N 1.2), aim to maintain compliance with County Code noise standards (N 1.5), ensure noise impacts do not exceed healthy levels (N 1.6), minimize transportation noise (N 1.7, N 1.8), and require barriers, buffers, and proper design and orientation for noise-sensitive uses when necessary (N 1.9, N 1.10, N 1.11). However, it is important to note that with the California Supreme Court decision regarding the assessment of the environment's impacts on proposed projects (*California Building Industry Association v. Bay Area Air Quality Management District* (2015) [Case No. S213478]), issued December 17, 2015, CEQA does not require the analysis of existing environmental conditions on any given project. Noise compatibility for future developments within the planning area should be assessed on an individual basis.

County Code of Ordinances

The county applies the Noise Control Ordinance in Chapters 12.08 and 12.12 of the Los Angeles County Code, which is designed to protect people from objectionable nontransportation noise sources such as music, construction activity, machinery, pumps, and air conditioners. The Noise Control Ordinance includes standards for stationary noise sources, such as nontransportation fans, blowers, pumps, turbines, saws, engines, and other (similar) machinery. These standards do not gauge the compatibility of developments in the noise environment, but provide restrictions on the amount and duration of noise generated at a property; as measured at the property line of the noise receptor. The county's exterior noise standards for stationary sources are presented in Table 5.8-6.

Exterior Noise

The noise standards in Table 5.8-6, County of Los Angeles Exterior Noise Standards, apply to all property within a designated noise zone; unless otherwise indicated.

Table 5.8-6 County of Los Angeles Exterior Noise Standards

Noise Zone	Noise Level Standard (dBA)[1,2]	
	7 AM to 10 PM	10 PM to 7 AM
Noise-Sensitive Area	45	45
Residential Properties	50	45
Commercial Properties	60	55
Industrial Properties	70	70

Source: Los Angeles County Code, Section 12.08.390.

[1] According to Section 12.08.390, if the ambient noise levels exceed the exterior noise standards above, then the ambient noise level becomes the noise standard. If the source of noise emits a pure tone or impulsive noise, the exterior noise levels limits shall be reduced by five decibels.

[2] If the measurement location is on a boundary property between two different zones, the noise limit shall be the arithmetic mean of the maximum permissible noise level limits of the subject zones; except when an intruding noise source originates on an industrial property and is impacting another noise zone, the applicable exterior noise level shall be the daytime exterior noise level for the subject receptor property.

The following adjustments are applicable to the exterior standards in Table 5.8-6;noise levels at sensitive receptors may not exceed the standards:

- for a cumulative period of more than thirty minutes in any hour (L_{50});
- plus 5 dB for a cumulative period of more than fifteen minutes in any hour (L_{25});
- plus 10 dB for a cumulative period of more than five minutes in any hour (L_8);
- plus 15 dB for a cumulative period of more than one minute in any hour (L_2); or
- plus 20 dB for any period of time (L_{max})

If the ambient noise level exceeds the noise level standard for any of the above noise metrics, then the ambient noise level becomes the noise level standard for that noise metric. If the measurement location is on a boundary property between two different zones, the exterior noise level standard shall be the arithmetic mean of the noise levels standards for the two zones. Except as provided above, when an intruding noise source originates on an industrial property and is impacting another noise zone, the applicable exterior noise level shall be the daytime exterior noise level for the subject receptor property.

Interior Noise

Section 12.08.400 of the County Code presents interior noise standards for multifamily residential uses. This section states that no person shall operate or cause to be operated within a dwelling unit, any source of sound, or allow the creation of any noise that causes the noise level when measured inside a neighboring receiving dwelling unit to exceed the standards in Table 5.8-7.

Table 5.8-7 County of Los Angeles Interior Noise Standards

Noise Zone	Noise Level Standard (dBA)[1]	
	7 AM to 10 PM	10 PM to 7 AM
Multi-family Residential	45	40

Source: County of Los Angeles Code of Ordinances, Section 12.08.400.
[1] According to Section 12.08.400, if the ambient noise level reflected by the L50 exceeds that permissible within any of the interior noise standards in subsection A of Section 12.08.390, the allowable interior noise level shall be increased in 5dB increments in each standard as appropriate to reflect said ambient noise level (L50)

The following adjustments are applicable to the exterior standards in Table 5.8-7:

Noise levels at sensitive receptors may not exceed the standards

- for a cumulative period of more than five minutes in any hour (L_8);
- plus 5 dB for a cumulative period of more than one minute in any hour (L_2); or
- plus 10 dB for any period of time (L_{max}).

Construction Noise

Los Angeles County Code Section 12.08.440 includes restrictions on construction noise. The County prohibits the operation of any tools or equipment used in construction, drilling, repair, alteration, or demolition work between weekday hours of 7 PM and 7 AM, or at any time on Sundays or holidays, such that the sound therefrom creates a noise disturbance across a residential or commercial real-property line. Exceptions are provided for emergency work of public service utilities or if a variance is issued by the Health Officer. The County also sets maximum noise level limits for mobile equipment (nonscheduled, intermittent, short-term operations for less than 10 days) as summarized in Table 5.8-8, *County of Los Angeles Mobile Construction Equipment Noise Limits*.

Table 5.8-8 County of Los Angeles Mobile Construction Equipment Noise Limits

Time of Day	Single-Family Residential	Multi-family Residential	Semi-residential/ Commercial	Business Structures
Daily, except Sundays and legal holidays, 7 AM to 8 PM	75 dBA	80 dBA	85 dBA	85 dBA
Daily, 8 PM to 7 AM and all day Sunday and legal holidays	60 dBA	64 dBA	70 dBA	85 dBA

Source: Los Angeles County Code, Section 12.08.440. For nonscheduled, intermittent, short-term operations for less than 10 days.

Maximum noise levels from stationary equipment (repetitively scheduled and relatively long-term operations of 10 days or more) are summarized in Table 5.8-9, *County of Los Angeles Stationary Construction Equipment Noise Limits*.

Table 5.8-9 County of Los Angeles Stationary Construction Equipment Noise Limits

Time of Day	Single-Family Residential	Multi-Family Residential	Semi-residential/ Commercial	Business Structures
Daily, except Sundays and legal holidays, 7 AM to 8 PM	60 dBA	65 dBA	70 dBA	n/a
Daily, 8 PM to 7 AM and all day Sunday and legal holidays	50 dBA	55 dBA	60 dBA	n/a

Source: Los Angeles County Code, Section 12.08.440. For repetitively scheduled and relatively long-term operations of ten days or more.

City of Los Angeles

The following noise standards and guidelines relative to the City of Los Angeles' General Plan Noise Element and Municipal Code.

Municipal Code

The City's noise ordinance is designed to protect people from objectionable nontransportation noise sources such as music, machinery, pumps, and air conditioners. According to Section 112.01 and 112.02 of the City's noise ordinance, stationary noise sources such as radios, television sets, and similar devices; air conditioning, refrigeration, heating, pumping, and filtering equipment are prohibited from causing the ambient noise level to increase by more than 5 dB. According to municipal code Section 111.03, where actual ambient levels are lower than shown in Table 5.8-10, the presumed ambient noise levels in the table are used as the baseline ambient noise level. For the purposes of noise compliance, noise produced within the planning area shall not exceed the measured ambient noise level or the minimum ambient noise level in Table 5.8-10 for each respective land use category (whichever is greater) by 5 dB.

Table 5.8-10 City of Los Angeles Ambient Noise Criteria

Zoning Categories	Minimum Ambient Noise Level (dBA Leq)	
	10:00 p.m. to 7:00 a.m.	7:00 a.m. to 10:00 p.m.
Residential: A1, A2, RA, RE, RS, RD, RW1, RW2, R1, R2, R3, R4, and R5	40	50
Commercial: P, PB, CR, C1, C1.5, C2, C4, C5, and CM	55	60
Industrial: M1, MR1, and MR2	55	60
Industrial: M2 and M3	65	65

Notes: Residential: A1 and A2: Agriculture; RA and RS: Suburban; RE Residential Estate; RD: Restricted Density Multiple Dwelling; RW1 and RW2: Residential Waterways; R1: One-family; R2: Two-family; R3, R4, and R5: Multiple Dwelling.
Commercial P: Automobile Parking; PB Parking Building; CR, C1, and C1.5: Limited Commercial; C2, C4, and C5: Commercial Zone; CM: Commercial Manufacturing.
Light Industrial: M1: Limited Industrial; MR1: Restricted Industrial; MR2: Restricted Light Industrial, M2: Light Industrial; M3: Heavy Industrial.

Additionally, according to municipal code Section 113.01, trash collecting within 200 feet of a residential building is prohibited between the hours of 9:00 PM and 6:00 AM. Further, per Section 114.03, loading/unloading of commercial vehicles is prohibited between the hours of 10:00 PM and 7:00 AM within 200 feet of a residential building.

Construction Noise Standards

Chapter IV, Section 41.40 and Chapter XI, Section 112.05 of the City of Los Angeles Municipal Code govern construction-related noise in the City.

Section 41.40 of the municipal code specifies hours allowed for construction activities for the purposes of noise control. Construction activities are constrained to the daytime hours from 7:00 AM to 9:00 PM Monday through Friday, 8:00 AM to 6:00 PM on Saturdays and national holidays, and prohibited on Sundays.

Section 112.05 of the Los Angeles Municipal Code Noise Ordinance also specifies the maximum noise level for construction equipment. In accordance with Section 112.05 and Section 41.40, construction equipment, including augers, loaders, power shovels, cranes, derricks, motor graders, paving machines, off-highway trucks, ditchers, trenchers, compactors, scrapers, wagons, pavement breakers, compressors, and pneumatic or other powered equipment items, shall not produce a maximum noise level exceeding 75 dBA at a distance of 50 feet between the hours of 7:00 AM and 9:00 PM. The City allows construction noise exceeding these noise limits if compliance is technically infeasible. However, the burden of proving that compliance is technically infeasible includes showing that noise limitations cannot be met despite the use of mufflers, shields, sound barriers, and/or other noise reduction devices or techniques during the operation of the equipment.

City of Hawthorne

Noise standards and guidelines from the applicable Hawthorne Municipal Code are provided below.

Municipal Code

The City of Hawthorne provides qualitative limits for noise-generating activities in the city. Municipal code Section 9.35.010, "Disturbances caused by loud, unnecessary and unusual noise," states that it shall be unlawful for any person to willfully make or continue, or cause to be made or continued, any loud, unnecessary and unusual noise which disturbs the peace or quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitivity residing in the area. The standard that may be considered in determining whether a violation of the provisions of this section exists may include, without limitation:

A. The level of noise
B. Whether the nature of the noise is usual or unusual
C. Whether the origin of the noise is natural or unnatural
D. The level and intensity of the background noise
E. The proximity of the noise to residential sleeping facilities
F. The nature and zoning of the area within which the noise emanates
G. The density of the inhabitation of the area within which the noise emanates
H. The time of the day and night the noise occurs
I. The duration of the noise
J. Whether the noise is recurrent, intermittent, or constant
K. Whether the noise is produced by a commercial or noncommercial activity

Due to the qualitative nature of the City of Hawthorne Noise Ordinance, operational noise and construction noise due to future developments within the planning area will be primarily subject to the County of Los Angeles Noise standards.

Vibration Standards

Los Angeles County Code

The County Code, Section 12.08.560, prohibits the operation of any device that creates vibration that is above 0.01 in/sec at or beyond the property boundary of the source, if on private property, or at 150 feet from the source, if on a public space or public right-of-way. This criterion is pertinent to the evaluation of vibration-annoyance impacts from ongoing industrial uses to nearby sensitive receptors. For temporary construction-generated vibration levels, the FTA guidelines shown in Table 5.8-11 will be used for annoyance criteria.

Table 5.8-11 Groundborne Vibration Criteria: Human Annoyance

Land Use Category	Max Lv (VdB)	Description
Workshop	90	Distinctly felt vibration. Appropriate to workshops and non-sensitive areas
Office	84	Felt vibration. Appropriate to offices and non-sensitive areas.
Residential – Daytime	78	Barely felt vibration. Adequate for computer equipment.
Residential – Nighttime	72	Vibration not felt, but groundborne noise may be audible inside quiet rooms.

Source: FTA 2006.
Note: Max Lv (VdB): Lv is the velocity level in decibels, as measured in 1/3-octave bands of frequency over the frequency ranges of 8 to 80 Hz.

It is also pertinent to assess potential architectural damage, beyond just annoyance effects, due to vibrational energy. In lieu of established vibration damage criteria in the County Code, the FTA guidelines shown below in Table 5.8-12 will be used for architectural damage criteria.

Table 5.8-12 Groundborne Vibration Criteria: Architectural Damage

Building Category	PPV (in/sec)	Lv (VdB)
I. Reinforced concrete, steel, or timber (no plaster)	0.5	102
II. Engineered concrete and masonry (no plaster)	0.3	98
III. Non-engineered timber and masonry buildings	0.2	94
IV. Buildings extremely susceptible to vibration damage	0.12	90

Source FTA 2006.
Note: Lv (VdB): Lv is the velocity level in decibels, as measured in 1/3-octave bands of frequency over the frequency ranges of 8 to 80 Hz.

Project-related construction activities that would generate vibration that are strong enough to cause vibration-induced architectural damage to the nearest buildings (which are commercial and light industrial) should be limited to 0.5 PPV in/sec for reinforced concrete, steel buildings without plaster. For residential structures

(which fall in the category of nonengineered timber and masonry buildings), the FTA criterion is 0.2 PPV in/sec.

5.8.1.4 EXISTING NOISE ENVIRONMENT

The West Athens-Westmont Community is in the southwestern portion of the Metro Planning Area, described in the 2035 General Plan as the geographic center of Los Angeles County. The Specific Plan area is approximately 3.1 square miles, and is bounded on the north and south by unincorporated Los Angeles County, on the east by the City of Los Angeles, and on the west by the City of Hawthorne.

The West Athens-Westmont Community is bisected by Interstate 105 (I-105). The Metro Green Line (commuter rail line) runs in the median of the I-105 for the majority of its route, extending from the City of Norwalk to the City of Redondo Beach. The Vermont/Athens Green Line station platform is in the median of I-105 below Vermont Avenue.

The Specific Plan area is also traversed by other major roadways, such as Imperial Highway, Normandie Avenue, and Vermont Avenue. Additionally, the Specific Plan area is less than a mile east of the Hawthorne Municipal Airport and less than four miles east of Los Angeles International Airport.

I-105 Freeway Transit Corridor

The controlling noise source throughout the specific plan area is roadway noise from the I-105 freeway/transit corridor. A traffic noise analysis was conducted on the nearest segment of I-105 based on the FHWA Highway Traffic Noise Prediction Model (FHWA, 1978). The average daily traffic flow data along I-105 was available through Caltrans (Caltrans, 2015). Additionally, rail noise from the Metro Green Line is noticeable throughout the planning area. A rail noise analysis for the nearest segment of the Metro Green Line was conducted using the CREATE Freight Noise and Vibration Model (FRA, 2006). The daily rail line trips for the Metro Green Line were available through the LA Metro Website (LA Metro, 2017). Since outputs for the rail noise model are only available in the L_{dn} noise level metric, traffic noise levels will be presented here and throughout this chapter in the L_{dn} metric, rather than the more common CNEL metric.[4]

The sound pressure levels of traffic-generated noise and rail-generated noise were summed to give the overall transportation-generated noise level. The results of these transit noise analyses as they affect receptors at various distances from the transit corridor are presented in Table 5.8-13.

Table 5.8-13 Transit Noise Analysis (L_{dn})

	Noise Receiver Location		
	Closest receptors to I-105	Center of Planning Area	Furthest Receptors from I-105
Receptor Example	Budlong Ave at 115th Pl	Normandie Ave at Imperial Hwy	Western Ave at 110th St
Distance from source to receiver	50 feet	1,600 feet	3,200 feet

[4] Note: L_{dn} and CNEL are comparable noise metrics used to describe 24-hour average noise levels. Values typically only differ by 1-2 dB.

I-105 Freeway Noise Contribution	88 dBA	65 dBA	55 dBA
Metro Green Line Noise Contribution	81 dBA	58 dBA	54 dBA
Total Noise Exposure due to Freeway and Rail Line	89 dBA	66 dBA	58 dBA

To adjust for estimated 2017 traffic based on the Caltrans 2015 document, a traffic increase of 2.64 percent per year was used, based on the 2014 to 2015 traffic trend increase.

According to Table 5.8-13, the Specific Plan area is exposed to transportation-generated noise levels in the range of 58 to 89 dBA L_{dn}. The levels presented in the table include the source values plus distance attenuation, and do not take barrier attenuation into account. The presence of intervening structures and/or berms is expected to lower noise levels experienced at receptors by an additional 5 to 10 dB.

At receivers at greater distances from the I-105 and Metro Green Line, ambient noise levels would be primarily influenced by traffic on nearby roadways and/or stationary noise sources. Noise level estimates along major roadways throughout the planning area are presented below, in Table 5.8-14.

Roadway Vehicles

Existing average daily traffic volumes along major roadways throughout the planning area were provided by IBI Group and were used to estimate existing traffic noise. These traffic noise estimates were based on the FHWA-RD77-108 roadway noise calculation method. The results of this modeling indicate that average noise levels along arterial segments currently range from approximately 63 dBA to 73 dBA L_{dn} as calculated at 50 feet from the centerline of the road. Noise levels for existing conditions along analyzed roadways are presented in Table 5.8-14.

Table 5.8-14 Existing (2017) Traffic Noise Levels (dBA L_{dn})

Roadway Segment	ADT Volumes	L_{dn} (dBA @ 50 ft)	Distance to L_{dn} Contour (feet from centerline)		
			65 dBA	70 dBA	75 dBA
Century Boulevard between Prairie Avenue and Crenshaw Boulevard	29,254	72.4	72	155	335
Century Boulevard between Western Avenue and Normandie Avenue	29,596	72.4	73	157	337
Century Boulevard between Hoover Avenue and Figueroa Avenue	32,537	72.8	77	167	359
Van Ness Avenue between Century Boulevard and 108th Avenue	19,854	67.9	36	78	168
Normandie Avenue between Century Boulevard and 108th Avenue	23,586	70.0	50	108	232
108th Avenue between Van Ness Avenue and Western Avenue	8,685	62.7	16	35	75
Crenshaw Boulevard between 108th Avenue and Imperial Hwy	31,929	71.3	61	131	283
Western Avenue between 108th Avenue and Imperial Hwy	27,334	69.2	45	96	207
Vermont Avenue between 108th Avenue and Imperial Hwy	35,852	70.6	55	118	254

Table 5.8-14 Existing (2017) Traffic Noise Levels (dBA L_{dn})

Roadway Segment	ADT Volumes	L_{dn} (dBA @ 50 ft)	Distance to L_{dn} Contour (feet from centerline)		
			65 dBA	70 dBA	75 dBA
Imperial Hwy between Prairie Avenue and Crenshaw Boulevard	29,643	69.7	47	102	220
Imperial Hwy between Van Ness Avenue and Western Avenue	33,264	70.2	51	110	238
Imperial Hwy between Normandie Avenue and Vermont Avenue	33,986	70.3	52	112	241
Imperial Hwy between Hoover Avenue and Figueroa Avenue	34,449	70.3	52	113	244
Imperial Hwy between Main Avenue and San Pedro Avenue	29,362	69.6	47	102	219
Van Ness Avenue between Imperial Hwy and 120th Avenue	23,071	68.6	40	86	186
Normandie Avenue between Imperial Hwy and 120th Avenue	17,854	68.8	42	89	193
120th Avenue between Normandie Avenue and Vermont Avenue	10,464	65.1	24	51	109
Crenshaw Boulevard between 120th Avenue and El Segundo Boulevard	43,639	72.6	75	162	348
Western Avenue between 120th Avenue and El Segundo Boulevard	24,337	68.7	41	89	191
Vermont Avenue between 120th Avenue and El Segundo Boulevard	20,564	68.2	38	81	175
El Segundo Boulevard between Van Ness Avenue and Western Avenue	40,862	72.6	74	160	344
El Segundo Boulevard between Normandie Avenue and Vermont Avenue	39,304	72.4	72	156	335
Normandie Avenue between El Segundo Boulevard and 135th Avenue	18,987	69.1	43	93	201
Crenshaw Boulevard between 135th Avenue and Rosecrans Avenue	31,471	71.2	60	130	280

Notes: Noise levels calculated by FHWA-RD77-108 Calculation Method.
Traffic volumes from IBI Group, July 2017.
ADT = average daily traffic

Aircraft Noise

The Specific Plan area is less than a mile east of the Hawthorne Municipal Airport and less than four miles east of Los Angeles International Airport. However, based on the airport-related noise contour maps provided by each jurisdiction, the entire planning area is outside of the 65 dBA CNEL noise contours for each of the airports (Los Angeles World Airports 2017; Hawthorne 2014). While operations at these airport facilities may, at times, be audible in the planning area, aircraft flyovers are expected to be limited and sporadic. Therefore, aircraft noise contributes negligible amounts of community noise to the planning area.

Stationary Source Noise

Stationary sources of noises may occur from all types of land uses. Residential uses would generate noise from landscaping, maintenance activities, and air conditioning systems. Commercial uses would generate noise from heating, ventilation, air conditioning (HVAC) systems, loading docks, and other sources. Industrial uses may generate noise from HVAC systems, loading docks, and possibly machinery. Noise generated by residential or commercial uses are generally short and intermittent. Industrial uses may generate noise on a more continual basis due to the nature of their activities. For the developed land within the planning area, land uses are primarily residential, with retail along major roadways and industrial uses in the western portion of the planning area. Noise from stationary sources is regulated through the Los Angeles County Code, as presented above.

5.8.2 Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, a project would normally have a significant effect on the environment if the project would result in:

N-1 Exposure of persons to or generation of noise levels in excess of standards established in the County General Plan or noise ordinance (Los Angeles County Code, Title 21, Chapter 12.08) or applicable standards of other agencies.

N-2 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.

N-3 A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from parking areas.

N-4 A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project, including noise from amplified sound systems.

N-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, expose people residing or working in the project area to excessive noise levels.

N-6 For a project within the vicinity of a private airstrip, expose people residing or working the project area to excessive noise levels.

5.8.3 Plans, Programs, and Policies

5.8.3.1 REGULATORY REQUIREMENTS

RR N-1 The buildout of the Specific Plan will be constructed in accordance with Section 12.08 of the County Code, which generally prohibits construction activities that generate noise that could create a disturbance across a residential or commercial property line between 7:00 PM

and 7:00 AM on weekdays, or at any time on Sunday or a federal holiday. Additionally, Section 12.12 of the noise ordinance sets limits on construction noise as it affects sensitive receptors, based on the duration of the construction activities and the receptor's land use type.

RR N-2 The buildout of the Specific Plan will operate in accordance with Section 12.08.390 and Section 12.08.400 of the Los Angeles County Code. Section 12.08.390 of the noise ordinance limits noise exposure from stationary sources as it affects various receptor types; Section 12.08.440 limits noise from within multifamily residential buildings.

RR N-3 The buildout of the Specific Plan will be constructed in accordance with Section 12.08.560 of the County Code, which generally limits perceptible levels of vibration within Los Angeles County.

RR N-4 As required by the Los Angeles County Code, Section 12.08.430, construction activities are prohibited between the hours of 7 PM and 7 AM on weekdays and Saturdays, or at any time on Sundays or holidays. Construction is also required to comply with the maximum noise levels from mobile equipment specified in Section 12.08.430. If applicable, construction activities may also be subject to the construction noise ordinance of the City of Los Angeles or the City of Hawthorne.

5.8.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.8-1: Construction activities would result in temporary noise increases in the vicinity of the proposed project. [Threshold N-4]

Impact Analysis: This impact discusses the potential construction-related noise impacts resulting from land use developments accommodated by the Specific Plan. Buildout of the Specific Plan would occur over an approximately 20-year period and would consist of many different projects with their own construction time frames and equipment. Individual construction projects within the Specific Plan area would have their own schedule and would only affect areas near the construction site. Residential areas are considered noise sensitive and would have the potential to be affected by construction activities during implementation of the Specific Plan. Other land uses may also be sensitive to high levels of construction noise, but the residential receptors within and near the boundaries of the planning area would be the most noise-sensitive land uses.

Los Angeles County limits the use of construction equipment to the daytime hours of 7:00 AM to 7:00 PM, not including Sundays or holidays. Additionally, the County's noise ordinance sets limits on construction noise as it affects sensitive receptors, based on the duration of the construction activities, and the receptor's land use type. These countywide construction noise standards are outlined in Table 5.8-8 and Table 5.8-9, above.

The entire Specific Plan area is in unincorporated Los Angeles County. However, one of its primary development areas surrounds the Vermont/Athens LA Metro Green Line station, which is bordered to the east by the City of Los Angeles. Additionally, the City of Hawthorne is along the western border of the planning area and may also be exposed to noise from future developments in the planning area. Future projects that could affect receptors in adjacent jurisdictions would be subject to the noise ordinance of that jurisdiction. The City of Los Angeles limits construction activities to the hours of 7:00 AM to 9:00 PM Monday through Friday, 8:00 AM to 6:00 PM on Saturdays and national holidays, and prohibits construction activity on Sundays. Additionally, the City's noise ordinance sets a 75 dBA noise level limit for various construction equipment items. Additional detail on the City of Los Angeles Municipal Code noise ordinance is presented above in Section 5.8.1.3, *Relevant Programs and Regulations*. Since the City of Hawthorne does not provide standards specific to construction noise, construction activities that may affect receptors within the City of Hawthorne will be subject to the applicable Los Angeles County noise ordinance.

Given the lack of specific details about the future developments within the planning area, a generalized, program-level set of construction equipment items were used to evaluate construction-related noise impacts. Noise generated during construction is based on the type of equipment used, the location of the equipment relative to sensitive receptors, and the timing and duration of the noise-generating activities.

The Specific Plan would increase the number of permitted residential units within the Specific Plan area to 4,518 units—roughly 1,061 more than existing conditions. The Specific Plan also increases potential nonresidential building square footage to approximately 3.5 million square feet (a net increase of approximately 1.7 million square feet over existing conditions). Additional details about the Specific Plan development potential are presented in the project description (Chapter 3 of this DEIR).

Two types of temporary noise impacts could occur during construction activities associated with buildout of the Specific Plan. First, the transport of workers and movement of materials to and from the site could incrementally increase noise levels along local access roads. The second type of temporary noise impact is related to demolition, site preparation, grading, and/or physical construction. Construction is performed in distinct steps, each of which has its own mix of equipment and noise characteristics. Table 5.8-15, *Construction Equipment Noise Emission Levels*, lists typical construction equipment noise levels recommended for noise-impact assessments, based on a distance of 50 feet between the equipment and noise receptor.

Table 5.8-15 Construction Equipment Noise Emission Levels

Construction Equipment	Typical Max Noise Level (dBA L_{eq})[1]	Construction Equipment	Typical Max Noise Level (dBA L_{eq})[1]
Air Compressor	81	Pile-Driver (Impact)	101
Backhoe	80	Pile-Driver (Sonic)	96
Ballast Equalizer	82	Pneumatic Tool	85
Ballast Tamper	83	Pump	76
Compactor	82	Rail Saw	90
Concrete Mixer	85	Rock Drill	98
Concrete Pump	82	Roller	74
Concrete Vibrator	76	Saw	76
Crane, Derrick	88	Scarifier	83

Table 5.8-15 Construction Equipment Noise Emission Levels

Construction Equipment	Typical Max Noise Level (dBA L_{eq})[1]	Construction Equipment	Typical Max Noise Level (dBA L_{eq})[1]
Crane, Mobile	83	Scraper	89
Dozer	85	Shovel	82
Generator	81	Spike Driver	77
Grader	85	Tie Cutter	84
Impact Wrench	85	Tie Handler	80
Jack Hammer	88	Tie Inserter	85
Loader	85	Truck	88
Paver	89		

Source: FTA 2006.
[1] Measured at 50 feet from the source.

As shown in Table 5.8-15, construction equipment generates high levels of noise, with averages ranging from 74 dBA to 101 dBA at 50 feet. Construction of individual development projects associated with the Specific Plan would temporarily increase the ambient noise environment and would have the potential to affect noise-sensitive land uses in the vicinity of that project. Significant noise impacts may occur from operation of heavy earthmoving equipment and truck hauling that would occur with construction of individual development projects. Implementation of the Specific Plan would result in an increase in development intensity throughout the Specific Plan area. Construction noise levels depend on the specific locations, site plans, and construction details of individual development projects. Construction-related noise would be localized and would occur intermittently for varying periods of time. Although the Specific Plan would take approximately 20 years to build out, it is anticipated that exposure of individual receptors to elevated construction noise levels would occur for much shorter periods (e.g., a few months).

The specific locations, duration, and equipment required for individual projects are unknown. Therefore, it cannot be specifically determined how noise-sensitive uses within and near the Specific Plan area would be affected. Future developments within 500-feet of noise-sensitive receptors would be required to conduct project-specific construction noise impact assessments in accordance with Mitigation Measure N-1.

The County of Los Angeles and other nearby jurisdictions exempt construction activities from the general noise standards of their noise ordinance and provide standards that are specific to construction noise activities. Even with these specialized standards, construction activities associated with any individual development may occur in close proximity to noise-sensitive receptors, and noise disturbances may occur for prolonged periods of time. Therefore, construction noise impacts are considered potentially significant.

Level of Significance before Mitigation: Upon implementation of regulatory requirements, Impact 5.8-1 would be potentially significant.

Impact 5.8-2: Project implementation would result in long-term operation-related noise that would not exceed local standards. [Thresholds N-1 and N-3]

Impact Analysis: Implementation of the proposed project would have a significant impact if it would expose new and existing receptors to incompatible levels of noise from both the operations and increased traffic resulting from future development of the project.

Traffic Noise

With respect to projected-related increases, noise impacts can be broken down into three categories. The first is "audible" impacts, which refer to increases in noise levels that are perceptible to humans. Audible increases in general community noise levels generally refer to a change of 3 dB or more since this level has been found to be the threshold of perceptibility in exterior environments. The second category, "potentially audible" impacts, refers to a change in noise level between 1 and 3 dB. The last category includes changes in noise level of less than 1 dB that are typically "inaudible" to the human ear except under quiet conditions in controlled environments. Only "audible" changes in noise levels at sensitive receptor locations (i.e., 3 dB or more) are considered potentially significant. Note that a doubling of traffic flows (i.e., 10,000 vehicles per day to 20,000 per day) would be needed to create a 3 dB increase in traffic-generated noise levels. A significant impact would occur if the project would result in an increase in traffic noise levels of 3 dB or more.

Future development in accordance with the Specific Plan would cause increases in traffic along local roadways. Traffic noise increases may affect various sensitive land uses, including residences, schools, churches, and medical uses. Commercial and industrial areas are not considered noise sensitive and generally have higher tolerances for exterior and interior noise levels.

The traffic noise levels for existing conditions and future-plus-project conditions were estimated using the FHWA Highway Traffic Noise Prediction Model (FHWA 1978). The FHWA model predicts noise levels through a series of adjustments to a reference sound level. These adjustments account for distances from the roadway, traffic flows, vehicle speeds, car/truck mix, length of exposed roadway, and road width. The distances to the 70, 65, and 60 L_{dn} contours for selected roadway segments in the vicinity of the Specific Plan are shown in Appendix F of this DEIR.

Table 5.8-16, *Specific Plan Buildout Traffic Noise Increases*, presents the noise level increases on roadways over existing conditions at 50 feet from the centerline of each roadway segment due to the project. The "2035 Plus Project" traffic noise levels include effects of future regional ambient growth and growth due to the project (IBI 2017). "Project Contribution" represents the effect the project would have on future noise levels by comparing the difference between "2035 Plus Project" noise levels and future noise levels due exclusively to ambient growth. Appendix F includes tables showing traffic noise levels for all four scenarios: Existing-No-Project, Existing-Plus-Project, 2035-No-Project, and 2035-Plus-Project.

Table 5.8-16 Specific Plan Buildout Traffic Noise Increases

Roadway	Segment	L_{dn} @ 50 ft. (dBA)		Increase (dB)	
		Existing No Project	2035 Plus Project	Overall Increase	Project Contribution
Century Boulevard	Between Prairie Ave and Crenshaw Blvd	72.4	72.6	0.2	0.2
Century Boulevard	Between Western Ave and Normandie Ave	72.4	72.6	0.2	0.2
Century Boulevard	Between Hoover Ave and Figueroa Ave	72.8	73.0	0.2	0.2
Van Ness Avenue	Between Century Blvd and 108th Ave	67.9	68.1	0.2	0.2
Normandie Avenue	Between Century Blvd and 108th Ave	70.0	70.2	0.2	0.2
108th Avenue	Between Van Ness Ave and Western Ave	62.7	62.8	0.2	0.2
Crenshaw Boulevard	Between 108th Ave and Imperial Hwy	71.3	71.5	0.2	0.2
Western Avenue	Between 108th Ave and Imperial Hwy	69.2	69.5	0.2	0.2
Vermont Avenue	Between 108th Ave and Imperial Hwy	70.6	70.8	0.2	0.2
Imperial Hwy	Between Prairie Ave and Crenshaw Blvd	69.7	69.9	0.2	0.2
Imperial Hwy	Between Van Ness Ave and Western Ave	70.2	70.7	0.5	0.2
Imperial Hwy	Between Normandie Ave and Vermont Ave	70.3	70.7	0.4	0.2
Imperial Hwy	Between Hoover Ave and Figueroa Ave	70.3	70.6	0.3	0.2
Imperial Hwy	Between Main Ave and San Pedro Ave	69.6	69.8	0.2	0.2
Van Ness Avenue	Between Imperial Hwy and 120th Ave	68.6	68.7	0.2	0.2
Normandie Avenue	Between Imperial Hwy and 120th Ave	68.8	69.1	0.3	0.2
120th Avenue	Between Normandie Ave and Vermont Ave	65.1	65.6	0.5	0.2
Crenshaw Boulevard	Between 120th Ave and El Segundo Blvd	72.6	72.8	0.2	0.2
Western Avenue	Between 120th Ave and El Segundo Blvd	68.7	69.1	0.4	0.2
Vermont Avenue	Between 120th Ave and El Segundo Blvd	68.2	68.4	0.3	0.2
El Segundo Boulevard	Between Van Ness Ave and Western Ave	72.6	72.8	0.2	0.2
El Segundo Boulevard	Between Normandie Ave and Vermont Ave	72.4	72.6	0.2	0.2
Normandie Avenue	Between El Segundo Blvd and 135th Ave	69.1	69.3	0.3	0.2
Crenshaw Boulevard	Between 135th Ave and Rosecrans Ave	71.2	71.4	0.2	0.2

Notes: Noise levels calculated by FHWA-RD77-108 Calculation Method.
Traffic volumes from IBI Group, July 2017.
The L_{dn} and CNEL noise descriptors are very similar, and typically only vary by 1-2 dB

Table 5.8-16 shows that traffic noise increases resulting from the project contribution would be approximately 0.2 dB L_{dn} at all analyzed roadways within the planning area, and overall increases due to both the project and regional growth would range from 0.2 to 0.5 dB L_{dn}. Based on the estimated traffic conditions provided by IBI Group, no segments would experience substantial noise increases greater than 3 dBA over existing conditions. Therefore, impacts would be less than significant and no mitigation measures are necessary.

Stationary-Source Noise

For the purposes of stationary noise sources within the planning area, the Los Angeles County Code Section 12.08.390 establishes exterior noise limits ranging from 45 dBA to 70 dBA, on the time of day and the land use types of the source and the receiver. The noise standards included in the Los Angeles County Code are presented above in Table 5.8-6. Additionally, as the cities of Los Angeles and Hawthorne are adjacent to the Specific Plan area, future development that could affect receptors within adjacent jurisdictions would be subject to their respective noise ordinances. Additional detail on the City of Los Angeles Municipal Code noise ordinance and the City of Hawthorne Municipal Code noise ordinance is presented above in Section 5.8.1.3, *Relevant Programs and Regulations*. A significant stationary-source impact would occur if the activities or equipment associated with a project within the Specific Plan area produce noise levels at nearby sensitive receptors in excess of local code standards.

Buildout of the Specific Plan would result in an increase in residential, mixed use, neighborhood commercial, public-institutional, and civic center development in the planning area. The primary stationary noise sources associated with these land uses are landscaping and maintenance activities, HVAC systems, mechanical equipment, and operational noise from residents and/or patrons. As mentioned above, traffic noise generally dominates the noise environment around the Specific Plan area. Noise generated by stationary sources associated with residential, commercial, mixed use, office, or public-recreational uses is generally short and intermittent, and these uses are not a substantial source of noise compared to roadway sources. Through the enforcement of the County Code, stationary-source noise from these types of proposed land uses would not substantially increase the noise environment in the Specific Plan area. Long-term operational noise would not exceed local standards and the impact would be less than significant.

Level of Significance before Mitigation: Upon implementation of regulatory requirements, Impact 5.8-2 would be less than significant.

Impact 5.8-3: The project would create short-term groundborne vibration and groundborne noise. [Threshold N-2]

Impact Analysis: The potential vibration impacts resulting from development of the Specific Plan with respect to construction, vehicle flows, and stationary sources are addressed separately.

Construction Vibration Impacts

Buildout of the Specific Plan would occur over an approximately 20-year period and would consist of many different projects with their own construction time frames and equipment. Individual construction projects within the Specific Plan area would have their own schedule and would only affect areas near the construction site. The most vibration-sensitive structures within the Specific Plan area would be existing and future residential uses within the immediate vicinity of individual projects developed in accordance with the Specific Plan.

Construction operations can generate varying degrees of ground vibration, depending on the construction procedures and equipment. Operation of construction equipment generates vibrations that spread through the ground and diminish with distance from the source. The effect on buildings in the vicinity of the

construction site depends on soil type, ground strata, and receptor building location. The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Vibration from construction activities rarely reaches levels that can damage structures, but can achieve the audible and perceptible ranges in buildings close to the construction site. Table 5.8-17 lists vibration levels for typical construction equipment.

Table 5.8-17 Vibration Levels for Typical Construction Equipment

Equipment	Approximate Velocity[1] Level at 25 Feet (VdB)	Approximate PPV at 25 Feet (in/sec)
Pile Driver (impact) Upper Range	112	1.518
Pile Driver (impact) Lower Range	104	0.644
Pile Driver (sonic) Upper Range	105	0.734
Pile Driver (sonic) Lower Range	93	0.170
Large Bulldozer	87	0.089
Caisson Drilling	87	0.089
Jackhammer	79	0.035
Small Bulldozer	58	0.003
Loaded Trucks	86	0.076
Vibration Thresholds	**VdB Limit**	**PPV Limit (in/sec)**
FTA Criteria: Human Annoyance (Daytime/Nighttime)	78/72	—
FTA Criteria: Structural Damage	—	0.200

Source: FTA 2006.
[1] RMS velocity calculated from vibration level (VdB) using the reference of 1 microinch/second.

As shown in Table 5.8-17, vibration generated by construction equipment has the potential to be substantial, since it has the potential to exceed the FTA criteria of 78 VdB for human annoyance and 0.200 in/sec for structural damage. However, groundborne vibration is almost never annoying to people who are outdoors, so it is usually evaluated in terms of indoor receivers (FTA 2006). Construction details and equipment for individual development projects are not known at this time. Vibration impacts may occur from construction equipment associated with development in accordance with the implementation of the Specific Plan. Therefore, construction vibration impacts are considered potentially significant.

Roadway-Related Vibration Impacts

Operation of new commercial land uses could generate additional truck trips over existing conditions, which could potentially generate various levels of vibration along the traveled roadways. Additionally, truck trips could also be generated during construction of new development projects in the Specific Plan area. Caltrans has studied the effects of vehicle vibration on sensitive land uses and notes that "heavy trucks, and quite frequently buses, generate the highest earth borne vibrations of normal traffic" (Caltrans 2002). Caltrans also notes that the highest traffic-generated vibration is along freeways and state routes and finds that "vibrations measured on freeway shoulders (five meters from the centerline of the nearest lane) have never exceeded 2.0 mm/s per second, with the worst combinations of heavy trucks" (Caltrans 2002). Further, trucks do not typically generate high levels of vibration because they travel on rubber wheels and do not have vertical movement, which generates ground vibration (Caltrans 2002). Given these observations and guidance notes

from Caltrans, trucks travelling on roadways in the Specific Plan area are not expected to generate excessive vibration. Therefore, there would be no impact due to roadway-related vibration.

Other Operations Vibration Impacts

Light industrial and commercial operations can possibly generate varying degrees of ground vibration, depending on the operational procedures and equipment. Specific project-level information is not available at this time for individual development projects that would be accommodated by the Specific Plan. However, project-specific operational vibration levels would be required to meet applicable Los Angeles County and FTA criteria, as provided under 'Vibration Standards' in Section 5.8.1.3 above. Through the enforcement of these applicable criteria, vibration potentially generated by these types of proposed land uses would not result in levels of vibration that would cause annoyance or architectural damage. Therefore, operations-related vibration impacts associated with implementation of the Specific Plan would be less than significant.

Level of Significance before Mitigation: Upon implementation of regulatory requirements, Impact 5.8-3 would be potentially significant.

Impact 5.8-4: The proximity of the project site to an airport or airstrip would result in exposure of future resident and/or workers to airport-related noise. [Thresholds N-5 and N-6]

Impact Analysis: As stated above under *Existing Conditions*, the Specific Plan area is less than a mile east of the Hawthorne Municipal Airport and less than four miles east of the Los Angeles International Airport (Airnav 2017). However, based on the airport-related noise contour maps provided by each jurisdiction, the entire planning area is outside of the 65 dBA CNEL noise contours for each of the airports (Los Angeles World Airports 2017; Hawthorne 2014). While operations at these airport facilities may, at times, be audible within the planning area, aircraft flyovers are expected to be limited and sporadic. Additionally, there are no major private airport or heliport facilities within two miles of the Specific Plan area. Aircraft noise contributes negligible amounts of community noise to the Specific Plan area. Aircraft noise around the Specific Plan area would not be modified with implementation of the Specific Plan.

Level of Significance before Mitigation: Upon implementation of regulatory requirements, Impact 5.8-4 would be less than significant.

5.8.5 Cumulative Impacts

Cumulative noise impacts occur when multiple sources of noise, though individually not substantial, combine to result in excessive, cumulative noise exposure at noise-sensitive uses.

Short-Term Construction Noise and Vibration

Cumulative construction noise impacts have the potential to occur when multiple construction projects in the same general area generate noise within the same time frame and contribute to increases in the ambient noise environment. The details of individual development projects within the approximately 20-year buildout period for the Specific Plan area are currently unknown. Therefore, it cannot be determined whether multiple,

close-proximity projects within the Specific Plan area will be developed simultaneously or what the extent of their potential noise and vibration emissions might be. Therefore, cumulative impacts related to construction-generated noise levels would be potentially significant.

Long-Term Operation

To estimate the Specific Plan's contribution to traffic noise, existing noise levels were compared to those projected with buildout of the Specific Plan. As demonstrated under Impact 5.8-2, the Specific Plan's contribution to increases in ambient noise levels over the 20-year buildout period would be less than significant, even when accounting for traffic increases forecast within the Specific Plan area.

5.8.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.8-2 and 5.8-4

Without mitigation, the following impacts would be **potentially significant**:

- Impact 5.8-1 Construction activities would result in temporary noise increases in the vicinity of the project.
- Impact 5.8-3 The project would create short-term groundborne vibration and groundborne noise

5.8.7 Mitigation Measures

Impact 5.8-1

N-1 Prior to the issuance of demolition, grading and/or construction permits, applicants for individual development projects within 500 feet of noise-sensitive receptors (e.g., residences, hospitals, schools) shall conduct a project-level construction noise analysis to evaluate potential impacts on sensitive receptors. The analysis shall be conducted once the final construction equipment list that will be used for demolition and grading activities is determined. The project-level noise analysis shall be prepared, reviewed, and approved by the County of Los Angeles, City of Los Angeles, and/or City of Hawthorne, as applicable. If the analysis determines that demolition and construction activities would result in an impact to identified noise-sensitive receptors, then specific measures to attenuate the noise impact shall be outlined in the analysis and reviewed and approved by the County. Specific measures may include, but are not limited to, the following best management practices:

- Post a construction site notice near the construction site access point or in an area that is clearly visible to the public. The notice shall include the: job site address; permit number, name, and phone number of the contractor and owner; dates and duration of construction activities; construction hours allowed; and the County of Los Angeles and

construction contractor phone numbers where noise complaints can be reported and logged.

- Consider the installation of temporary sound barriers for construction activities immediately adjacent to occupied noise-sensitive structures.
- Restrict haul routes and construction-related traffic to the least noise-sensitive times of the day.
- Reduce nonessential idling of construction equipment to no more than five minutes.
- Ensure that all construction equipment is monitored and properly maintained in accordance with the manufacturer's recommendations to minimize noise.
- Fit all construction equipment with properly-operating mufflers, air intake silencers, and engine shrouds, no less effective than as originally equipped by the manufacturer, to minimize noise emissions.
- If construction equipment is equipped with back-up alarm shut offs, switch off back-up alarms and replace with human spotters, as feasible.
- Stationary equipment (such as generators and air compressors) and equipment maintenance and staging areas shall be located as far from existing noise-sensitive land uses as feasible.
- To the extent feasible, use acoustic enclosures, shields, or shrouds for stationary equipment such as compressors and pumps.
- Shut off generators when they are not needed.
- Coordinate deliveries to reduce the potential of trucks waiting to unload and idling for long periods of time.
- Grade surface irregularities on construction sites to prevent potholes from causing vehicular noise.
- Minimize the use of impact devices such as jackhammers, pavement breakers, and hoe rams. Where possible, use concrete crushers or pavement saws rather than hoe rams for tasks such as concrete or asphalt demolition and removal.

The final noise-reduction measures to be implemented shall be determined by the project-level construction noise analysis. The final noise-reduction measures shall be included on all construction and building documents and/or construction management plans and submitted for verification to the County of Los Angeles; implemented by the construction contractor through the duration of the construction phase; and discussed at the predemolition, pregrade, and/or preconstruction meetings.

Impact 5.8-3

N-2 Prior to issuance of grading and construction permits, applicants for individual development projects that involve vibration-intensive construction activities—such as pile drivers, jack hammers, and vibratory rollers—within 100 feet of off-site, vibration-sensitive receptors (e.g., residences, schools, medical facilities, and houses of worship) and/or structures (e.g., historical buildings, audio/video recording studios, and laboratory facilities), shall prepare and submit to the County of Los Angeles an acoustical study to evaluate potential construction-related vibration damage impacts. The vibration assessment shall be prepared by a qualified acoustical engineer and be based on the Los Angeles County vibration perception threshold and the Federal Transit Administration (FTA) vibration-induced architectural damage criterion. If the acoustical study determines a potential exceedance of the applicable thresholds, measures shall be identified that ensure vibration levels are reduced to below the thresholds. Measures to reduce vibration levels can include use of less-vibration-intensive equipment (e.g., drilled piles and static rollers) and/or construction techniques (e.g., nonexplosive rock blasting and use of hand tools) and preparation of a preconstruction survey report to assess the preconstruction, existing conditions of the potentially affected sensitive receptor or structure. Identified measures shall be included on all construction and building documents and submitted for verification to the County.

5.8.8 Level of Significance After Mitigation

Impact 5.8-1

With implementation of Mitigation Measure N-1, construction noise impacts due to construction activities would be reduced to the extent feasible. However, feasible mitigation may not be effective at reducing construction-generated noise received at sensitive receptors to levels below the County Code thresholds throughout all periods of construction and at all receptors. Given the expected noise levels and the length of the construction activities, significant construction noise impacts would remain. Impact 5.8-1 would remain ***significant and unavoidable***.

Impact 5.8-3

With the implementation of Mitigation Measure N-2, which would place limitations on certain equipment and/or their use at certain distances, construction vibration impacts would be reduced to less than significant after mitigation.

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5.9 POPULATION AND HOUSING

This section of the Draft Environmental Impact Report (DEIR) examines the potential for socioeconomic impacts of the proposed Connect Southwest LA project in the County of Los Angeles, including changes in population, employment, and housing.

5.9.1 Environmental Setting

5.9.1.1 RELEVANT PROGRAMS AND REGULATIONS

State

California Housing Element Law

California planning and zoning law requires each city and county to adopt a general plan for future growth (California Government Code § 65300). This plan must include a housing element that identifies housing needs for all economic segments and provides opportunities for housing development to meet that need. At the state level, the Housing and Community Development Department (HCD) estimates each county's share of California's projected population growth based on California Department of Finance population projections and historical growth trends. These figures are compiled by HCD in a Regional Housing Needs Assessment (RHNA) for each region of California. Where there is a regional council of governments, the HCD provides the RHNA to the council. The council of governments then assigns a share of the regional housing need to each of its cities and counties, and HCD oversees the process. The process of assigning shares gives cities and counties the opportunity to comment on the proposed allocations.

State law recognizes the vital role local governments play in the supply and affordability of housing. To that end, California Government Code requires that the housing element achieve legislative goals to:

- Identify adequate sites to facilitate and encourage the development, maintenance, and improvement of housing for households of all economic levels, including persons with disabilities.
- Remove, as legally feasible and appropriate, governmental constraints to the production, maintenance, and improvement of housing for persons of all incomes, including those with disabilities.
- Assist in the development of adequate housing to meet the needs of low- and moderate-income households.
- Conserve and improve the condition of housing and neighborhoods, including existing affordable housing. Promote housing opportunities for all persons regardless of race, religion, sex, marital status, ancestry, national origin, color, familial status, or disability.
- Preserve for lower income households the publicly assisted multifamily housing developments in each community.

California housing element laws (California Government Code §§ 65580–65589) require that each city and county identify and analyze existing and projected housing needs within its jurisdiction and prepare goals, policies, and programs to further the development, improvement, and preservation of housing for all economic segments of the community, commensurate with local housing needs.

Regional

Southern California Association of Governments

The Southern California Association of Governments (SCAG) represents Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. It is a regional planning agency and serves as a forum for addressing regional issues concerning transportation, the economy, community development, and the environment.

Regional Transportation Plan/Sustainable Communities Strategy

The 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) was adopted in April 2016 (SCAG 2016). Major themes in the 2016 RTP/SCS include integrating strategies for land use and transportation; striving for sustainability; protecting and preserving existing transportation infrastructure; increasing capacity through improved systems managements; providing more transportation choices; leveraging technology; responding to demographic and housing market changes; supporting commerce, economic growth, and opportunity; promoting the links between public health, environmental protection, and economic opportunity; and incorporating the principles of social equity and environmental justice into the plan.

Local

Los Angeles County Housing Element

The Los Angeles County 2014-2021 Housing Element was adopted by the County Board of Supervisors of February 4, 2014, and certified by HCD on April 30, 2014. The housing element serves as a policy guide to address the comprehensive housing needs of the unincorporated County areas. The primary focus is to ensure decent, safe, sanitary, and affordable housing for current and future residents, including those with special needs.

5.9.1.2 EXISTING CONDITIONS

Population

The estimated and forecast populations of the County's Metro Planning Area and unincorporated areas are detailed in Table 5.9-1. As shown, the Metro Planning Area is anticipated to grow slightly faster than the total unincorporated County.

Table 5.9-1 Population Estimates and Forecasts

Area	Population			Population Change, 2013-2035 [2012-2040]	Percent Change, 2013-2035 [2012-2040]
	2013 [2012]	2016[3]	2035 [2040]		
Metro Planning Area[1]	235,990	--	301,073	65,083	27.6%
Unincorporated Los Angeles County[2]	[1,040,700]	1,051,989	[1,273,700]	[233,000]	[22.4%]

Sources:
1 Los Angeles County General Plan Update Draft EIR, June 2014.
2 SCAG 2016.
3 DOF 2016.

The communities of West Athens and Westmont are census designated places; therefore, SCAG does not provide population estimates or projections. However, according to the U.S. 2010 Census, the communities of West Athens and Westmont had populations of 8,729 and 31,853, respectively (Census 2010a). American Community Survey 5-Year Estimates from 2011 to 2015 estimate the populations to now be approximately 8,320 residents in West Athens and 32,566 residents in Westmont, totaling 40,886 residents (Census 2015). Collectively, the population in West Athens and Westmont has remained static with an increase of only 304 residents in five years. However, the according to other sources of population data, the communities of West Athens and Westmont showed -5.34 and -2.49 percent population growth from 2000 to 2014, respectively (USA 2014a, 2014b).

Currently, the population of the Specific Plan area, which spans portions of both West Athens and Westmont, is estimated to be approximately 11,158 residents.

Housing

Estimated and forecast housing units in the Metro Planning Area and unincorporated County are detailed in Table 5.9-2.

Table 5.9-2 Housing Estimates and Forecasts

Area	Housing Units			Housing Change, 2013-2035 [2012-2040]	Percent Change, 2013-2035 [2012-2040]
	2012 [2013]	2016[3]	2035 [2040]		
Metro Planning Area[1]	[73,068]	--	92,158	19,090	26.1%
Unincorporated Los Angeles County[2]	292,700	311,784	[392,400]	99,700	34.1%

Sources:
1 Los Angeles County General Plan Update Draft EIR, June 2014.
2 SCAG 2016.
3 DOF 2016.

Since the communities of West Athens and Westmont are census designated places, SCAG and the California Department of Finance do not provide housing estimates or projections for them. However, according to the U.S. 2010 Census, the communities of West Athens and Westmont had 2,691 and 10,588 housing units,

respectively (Census 2010a). The American Community Survey 2011-2015 5-Year Estimates now estimates approximately 2,779 units in West Athens and 11,082 units in Westmont, totaling 13,861 housing units (Census 2015). This represents an approximate increase of 582 units over five years.

Currently, there are approximately 3,457 housing units within the Specific Plan area.

Regional Housing Needs Assessment

The RHNA is mandated by state housing law as part of the periodic process of updating housing elements of local general plans. State law requires that housing elements identify RHNA targets set by HCD to encourage each jurisdiction in the state to provide its fair share of very low, low, moderate, and upper income housing. State law does not require the jurisdiction to build housing; rather, it requires cities and counties to adopt zoning regulations and standards that provide the opportunity for housing development. The RHNA does not promote growth, but provides a long-term outline for housing in the context of local and regional trends and housing production goals.

SCAG determines total housing need for each community in southern California based on three general factors: 1) the number of housing units needed to accommodate future population and employment growth; 2) the number of additional units needed to allow for housing vacancies; and 3) the number of very low, low, moderate, and above moderate income units needed in the community. Additional factors used to determine the RHNA include tenure, the average rate of units needed to replace housing units demolished, and other factors.

The County of Los Angeles' quantified objectives for construction, preservation, and financial assistance over the 2014-2021 planning period are shown in Table 5.9-3. The County is required to ensure that sufficient sites planned and zoned for housing are available to accommodate its need and to implement proactive programs that facilitate and encourage the production of housing commensurate with its housing needs.

Table 5.9-3 Quantified Objectives, Los Angeles County Housing Element 2014-2021

Program	Extremely Low (30% AMI and below)	Very Low (50% AMI and below)	Lower (80% AMI and below)	Moderate (120% AMI and below)	Above Moderate (120% AMI and below)	Total
RHNA	3,927	3,927	4,650	5,060	12,581	30,145
Section 8 Rental Assistance	1,560	2,340	0	0	0	3,900
Family Self Sufficiency	25	75	0	0	0	100
First 5 LA	560	0	0	0	0	560
New Construction Countywide						
- Affordable Rental Housing Construction	175	175	43	0	0	350
- AHOP	0	0	43	0	0	43
Homebuyer Assistance	0	200	425	425	0	1,050
Ownership Housing Rehabilitation	1,265	1,050	1,050	0	0	3,365
Public Housing Modernization	972	973	0	0	0	1,945
Preservation of At-Risk	24	662	263	0	0	949

Housing						
Total	8,508	9,402	6,474	5,485	12,581	42,407

Source: Los Angeles County House Element 2014-2021.
Notes: AMI= area mean income
In the absence of income data for extremely low income households, 50% of the very low income units are assumed to be extremely low-income.

Employment

Estimated and forecast jobs in the Metro Planning Area and unincorporated County are detailed in Table 5.9-4.

Table 5.9-4 Employment Estimates and Forecasts

Area	Jobs		Employment Change, 2013-2035 [2012-2040]	Percent Change, 2013-2035 [2012-2040]
	2012 [2013]	2035 [2040]		
Metro Planning Area[1]	[59,359]	100,906	41,547	70.0%
Unincorporated Los Angeles County[2]	222,900	[288,400]	65,500	29.4%

Sources:
[1] Los Angeles County General Plan Update Draft EIR, June 2014.
[2] SCAG 2016.

Since the communities of West Athens and Westmont are not incorporated cities, SCAG does not have estimated and forecast employment for the communities. However, Census data for 2010 estimate approximately 1,181 and 1,830 in West Athens and Westmont respectively (Census 2010b). Census data for 2014 estimate approximately 1,374 and 1,524 jobs in West Athens and Westmont, respectively (Census 2014). Collectively, the two communities had an approximate decrease of 113 jobs from 2010 to 2014.Overall, the two communities currently have about 2,898 jobs, of which the vast majority are within the Specific Plan area.

Currently, there are approximately 2,265 jobs within the Specific Plan area.

Jobs-Housing Balance

The jobs-housing ratio is a general measure of the total number of jobs and housing units in a defined geographic area, without regard to economic constraints or individual preferences. The balance of jobs and housing in an area—in terms of the total number of jobs and housing units as well as the type of jobs versus the price of housing—has implications for mobility, air quality, and the distribution of tax revenues. The jobs/housing ratio is one indicator of a project's effect on growth and quality of life in the project area. SCAG applies the jobs-housing ratio at the regional and subregional levels to analyze the fit between jobs, housing, and infrastructure. A major focus of SCAG's regional planning efforts has been to improve this balance. SCAG defines the jobs-housing balance as follows:

> Jobs and housing are in balance when an area has enough employment opportunities for most of the people who live there and enough housing opportunities for most of the people who work there. The region as a whole is, by definition, balanced…. Job-rich subregions

> have ratios greater than the regional average; housing-rich subregions have ratios lower than the regional average.
>
> Ideally, job-housing balance would… assure not only a numerical match of jobs and housing but also an economic match in type of jobs and housing.

Jobs-housing goals and ratios are advisory only. No ideal jobs-housing ratio is adopted in state, regional, or City policies. The American Planning Association (APA) is an authoritative resource for community planning best practices, including recommendations for assessing jobs-housing ratios. Although the APA recognizes that an ideal jobs-housing ratio will vary from jurisdiction to jurisdiction, its recommended target for an appropriate jobs-housing ratio is 1.5, with a recommended range of 1.3 to 1.7 (Weltz 2003).

Jobs-housing balance applies to regions and not to small geographic areas and/or small populations. The jobs-housing balance for the Specific Plan area, Metro Planning Area, and unincorporated Los Angeles County are detailed in Table 5.9-5. As shown, the jobs-housing ratio for the Specific Plan area would increase and improve from 0.66 to 1.15. The Metro Planning Area is anticipated to increase its jobs-housing ratio by 2035 while unincorporated Los Angeles County would slightly reduce its jobs-housing ratio by 2040.

Table 5.9-5 Jobs-Housing Balance

	Year	Employment	Households	Jobs-Housing Ratio
Specific Plan Area	2015	2,265	3,457	0.66
Metro Planning Area[1]	2013	59,359	73,068	0.81
	2035	100,906	92,158	1.09
Unincorporated Los Angeles County[2]	2012	222,900	292,700	0.76
	2040	288,400	392,400	0.73

[1] Los Angeles County General Plan Update Draft EIR, June 2014.
[2] SCAG 2016.

5.9.2 Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, a project would normally have a significant effect on the environment if the project would:

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

P-2 Displace substantial numbers of existing housing, especially affordable housing, necessitating the construction of replacement housing elsewhere.

P-3 Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

P-4 Cumulatively exceed official regional or local population projections.

5.9.3 Plans, Programs, and Policies

No project design features or regulatory requirements are applicable to population and housing.

5.9.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.9-1: The proposed project would introduce approximately 3,204 additional residents and 2,949 additional workers into the Specific Plan area. [Threshold P-1 and P-4]

Impact Analysis: Buildout of the Specific Plan area in accordance with the proposed zoning district would allow up to 1,061 additional residential units and 1,690,638 additional square feet of nonresidential development, and thereby introduce 3,204 additional residents and 2,949 additional workers.

Population Growth

Although population projections within the communities of West Athens and Westmont are not available, Table 5.9-1 details population projections for the Metro Planning Area and unincorporated Los Angeles County. The project's anticipated net population increase of 3,204 residents is well within both the forecast population growths for the Metro Planning Area for 2013 to 2035 (65,083 residents) and unincorporated Los Angeles County for 2012 to 2040 (233,000 residents)—representing only 4.9 and 1.4 percent of the forecast population increase, respectively. Therefore, population growth impacts of the proposed project would be less than significant.

Housing

Currently, the Specific Plan area has approximately 3,457 residential units. The proposed Specific Plan would allow development of up to 4,518 units or 1,061 additional units compared to existing conditions. Housing forecasts for the Metro Planning Area and unincorporated Los Angeles County are detailed in Table 5.9-2. As shown, the Metro Planning Area is anticipated to increase housing units between 2013 and 2035 by 19,090 units, and unincorporated Los Angeles County is anticipated to increase housing units between 2012 and 2040 by 99,700 units. The additional 1,061 housing units allowed under the Specific Plan would be within both housing forecasts for the Metro Planning Area and unincorporated Los Angeles County, representing only 5.6 and 1.1 percent of each area's increase, respectively. Thus, project impacts on housing would be less than significant as well.

Employment

Employment projections for the Metro Planning Area between 2013 and 2035 and for unincorporated Los Angeles County between 2012 and 2040 are approximately 41,547 and 65,500 jobs, respectively (see Table 5.9-4). The Specific Plan is expected to generate 2,949 additional jobs from development of up to 1,690,638 additional square feet of nonresidential development. Therefore, the proposed project represents 7.1 and 4.5

percent of the projected employment increases in the Metro Planning Area and unincorporated Los Angeles County, respectively. Project impacts to employment growth would be less than significant.

Jobs-Housing Balance

Development of the proposed project would introduce 2,949 additional employees and 1,061 additional dwelling units in the Specific Plan area. Table 5.9-6 compares the jobs-housing balance of the Specific Plan area under existing conditions to project buildout by 2035. As shown, buildout of the proposed project would improve the Specific Plan area's jobs-housing balance by increasing it from 0.66 to 1.15.

Table 5.9-6 Jobs-Housing Balance in the Specific Plan Area

	Existing Conditions (2015)	Project Buildout (2035)
Jobs	2,265	5,214
Households	3,457	4,518
Jobs-Housing Balance	0.66	1.15

More typically, jobs-housing balance applies to regions and not to small geographic areas and/or small populations (i.e., the Specific Plan area). Thus, as detailed in Table 5.9-7, the jobs-housing ratio in the Metro Planning Area in 2035 would increase from 1.09 to 1.11 with buildout of the proposed project. This is a slightly favorable impact. Therefore, no adverse impact on jobs-housing balance would occur.

Table 5.9-7 Project Impacts on Jobs-Housing Balance

	Metro Planning Area Buildout	Specific Plan Buildout Net Increase	Metro Planning Area + Specific Plan Buildout
Jobs	100,906	2,949	103,855
Households	92,158	1,061	93,219
Jobs-Housing Balance	1.09	--	1.11

Source: Los Angeles County Department of Regional Planning. 2014. Los Angeles County General Plan Update Draft EIR.
[1] Numbers of households is estimated based on estimated/forecast dwelling units and the estimated 4.7 percent vacancy rate in 2012 in the South Bay Cities Subregion.
[2] Based on net increase of 2,271 housing units and a 3.5-percent vacancy rate in West Carson obtained from the 2010 US Census.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.9-1 would be less than significant.

Impact 5.9-2: Implementation of the Specific Plan would not result in displacing substantial numbers of people or housing. [Threshold P-2 and P-3]

Impact Analysis: The proposed Specific Plan would change the General Plan designations and zoning onsite to increase residential and nonresidential development. Future projects in accordance with the Specific Plan may redevelop properties by demolishing homes or structures. However, Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont is a planning document used to guide future development in the project area and would not implement any individual development project. Redevelopment would add

housing to the project area. Therefore, implementation of the Specific Plan would not significantly displace people or housing. Overall, buildout of the proposed project would increase residential development by 1,061 units and nonresidential development by 1,690,638 square feet. Thus, impacts would be less than significant.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.9-2 would be less than significant.

5.9.5 Cumulative Impacts

Future development projects associated with buildout of the County's 2035 General Plan would include the development of residential and nonresidential uses in unincorporated Los Angeles County. SCAG projections for net increases in population, housing, and employment between 2012 and 2040 are discussed above in Section 5.9.2, *Existing Conditions*. Compared to SCAG's 2040 population projection for unincorporated Los Angeles County, net buildout of the proposed project would represent only 0.3 percent of the projected population (1,273,700 residents), 0.3 percent of the projected housing (392,400 homes), and 1.0 percent of the projected employment (288,400 jobs).

The proposed project is small within the context of unincorporated Los Angeles County and would nominally change the SCAG-projected jobs-housing ratio from 0.73 to 0.74 by 2040. In consideration of the preceding factors, the project's contribution to cumulative population growth impacts would be less than significant, and project impacts would not be cumulatively considerable.

5.9.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.9-1 and 5.9-2.

5.9.7 Mitigation Measures

No mitigation measures are required.

5.9.8 Level of Significance After Mitigation

Impacts would be less than significant.

5.9.9 References

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5.10 PUBLIC SERVICES

This section of the Draft Environmental Impact Report (DEIR) addresses the potential for implementation of the proposed Connect Southwest LA project to impact public services providing fire protection and emergency services, police protection, school services, and library services. Park services are addressed in Section 5.11, *Recreation*. Public and private utilities and service systems, including water, wastewater, and solid waste services and systems, are addressed in Section 5.14, *Utilities and Service Systems*.

The information in this section is based partly on responses to service provider questionnaires, included as Appendix G of this DEIR.

5.10.1 Fire Protection and Emergency Services

5.10.1.1 ENVIRONMENTAL SETTING

Relevant Programs and Regulations

State

California Fire Code

The California Fire Code (CFC) comprises Part 9 of Title 24 of the California Code of Regulations. The CFC is updated on a three-year cycle; the 2016 CFC took effect on January 1, 2017. Fire flow requirements are in CFC Appendix B, Table B105.1. Fire hydrant location and distribution requirements are in CFC Appendix C.

California Building Code

The California Building Code comprises Title 24, California Code of Regulations, Part 2. The CBC is updated on the same cycle as the CFC. Hospitals are classified by the CBC as essential facilities, defined as "Buildings and other structures that are intended to remain operational in the event of extreme environmental loading from flood, wind, snow or earthquakes."

Existing Conditions

Fire Stations, Staffing, and Apparatus

The Los Angeles County Fire Department (LACoFD) provides fire protection and emergency medical services to the communities of West Athens and Westmont. The nearest LACoFD station to the project site is Station 14 at 1401 W. 108th Street, Los Angeles, approximately 0.2 miles north of the project site's northern boundary (see Table 5.10-1).

Table 5.10-1 Fire Stations Serving the Project Site

Station and Address	Equipment	Daily Staffing	Distance to Project Site Boundary (miles)
Station #14 1401 West 108th Street, Los Angeles	1 four-person paramedic engine 1 two-person paramedic squad	6	0.2
Station #162 12151 Crenshaw Boulevard, Hawthorne	1 three-person engine	3	0.8
Station #170 10701 South Crenshaw Boulevard, Inglewood	1 four-person truck 1 two-person engine (respond in tandem as Light Force)	6	0.8
Station #159 2030 West 135th Street, Gardena	1 three-person assessment engine (an engine company with limited paramedic capability)	3	1.1

Source: Takeshita 2017.

LACoFD has no plans to build new or expanded fire stations that would serve the project area. Current stations, equipment, and facilities are considered adequate (Takeshita 2017).

Response Times

LACoFD's response time goals in urban areas are five minutes or less for the first responding unit for fire and emergency medical responses, and eight minutes or less for the advanced life support (paramedic) unit.

Actual average response times to emergencies from the four nearest fire stations in 2016 were (Takeshita 2017):

- Station 14: 4:19 minutes
- Station 162: 5:06 minutes
- Station 170: 4:18 minutes
- Station 159: 5:14 minutes

Funding

The majority of the LACoFD's operational budget is funded by property taxes and charges for services. LACoFD charges a special tax added to annual property tax bills.[1] The special tax rates are based on land use types (i.e., single-family residential, multifamily residential, commercial/industrial, and high rise).

[1] Special Tax rates per parcel for 2016-17 include:
Single-family residential: $65.08
Multi-family residential, 3 stories or less: $82.20 per unit + 0.0083 per square foot over 1,555 square feet
Commercial/Industrial, 3 stories or less: $78.76 + 0.053 per square foot over 1,555 square feet
Four stories or higher (most land uses): $95.87 + 0.0648 per square foot over 1,555 square feet (LACoFD 2017).

5.10.1.2 THRESHOLDS OF SIGNIFICANCE

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, a project would normally have a significant effect on the environment if the project would:

FP-1 Create capacity or service level problems, or result in substantial adverse physical impacts associated with the provisions of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services.

5.10.1.3 PLANS, PROGRAMS, AND POLICIES

Regulatory Requirements

RR PS-1 The proposed project will be designed and constructed in accordance with the County of Los Angeles Fire Code (Los Angeles County Code, Title 32), which incorporates by adoption the 2016 California Fire Code, and the regulations of the Los Angeles County Fire Department, which include standards for building construction that would reduce the creation of fire hazards and facilitate emergency response.

5.10.1.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.10-1: The proposed project would introduce new residents, workers, and structures into the Los Angeles County Fire Department's service boundaries, thereby increasing demands on fire protection facilities and personnel. [Threshold FP-1]

Impact Analysis: Specific Plan buildout would allow development of up to 1,061 additional residential units and approximately 1.7 million additional square feet of nonresidential development. The increase in residential and nonresidential development is expected to increase typical fire and emergency service calls and may lead to the need for new or expanded fire stations, additional equipment, and additional personnel in order to maintain adequate response times.

LACoFD's response time goals in urban areas are five minutes or less for the first responding unit for fire and emergency medical responses, and eight minutes or less for paramedic responses. The closest responding unit to the project site would be Station 14, about 0.2 miles north of the project site's northern boundary. The average response time for Station 14 in 2016 was 4:19 minutes. Station 162 is second closest to the project site's boundary and had an average response time of 5:06 minutes. Thus, the two closest fire stations are meeting LACoFD's average response time goals for fire and paramedic responses.

LACoFD states that development in accordance with the proposed project could be served with current firefighting resources in the project area, and that no new or expanded fire stations or increases in staff or equipment would be required (Takeshita 2017).

Development in accordance with the Specific Plan would also be required to pay the special tax added to annual property tax bills, which would contribute towards proportionally increasing LACoFD's operational budget.

Additionally, during the County's development review and permitting process, LACoFD would review and approve individual development projects to ensure that adequate facilities, infrastructure, and access are provided to serve the needs of LACoFD. Specific fire and life-safety requirements for the construction phase of future development projects that would be accommodated under the proposed project would be addressed at the building and fire plan check review stage for each development project. Further, all development projects would be required to comply with the most current adopted fire codes, building codes, and nationally recognized fire and life safety standards of Los Angeles County and the State of California per regulatory requirement RR PS-1.

Level of Significance before Mitigation: Upon implementation of regulatory requirement RR PS-1, Impact 5.10-1 would be less than significant.

5.10.1.5 CUMULATIVE IMPACTS

LACoFD serves 58 cities in addition to unincorporated areas of the County. The department's service area is divided into 22 battalions organized into 9 divisions. The area considered for cumulative impacts is LACoFD's Divisions I and VI. Division I, consisting of Battalions 7, 14, and 18, serves 9 incorporated cities and all unincorporated areas in a region west of the I-710 and almost entirely south of the I-105, plus Santa Catalina Island. Division VI, consisting of Battalions 14 and 20, serves six incorporated cities and unincorporated areas in an area stretching from the City of Inglewood on the west to the City of South Gate on the east (LACoFD 2012).

Future cumulative projects in the service area of Divisions I and VI would increase residential and nonresidential uses in accordance with the County General Plan, thus increasing demands for fire protection and emergency medical services. Such demands would create needs for additional equipment and staffing and could require construction of new or expanded fire stations. Increased property and sales tax from future new developments would increase the County's General Funds in rough proportions, providing funding for capital improvements necessary to maintain adequate fire protection facilities, equipment, and/or personnel. By maintaining a consistent level of service through expansion or facility improvements, LACoFD would be able to ensure that its performance objectives are consistently met. Furthermore, as with the proposed Specific Plan, individual development projects pursuant to the County's General Plan would be reviewed by the County and LACoFD and would be required to comply with the requirements in effect at the time building permits are issued, including the payment of developer impact fees. Regulatory requirement RR PS-1 also applies to future projects and would ensure projects are designed and constructed in accordance with the County of Los Angeles Fire Code and the regulations of the LACoFD.

Thus, the proposed project's increased demand for fire protection services, in conjunction with the increased demand for cumulative development pursuant to the County's General Plan, would not result in significant cumulative impacts.

5.10.1.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, Impact 5.10-1 would be less than significant.

5.10.1.7 MITIGATION MEASURES

No mitigation measures are required.

5.10.1.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.10.2 Police Protection

5.10.2.1 ENVIRONMENTAL SETTING

Existing Conditions

The Los Angeles County Sheriff's Department (LASD) provides police protection to the communities of West Athens and Westmont. The project site is in the service area of LASD Central Patrol Division's South Los Angeles Station at 1310 W. Imperial Highway, Los Angeles, within the Specific Plan area.

Patrol Operations – South Los Angeles Station

The Central Patrol Division serves several unincorporated communities and incorporated cities stretching east to west across much of central Los Angeles County—from the Community of Marina Del Rey on the west to the Community of East Los Angeles and the City of Commerce on the east—in addition to Santa Catalina Island. Patrol services are based from six stations, five on the mainland and one on Santa Catalina Island.

Located within the project site, the South Los Angeles Station serves the communities of West Athens, Del Aire, Lennox, and Alondra Park, in addition to the City of Lawndale (LASD 2014). South Los Angeles Station staff consists of 156 sworn officers and 51 civilian employees. Approximately 6 officers per shift patrol the West Athens-Westmont community.

Response Times

Response times for the South Los Angeles Station are shown in Table 5.10-2. As demonstrated, LASD is currently meeting its response time goals.

Table 5.10-2 LASD South Los Angeles Station Response Times

	Response Time Goal (minutes)	Actual Response Time (minutes)
Emergency	7	3–5
Priority	12	6.3–9.3
Routine	55	30.5–40

Source: Strong 2017.

Mutual Aid and Funding

Los Angeles County has mutual aid agreements with nearby cities including Los Angeles, Torrance, and Gardena. The Los Angeles County Sheriff is the mutual aid coordinator for the Los Angeles County Operational Area.

Patrol operations in unincorporated areas of Los Angeles County are mostly funded through State Proposition 172 public safety funds, which in turn are financed by a 0.5-cent state sales tax (County 2016).

5.10.2.2 THRESHOLDS OF SIGNIFICANCE

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, a project would normally have a significant effect on the environment if the project would:

PP-1 Create capacity or service level problems, or result in substantial adverse physical impacts associated with the provisions of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for police protection services.

5.10.2.3 PLANS, PROGRAMS, AND POLICIES

Regulatory Requirements

No regulatory requirements apply to police protection services.

5.10.2.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.10-2: The proposed project would introduce new residents, workers, and structures into the Los Angeles County Sheriff's Department service boundaries, thereby increasing the demand on police protection facilities and personnel. [Threshold PP-1]

Impact Analysis: Specific Plan buildout would allow up to 1,061 additional residential units and approximately 1.7 million square feet of additional nonresidential development. Project buildout would thus increase demands for police protection, causing increased response times. Improvements to transit

infrastructure encouraged by the Specific Plan could also potentially require additional law enforcement services provided by LASD's Transit Services Bureau (Bateman 2017). To accommodate the increase in demand, LASD would be required to hire additional police officers and administrative staff to ensure response times are not adversely impacted. For planning purposes, LASD uses the generally accepted law enforcement service ratio of one patrol deputy per one 1,000 residents. Applying this service ratio, LASD calculates that buildout of the Specific Plan would require approximately six additional deputies and three two-person cars (Tardy 2017). However, LASD estimates that approximately 9.79 sworn officers would be required to staff three 2-person patrol cars to meet the demands of the proposed project (Strong 2017).

Operational funding for the LASD is derived from various types of tax revenue (property taxes, sales taxes, user taxes, vehicle license fees, deed transfer fees, etc.), which are deposited in the County's General Fund. The County Board of Supervisors then allocates the revenue for various County-provided public services, including LASD's services. As future development occurs, tax revenues from property and sales taxes would be generated and deposited in the County's General Fund and the State Treasury. A portion of these revenues would be allocated to the LASD during the County's annual budgeting process to ensure adequate staffing and equipment are provided to adequately serve project-related increases in service-call demands.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.10-2 would be less than significant.

5.10.2.5 CUMULATIVE IMPACTS

LASD's patrol operations are based from 23 patrol stations in four divisions. The area considered for cumulative impacts is the Central Patrol Division, which extends from Marina Del Rey east to East Los Angeles and includes Santa Catalina Island. The Central Patrol Division operates out of six stations—from west to east these are Marina Del Rey, South Los Angeles, Century, Compton, and East Los Angeles, and Avalon on Santa Catalina Island.

The Central Patrol Division provides patrol services in seven incorporated cities and all unincorporated areas in the division's service area (LASD 2014, 2017). Other projects in the division's service area would develop residential units and nonresidential building area, thus increasing demands for police protection. Other projects would also generate additional funding available for LASD operations, including Proposition 172 public safety funds supported by sales taxes. Patrol operations in incorporated cities are funded from sources including sales taxes and property taxes. Cumulative impacts would be less than significant, and project impacts would not be cumulatively considerable.

5.10.2.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, Impact 5.10-2 would be less than significant.

5.10.2.7 MITIGATION MEASURES

No mitigation is needed.

5.10.2.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.10.3 School Services

5.10.3.1 ENVIRONMENTAL SETTING

Relevant Programs and Regulations

State

California State Assembly Bill 2926: School Facilities Act of 1986

To assist in providing school facilities to serve students generated by new development, Assembly Bill (AB) 2926 was enacted in 1986 and authorizes a levy of impact fees on new residential and commercial/industrial development. The bill was expanded and revised in 1987 through the passage of AB 1600, which added Sections 66000 et seq. to the Government Code. Under this statute, payment of impact fees by developers serves as CEQA mitigation to satisfy the impact of development on school facilities.

California Senate Bill 50

Senate Bill (SB 50) (California Government Code Section 65996, passed in 1998) provides a comprehensive school facilities financing and reform program and enables a statewide bond issue to be placed on the ballot. Under the provisions of SB 50, school districts are authorized to collect fees to offset the costs associated with increasing school capacity as a result of development and related population increases. The funding goes to acquiring school sites, constructing new school facilities, and modernizing existing school facilities. SB 50 establishes a process for determining the amount developers will be charged. According to Section 65996 of the California Government Code, development fees authorized by SB 50 are deemed "full and complete school facilities mitigation."

Under this legislation, there are three levels of developer fees that may be imposed upon new development by the governing school district. Level I fees are assessed based upon the proposed square footage of residential, commercial/industrial, and/or parking structure uses. Level II fees require the developer to provide one-half of the costs of accommodating students in new schools, and the state provides the remaining half. To qualify for Level II fees, the governing board of the school district must adopt a School Facilities Needs Analysis and meet other prerequisites in accordance with Section 65995.6 of the California Government Code. Level III fees apply if the state runs out of bond funds, allowing the governing school district to impose 100 percent of the cost of school facility or mitigation, minus any local dedicated school monies, on the developer.

Existing Conditions

The Los Angeles Unified School District (LAUSD) provides public K-12 education for the project site. LAUSD is organized into six local districts; the project site is near the southeast corner of Local District West. The project site is in the attendance areas of schools listed in Table 5.10-3. The elementary and high

schools serving the project site are schools for which adequacy of capacity is measured in terms of resident enrollment—that is, the total number of students living in the school's attendance area and who are eligible to attend the school plus students enrolled at any on-site magnet centers. The two middle schools serving the project site are charter schools that do not have defined attendance areas, and resident enrollments are not calculated for those schools. Therefore, in Table 5.10-3, capacity overage/(shortage) for the two charter schools is shown in terms of actual enrollment, not resident enrollment.

Table 5.10-3 LAUSD Schools Serving the Project Site: Enrollments and Capacities, 2016-2017

School and Address	Current Enrollment	Resident Enrollment	Maximum Capacity	Remaining Capacity
Elementary Schools				
West Athens Elementary School (K-5) 1110 W. 119th Street, West Athens	720	888	853	(35)
Cimarron Avenue Elementary School (K-5) 11559 Cimarron Avenue, City of Hawthorne	288	187	335	148
Century Park Elementary (K-5) 10935 S Spinning Avenue, City of Inglewood	312	377	338	(39)
Woodcrest Elementary School (K-5) 1151 W 109th Street, Los Angeles	836	1,021	909	(112)
Washington Primary Center (K-1) 860 W 112th Street, Los Angeles	146	147	168	21
Figueroa Street Elementary (2-5) 510 W 111th Street, Los Angeles	448	443	496	53
Subtotal	*2,750*	*3,063*	*3,099*	*36*
Middle Schools				
Animo Western Charter Middle School (6-8) 12226 S Western Avenue, West Athens	631	---	697	66
Animo Phillis Wheatley Charter Middle School (6-8) 12226 S Western Avenue, West Athens	597	---	666	69
Subtotal	*1,228*	*---*	*1,363*	*135*
High Schools				
George Washington Preparatory Senior High School (9-12) 10860 S Denker Avenue, West Athens	958	2,570	2,300	(270)
Subtotal	*958*	*2,570*	*2,300*	*(270)*

Source: Perez 2017.

SB 50 Developer Fees

LAUSD currently charges Level I developer fees under SB 50 of $3.48 per square foot for residential units (single family and multifamily) and $0.56 per square foot for commercial and industrial uses.

5.10.3.2 THRESHOLDS OF SIGNIFICANCE

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, a project would normally have a significant effect on the environment if the project would:

SS-1 Create capacity or service level problems, or result in substantial adverse physical impacts associated with the provisions of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for school services.

5.10.3.3 PLANS, PROGRAMS, AND POLICIES

RR PS-2 Pursuant to California Government Code Section 65995, the individual applicants shall pay developer fees to the appropriate school districts at the time building permits are issued; payment of the adopted fees would provide full and complete mitigation of school impacts. Alternatively, the applicant may enter into a school finance agreement with the school district(s) to address mitigation to school impacts in lieu of payment of developer fees. The agreement shall establish financing mechanisms for funding facilities to serve the students from the project. If the applicant and the affected school district(s) do not reach a mutually satisfying agreement, then project impacts would be subject to developer fees.

5.10.3.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.10-3: The proposed project would introduce 488 additional students into area schools of the Los Angeles Unified School District. [Threshold SS-1]

Impact Analysis: Specific Plan buildout would allow development of up to 1,061 additional residential units and about 1.7 million square feet of additional nonresidential land uses. The additional residential units are proposed mostly in the two mixed-use zones as multifamily units; thus, student generation factors for apartment units are utilized in Table 5.10-4. Overall, project buildout is estimated to generate approximately 488 students, consisting of 233 elementary school students, 106 middle school students, and 149 high school students (see Table 5.10-4).

Table 5.10-4 Estimated Project Student Generation

		Student Generation[1]							
		Elementary School (K-5)		Middle School (6-8)		High School (9-12)		Total	
Housing Unit Type	Net Increase	Generation Factor	Total	Generation Factor	Total	Generation Factor	Total	Generation Factor	Total
Apartment	1,061 units	0.22	233	0.10	106	0.14	149	0.46	488

[1] All student generation factors are from the City of Los Angeles CEQA Thresholds Guide (2006).

By adding the total number of students that would be generated at full project buildout to the existing facilities' student enrollment, the 233 additional elementary school students would exceed elementary school capacity by 197 students. The 106 additional middle school students would be adequately accommodated by the two Amino charter middle schools and have additional space for 29 future students. Lastly, the 149

additional high school students would exceed the student capacity at Washington High School by 419 students (see Table 5.10-5).

Table 5.10-5 LAUSD School Capacities at Project Buildout

School Level	Current/Resident Enrollment	Project Student Generation	Current Enrollment + Project Student Generation	Maximum Capacity	Remaining Capacity
Elementary	3,063	233	3,296	3,099	(197)
Middle	1,228	106	1,334	1,363	29
High	2,570	149	2,719	2,300	(419)

Sources: Perez 2017.

According to LAUSD, there are no schools planned in the project area to accommodate the additional elementary and high school students generated at buildout of the Specific Plan, and the data provided already takes into account portable classrooms onsite, additions being built onto existing schools, student permits and transfers, specific educational programs running at the schools, and any other operational activities or educational programming that affects the capacities and enrollments of LAUSD's schools (Perez 2017).

However, it should be noted that the exceedance in student capacity at West Athens, Century Park, and Woodcrest Elementary Schools and George Washington High School are based on resident enrollment (total number of students living in the school's attendance area and who are eligible to attend the school), not current enrollment. Utilizing "on the ground" current enrollment for the 2016-2017 student school year, the three elementary schools and one high school would not exceed their respective maximum student capacity. Instead, West Athens Elementary School would have 133 remaining seats, Century Park Elementary School would have 26 remaining seats, Woodcrest Elementary School would have 73 remaining seats, and George Washington High School would have 1,342 remaining seats. Thus, based on current student enrollment, the LAUSD schools serving the project site would be able to adequately serve the 488 additional students generated at buildout of the Specific Plan. Additionally, the projected student generation is based on buildout of the Specific Plan. Development is expected to occur incrementally over the next 20 plus years. Enrollment fluctuates over time as students graduate, thereby allowing additional capacity.

Additionally, SB 50 developer fees would be collected by LAUSD for every new residential development in the project area, which would contribute towards LAUSD's funds to construct new or expand existing school facilities.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.10-3 would be less than significant.

5.10.3.5 CUMULATIVE IMPACTS

The LAUSD is organized into six local districts. The area considered for cumulative impacts is Local District West, which extends from the City of Gardena on the south to Griffith Park and the Santa Monica Mountains in the north, and is bounded by the Pacific Ocean and District boundary on the west. LAUSD districtwide enrollment is forecast to decrease about 2 percent—that is, from about 650,000 to about

637,000—between 2014 and 2024 (LAUSD 2014). Enrollment forecasts for the West District are not available. However, the Westside Cities Subregion of Los Angeles County, which contains most of Local District West, is forecast to increase in population by 18.3 percent between 2004 and 2040 (LACMTA 2009), approximately the same as the County as a whole, which is forecast to increase by 17.3 percent between 2010 and 2040 (SCAG 2016). Thus, the West District enrollment trend between 2014 and 2024 is not expected to be substantially different than the 2 percent forecast decrease in districtwide enrollment.

As discussed above, under state law, development projects are required to pay established school impact fees in accordance with SB 50 at the time of building permit issuance. The funding program established by SB 50 has been found by the legislature to constitute "full and complete mitigation of the impacts of any legislative or adjudicative act…on the provision of adequate school facilities" (Government Code Section 65995[h]). Therefore, the increase in demand for school facilities and services due to cumulative development would be adequately mitigated to a less than significant level by the payment of SB 50 fees.

5.10.3.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, Impact 5.10-3 would be less than significant.

5.10.3.7 MITIGATION MEASURES

No mitigation measures are required.

5.10.3.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.10.4 Library Services

5.10.4.1 ENVIRONMENTAL SETTING

Relevant Programs and Regulations

Local

Los Angeles County Code Section 22.72.030

This section of the County Code establishes a library facilities mitigation fee to mitigate any significant adverse impacts of increased residential development upon public library facilities. The fee is applicable to all new residential developments in the unincorporated County areas and is based on the estimated cost of providing library services in each library planning area. The project area is in the Southwest Planning Area (Planning Area 6), which has a current mitigation fee of $916 per dwelling unit. The mitigation fees are reviewed annually by the County librarian, in consultation with the County auditor-controller.

Existing Conditions

The Los Angeles County Public Library (LACPL) operates 87 community libraries serving unincorporated areas of Los Angeles County, including the communities of West Athens and Westmont, as well as 49 incorporated cities. Overall, the LACPL serves 3.5 million residents in a service area of more than 3,000 square miles (LACPL 2017). The LACPL is a member of the Southern California Library Cooperative, a consortium of 38 independent city, county, and special district public libraries in Los Angeles and Ventura counties that cooperate in providing library service to the residents of all participating jurisdictions.

The closest LACPL library to the project site is the Woodcrest Library at 1340 West 106th Street in West Athens. The Woodcrest Library is approximately 7,254 square feet and has 12 public computers and children and teen services. The Woodcrest Library's collection comprises 30,304 items and is open six days per week, Monday through Saturday.

Service Standards

The LACPL uses the following library service level guidelines to determine adequacy of library services:

- Building size: 0.5 gross square foot per capita
- Land: two gross square foot per capita
- Collection: 2.75 items per capita
- Computer: 1 computer per 1,000 capita

Based on LACPL's service level guidelines, the Woodcrest Library has a 13,613 square foot facility size deficit, 114,766 collection items deficit, and a 30 computer deficit (Munoz 2017).

Funding

LACPL is a special fund department under the jurisdiction of the County Board of Supervisors. The LACPL system is financed primarily by a dedicated share of property tax from its service areas; other revenues include a general fund contribution, a parcel tax, grants, and fees. The project site is subject to the county library's special tax rate of $30.97 per parcel for FY 2017-18. The special tax may increase annually on July 1. The county library's special tax currently affects the unincorporated areas, excluding the unincorporated area in the Altadena Library District, the Palos Verdes Library District, and 10 cities served by the county library.

LA County Mitigation Fees

In addition, LACPL collects a one-time library facilities mitigation fee on new construction in unincorporated Los Angeles County to help offset demand for library services due to population growth. The project area is in the Southwest Planning Area (Planning Area 6). The current fee for the LACPL Southwest Planning Area is $916 per new residential unit in FY 2017-18.

5.10.4.2 THRESHOLDS OF SIGNIFICANCE

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, a project would normally have a significant effect on the environment if the project would:

LS-1 Create capacity or service level problems, or result in substantial adverse physical impacts associated with the provisions of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for library services.

5.10.4.3 PLANS, PROGRAMS, AND POLICIES

RR PS-3 The County applies a library facilities mitigation fee to new residential developments in the unincorporated areas. This fee is intended to mitigate the significant adverse impacts of increased residential development on the Los Angeles County Library System. The library facilities mitigation fee is based on the estimated cost of providing the projected library facility needs in each library planning area, defined in Section 22.72.030 of the County's Zoning Code. There are seven library planning areas—the project area falls in the Southwest Planning Area. The current mitigation fee for the Southwest Library Planning Area is $916 per dwelling unit.

5.10.4.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.10-4: The proposed project would not substantially increase demand for services at local libraries maintained by the Los Angeles County Public Library. [Threshold LS-1]

Impact Analysis: The proposed Specific Plan would allow development of up to 1,061 additional residential units. This would introduce up to 3,204 additional residents in the project area.

The increase in residents within the project area may increase demands for library services provided at the Woodcrest Library. Based on the LACPL's service level guidelines, the introduction of 3,204 additional residents would require 1,602 additional square feet of building area, 8,811 additional collection items, and 3 additional computers. This would contribute to LACPL's current deficiency at Woodcrest Library. However, other library branches in the LACPL system would be available for future residents. LACPL branch libraries close to the project area include A.C. Bilbrew Library and Willowbrook Library in unincorporated West Rancho Dominguez-Victoria and Willowbrook, respectively. Additionally, library patrons are able to borrow collection items from any library within the LACPL system through interlibrary loan.

In addition, future residential and nonresidential development built in accordance with the Specific Plan would be required to pay the LACPL's special tax rate of $30.97 per parcel for the 2017-2018 fiscal year, which may increase annually. Future residential development would also be required to pay the County's

library facilities mitigation fee per Section 22.72.030 of the County's Zoning Code as detailed in Regulatory Requirement RR PS-3. Payments of the special taxes and mitigation fees, both of which are dedicated towards LACPL, would fund the acquisition, expansion, or new construction of library facilities as required by LACPL.

Development of additional library facilities, including construction and operation, could result in impacts on the environment. However, it is assumed that additional library capacity would be developed near an existing library site or within an allowed land use, which has been considered as part of the Specific Plan throughout this DEIR. Note that until the time when the precise location and type of facility are identified, the potential significant impacts cannot be meaningfully identified and evaluated. Addressing potential significant impacts associated with any potential sites or facilities of unknown size would be too speculative at this time. Therefore, no significant impacts associated with the construction and operation of new library facilities to address the future shortfall in library service standards can conclusively be identified at this time.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.10-4 would be less than significant.

5.10.4.5 CUMULATIVE IMPACTS

The area considered for cumulative impacts is LACPL service boundary. LACPL branch libraries that serve the County's Metro Planning Area include:

- Compton Library, City of Compton
- East Rancho Dominguez Library (unincorporated East Rancho Dominguez)
- A.C. Bilbrew Library (unincorporated West Rancho Dominguez-Victoria)
- Willowbrook Library (unincorporated Willowbrook)
- Graham Library (unincorporated Florence-Firestone)
- Florence Library (unincorporated Florence-Firestone)
- City Terrace Library (unincorporated East Los Angeles)
- Anthony Quinn Library (unincorporated East Los Angeles)
- El Camino Real Library (unincorporated East Los Angeles)
- East Los Angeles Library (unincorporated East Los Angeles)

In addition to these LACPL branch libraries, the City of Los Angeles, also in the Metro Planning Area, operates its own library facilities.

Cumulative development in accordance with the County's General Plan would increase residential development and introduce new residents that may increase demand on existing library services in the Metro Planning Area. The County applies a library facilities mitigation fee to new residential developments in the unincorporated areas, which would mitigate the significant adverse impacts of increased residential development on the library system. The library facilities mitigation fee is based on the estimated cost of providing the projected library facility needs in each of the seven library planning areas, per Section 22.72.030

of the County's Zoning Code. Therefore, cumulative impacts to library facilities and services would be less than significant, and project impacts would not be cumulatively considerable.

5.10.4.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, Impact 5.10-4 the would be less than significant.

5.10.4.7 MITIGATION MEASURES

No mitigation is required.

5.10.4.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.10.5 References

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5. Environmental Analysis
PUBLIC SERVICES

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5.11 RECREATION

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Connect Southwest LA project to impact public parks and recreational facilities in the County of Los Angeles. The information in this section is based partly on responses to service provider questionnaires included as Appendix G of this DEIR.

5.11.1 Environmental Setting

5.11.1.1 RELEVANT PROGRAMS AND REGULATIONS

State

Quimby Act

The 1975 Quimby Act (California Government Code Section 66477) authorizes cities and counties to pass ordinances requiring that developers set aside land, donate conservation easements, or pay fees for park improvements. Revenues generated through the Quimby Act cannot be used for the operation and maintenance of park facilities. A 1982 amendment (AB 1600) requires agencies to clearly show a reasonable relationship between the public's need for the recreation facility or parkland, and the type of development project upon which the fee is imposed. Cities and counties with a high ratio of park space to inhabitants can set a standard of up to five acres per 1,000 people for new development. Cities and counties with a lower ratio can only require the provision of up to three acres of park space per 1,000 people. The calculation of a city or county's park space to population ratio is based on a comparison of the population count of the last federal census to the amount of city/county-owned parkland.

California Public Park Preservation Act

The primary instrument for protecting and preserving parkland is California's Public Park Preservation Act of 1971. Under the Public Resource Code, cities and counties may not acquire any real property that is in use as a public park for any nonpark use unless compensation, land, or both are provided to replace the parkland acquired. This provides no net loss of parkland and facilities.

The Mello-Roos Community Facilities Act of 1982

The Mello-Roos Community Facilities Act provides an alternative method of financing certain public capital facilities and services, especially in developing areas and areas undergoing rehabilitation. This state law empowers local agencies to establish Community Facilities Districts as a means of obtaining community funding.

Landscaping and Lighting Act of 1972, California Streets and Highway Code Section 22500–22509

The California Landscaping and Lighting Act of 1972 authorizes local legislative bodies to establish benefit related assessment districts, or Landscaping and Lighting Districts (LLADs) and to levy assessments for the

construction, installation, and maintenance of certain public landscaping and lighting improvements. LLADs may be established to maintain local public parks.

Local

Los Angeles County Code

In addition to containing regulations on the operation of park facilities, the County Code contains provisions that regulate the provision of parklands for new subdivisions, in accordance with the Quimby Act. County Code Section 21.24.340 (Residential Subdivisions, Local Park Space Obligation, Formula) contains the methodology used to determine the amount of parkland required to be dedicated by the subdivider as a part of the subdivision map approval process. In accordance with Section 21.28.140, the developer may also choose to pay a fee in lieu of the provision of parkland. Additionally, the developer may choose to provide less than the required amount of parkland, but develop it with amenities equal to the value of what the in-lieu fee would be. In order to determine the local park space obligation for a subdivision, a formula is used that considers the number of dwelling units in the subdivision, the average household size by Park Planning Area (PPA) (which differs for single-family, multifamily, and mobile home developments as well as by PPA), and the adopted ratio of three acres of parkland per 1,000 residents, per the Quimby Act. However, it should be noted that, as discussed in the County's General Plan, as a condition of zone change approval, general plan amendment, specific plan approval, or development agreement, the County may require a subdivider to dedicate land according to the General Plan goal of three acres of local parkland per 1,000 residents, and six acres of regional parkland per 1,000 residents.

Once the local park space obligation is determined, County Code Section 21.24.350 (Residential Subdivisions, Provision or Local Park Sites) contains regulations pertaining to the siting of park facilities as well as provisions that give the option to subdividers of 50 units or less to choose to provide the obligatory amount of parkland, any excess of which would be credited to the subdivision, or otherwise allow any remaining obligation to be satisfied by the payment of park fees in accordance with the provisions of Section 21.28.140.

Section 21.28.140 (Park Fees Required When – Computation and Use) contains provisions regarding the payment of in-lieu fees for any portion of the dedication obligation not satisfied by the subdivider. These fees would be enforced as a condition of approval on the final approval of the subdivision. The in-lieu fee is determined by multiplying the amount of park space not satisfied by the representative land value for the appropriate PPA. As of July 1, 2016, the representative land value for the West Athens/Westmont PPA (PPA 19) is $339,692. Park fees shall be used only for acquiring local park land or developing new or rehabilitating existing recreational facilities. This section also makes it the responsibility of the Los Angeles County Department of Parks and Recreation to develop a schedule specifying how, when, and where it will use the land or fees, or both, from each subdivision to develop park or recreational facilities within the applicable PPA.

Park Planning Area and Parkland Standard

The communities of West Athens and Westmont are in PPA 19, West Athens/Westmont. The local park space obligations in acres per residential unit for residential subdivisions in PPA 19 are identified in Table

5.11-1. The extent of local park space obligation to be satisfied by land, fees, land and amenities, or a combination of these, is determined by the following formula:

Local park space obligation (acres) = Total approved dwelling units x Acres per residential unit (per Table 5.11-1)

Table 5.11-1 West Athens/Westmont PPA 19 Parkland Obligation for Residential Subdivisions

Residential Unit Type	Average Household Size	Acres per Resident	Acres per Residential Unit
Single-Family (detached or attached)	3.45	0.003	0.01035
Multi-Family (2–4 units)	2.54	0.003	0.00762
Multi-Family (5+ units)	2.76	0.003	0.00828
Mobile Home	3.73	0.003	0.01119

Source: Jung 2017.

Los Angeles County General Plan Park Standard

Policy 3.1 of the Los Angeles County 2035 General Plan Parks and Recreation Element sets forth the following standards for acres of parkland per population: three acres of local parkland per 1,000 residents in the unincorporated areas and six acres of regional parkland per 1,000 residents of the total population of Los Angeles County.

Proposition A: Safe Neighborhood Parks Proposition of 1992 and 1996

Proposition A created the Los Angeles County Regional Park and Open Space District. The district's boundaries are coterminous with the boundaries of Los Angeles County. The proposition authorized an annual assessment on nearly all of the 2.25 million parcels of real property in Los Angeles County. Proposition A funded $540 million for the acquisition, restoration, or rehabilitation of real property for parks and park safety; senior recreation facilities; gang prevention; beaches; recreation, community, or cultural facilities; trails, wildlife habitats, or natural lands; and maintenance and servicing of those projects. In 1996, voters approved another Proposition A to fund an additional $319 million for parks and recreation projects and additional funds to maintain and service those projects. Proposition A funds may be used to fund the development, acquisition, improvement, restoration, and maintenance of parks; recreational, cultural and community facilities; and open space lands.

Measure A

Los Angeles County Measure A, passed by voters in November 2016, placed a 1.5-cent per square foot property tax levy on improved property in Los Angeles County, to take effect on July 1, 2017. Tax proceeds shall be used to develop or implement programs with projects consistent with the 2016 Countywide Park Needs Assessment, including but not limited to: projects protecting, developing, enhancing, and preserving parks, play areas, beaches, open space lands, natural areas, waterways, water resources, and equestrian facilities; promoting health and encouraging community use, including for seniors and youth; investing in areas with high-needs for parks; developing and improving local and regional recreational facilities; maintaining and improving park safety, healthiness, and accessibility; and providing and facilitating safe places to play,

afterschool programs, career development, job training, educational, and cultural resources (Ballotpedia 2016). Measure A funds will be allocated for expenditure in both incorporated cities and unincorporated areas.

Los Angeles Countywide Parks and Recreation Needs Assessment

Adopted by the Board of Supervisors on July 5, 2016, the Parks Needs Assessment was a historic and significant undertaking to engage all communities within Los Angeles County in a collaborative process to gather data and input for future decision-making on parks and recreation. The primary goal of the assessment was to quantify the magnitude of needs for parks and recreational facilities, and determine the potential costs of meeting that need. The final report uses a transparent, best-practices approach to evaluate park and recreation needs and is the product of an engagement process that involved the public, cities, unincorporated communities, community-based organizations, and other stakeholders. Specifically, the *Parks Needs Assessment*:

- Uses a set of metrics to measure and document park needs for each study area;
- Establishes a framework to determine the overall level of park need for each study area;
- Offers a list of priority park projects for each study area;
- Details estimated costs for the priority park projects by study area;
- Builds a constituency of support and understanding of the park and recreational needs and opportunities; and
- Informs future decision-makers regarding planning and funding for parks and recreation.

West Athens-Westmont is an area of very high park needs. According to the Parks Needs Assessment, this study area has 7 acres of parkland per 41,288 residents, which translates to 0.2 acres per 1,000 residents. This is significantly below the Countywide average of 3.3 acres per 1,000 residents. Additionally, only 26 percent of West Athens-Westmont residents are within a half-mile distance of a park, as compared to the County average of 49 percent.

West Athens-Westmont Community Parks and Recreation Plan

The County's Department of Parks and Recreation received a Sustainable Communities Planning Grant from the California Strategic Growth Council, which allows the County to develop community parks and recreation plans for six unincorporated communities in Los Angeles County that have significant parks and recreation deficits, including West Athens-Westmont. The plan was completed in February 2016 and provides a guide toward developing new green spaces and enhancing existing recreational amenities in West Athens-Westmont, and more importantly, recommends potential sites and site types for acquisitions and development of new park projects. Two park projects identified in the plan are currently in the planning stage—the Normandie Avenue Pocket Park and the Woodcrest Liberty Park - Plaza.

County of Los Angeles Park Design Guidelines and Standards

The Park Design Guidelines and Standards document is intended to give design professionals, County staff, and other agencies guidance on how to design and develop parks that meet County standards and

expectations. It incorporates input from Department of Parks and Recreation staff, other County departments, as well as outside partners such as non-profit organizations and private developers that have an interest in park design. This manual addresses topics such as spatial organization, buildings, circulation, recreational facilities, landscaping, storm water management, utilities, preferred manufacturing products to be used at parks, and preferred plant lists for potable and recycled water.

5.11.1.2 EXISTING CONDITIONS

The Los Angeles County Department of Parks and Recreation owns and maintains 180 parks and miles of trails throughout the County, including community regional parks, regional parks, nature centers and wildlife sanctuaries, golf courses, and equestrian centers. The County's park system, including facilities that are owned, operated, and maintained by the County, totals approximately 70,000 acres (Los Angeles 2015). The County's parks and recreation resources fall under two systems:

- **Local Park System:** Consists of parks of varying sizes that meet local needs and offer opportunities for daily recreation. This system includes community parks, neighborhood parks, pocket parks, and park nodes.

- **Regional Park System:** Intended to meet the parks and recreation needs of residents and visitors throughout Los Angeles County. This system consists of community regional parks, regional parks, and special use facilities.

In addition to local and regional parks and trails, the County also provides parks and recreational opportunities through multibenefit parks, school sites, city parks and facilities, private recreational facilities, and greenways.

Parks Serving the Project Site

There are no County parks within the project site, and the only park in the West Athens-Westmont community is Helen Keller Park. Additional green space in the Specific Plan area includes the County-owned Chester Washington Golf Course and recreational facilities on the Los Angeles Southwest College campus.

- **Helen Keller Park:** A seven-acre park at 1045 S. 126th Street. Amenities include an office, community building with multipurpose room and computer lab, swimming pool, restrooms, group picnic shelter, lighted softball/baseball field, multipurpose field, fitness zone, basketball court, tot lot play area, playground, picnic tables, barbecues, drinking fountains and security lighting (Jung 2017).

- **Chester Washington Golf Course:** Located at 1930 W. 120th Street, an 18-hole golf course featuring level terrain, two lakes, and landscaped trees. Additional amenities include banquet facilities, cart and club rentals, cocktail lounge, coffee shop, driving range, pro shop, golf lessons, and practice putting greens.

- **Los Angeles Southwest College Campus:** Located along Imperial Highway east of Western Avenue and approximately 64 acres in size. The campus includes a number of sports facilities, including a football field and walking track, baseball and softball fields, and an aquatic center.

The following additional green spaces are within one-half mile of the project site, which encompasses the service area distance of neighborhood parks, pocket parks, and park nodes, as defined by the County of Los Angeles. However, they are small community gardens rather than traditional parkland or recreational facilities.

- **Little Green Acres Park:** A 0.25-acre community garden park at 10420 S. Vermont Avenue in the City of Los Angeles.

- **West Athens Victory Garden:** A 0.5-acre community garden park at 1344 W. 105th Street in the community of West Athens.

Further, the County parks in Table 5.11-2 are within a five-mile radius of the project site.

Table 5.11-2 County Parks within 5-Miles of the Project Site

Park	Address	Acres
Alondra Community Regional Park	3850 W. Manhattan Beach Boulevard, Lawndale	53
Alondra Golf Course	16400 S. Prairie Avenue, Lawndale	Two 18-hole golf courses
Athens Park	12603 S. Broadway Avenue, Los Angeles	20
Bodger Park	14900 S. Yukon Avenue, Hawthorne	12
Colonel Leon H. Washington Park	8908 S. Maie Avenue, Los Angeles	10.8
Del Aire Park	12601 S. Isis Avenue, Hawthorne	7
Earvin Magic Johnson Park	905 E. El Segundo Boulevard, Los Angeles	104
El Parque Nuestro	1675 Gage Avenue, Los Angeles	0.6
Enterprise Park	13055 Clovis Avenue, Los Angeles	10
Faith and Hope Park	East 119th Street, Los Angeles	0.5
Franklin D. Roosevelt Park	7600 Graham Avenue, Los Angeles	21.5
Jesse Owens Community Regional Park	9651 S. Western Avenue, Los Angeles	20
Ladera Park	6027 Ladera Park Avenue, Los Angeles	16
Lennox Park	10828 S. Condon Avenue, Lennox	5.6
Martin Luther King Jr. Fitness Park	11833 S. Wilmington Avenue, Los Angeles	0.3
Mary M. Bethune Park	1244 E. 61st Street, Los Angeles	5.3
Mona Park	2291 E. 121st Street, Compton	8.4
Roy Campanella Park	14812 Stanford Avenue, Compton	9.5
Ted Watkins Memorial Park	1335 E. 103rd Street, Los Angeles	28
Walnut Nature Park	2642 Olive Street, Huntington Park	Part of Walnut Park Elementary School
	Total	332.5

Source: Los Angeles County 2017.

Golf Courses

The 9-hole Maggie Hathaway Golf Course is owned and operated by the County's Department of Parks and Recreation but is located within the City of Los Angeles just outside the boundaries of West Athens-Westmont. The 18-hole Chester Washington Golf Course is located within the West Athens-Westmont park planning area (PPA-19). Similar to the Maggie Hathaway Golf Course, it is owned and operated by the County and is open to the public. However, there are fees to use both courses or to hold events at the facilities. The Chester Washington Golf Course serves as one of the largest green spaces in the West Athens-Westmont area (Jung 2017).

Parkland Standard

According to the Los Angeles County General Plan, existing County parkland in the 10,160-acre Metro Planning Area, where the communities of West Athens and Westmont are located (see Figure 5.7-1, *County of Los Angeles Planning Areas*), includes 111 acres of local parks and 398 acres of regional parks, totaling 509 acres of parkland (Los Angeles 2014). Table 10.4 of the County's General Plan is reproduced below as Table 5.11-3 and details the surplus/deficit local and regional parkland acreage for the Metro Planning Area based on 2010 population data. As shown, based on the County's local and regional parkland goals, the Metro Planning Area has a large deficit of 1,116 acres of local parkland and 10,517 acres of regional parkland.

Table 5.11-3 Metro Planning Area Existing County Parkland, Year 2010

	Local Parkland Goal (4 acres per 1,000 residents)			Regional Parkland Goal (6 acres per 1,000 residents)		
Planning Area	Unincorporated Population (2010)	Parkland Acreage	Surplus/Deficit Acreage	Countywide Population (2010)	Parkland Acreage	Surplus/Deficit Acreage
Metro	306,768	111	-1,116	1,819,084	398	-10,517

Source: Los Angeles County General Plan Parks and Recreation Element, 2014.

According to the Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment (2016) Park Metrics section for West Athens-Westmont, the current population to parkland ratio is seven acres per 41,288 residents, which translates to 0.2 acres per 1,000 residents. This is significantly below the County average of 3.3 acres per 1,000 residents and the County General Plan goal of 4 acres per 1,000 residents. Additionally, only 16 percent of West Athens-Westmont residents are within walking distance (i.e., one-half mile) of a park, as compared to the County average of 49 percent (Jung 2017).

5.11.2 Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, a project would normally have a significant effect on the environment if the project:

R-1 Would increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

R-2 Includes recreational facilities or requires the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

R-3 Would interfere with regional open space connectivity.

In addition, Threshold PS-1 related to park services from Section 5.9, *Public Services*, is also analyzed in this section:

PS-1 Create capacity or service level problems, or result in substantial adverse physical impacts associated with the provisions of new or physically altered governmental facilities in order to maintain acceptable service ratios, response times or other performance objectives for park services.

5.11.3 Plans, Programs, and Policies

There are no applicable project design features or regulatory requirements related to recreation.

5.11.4 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

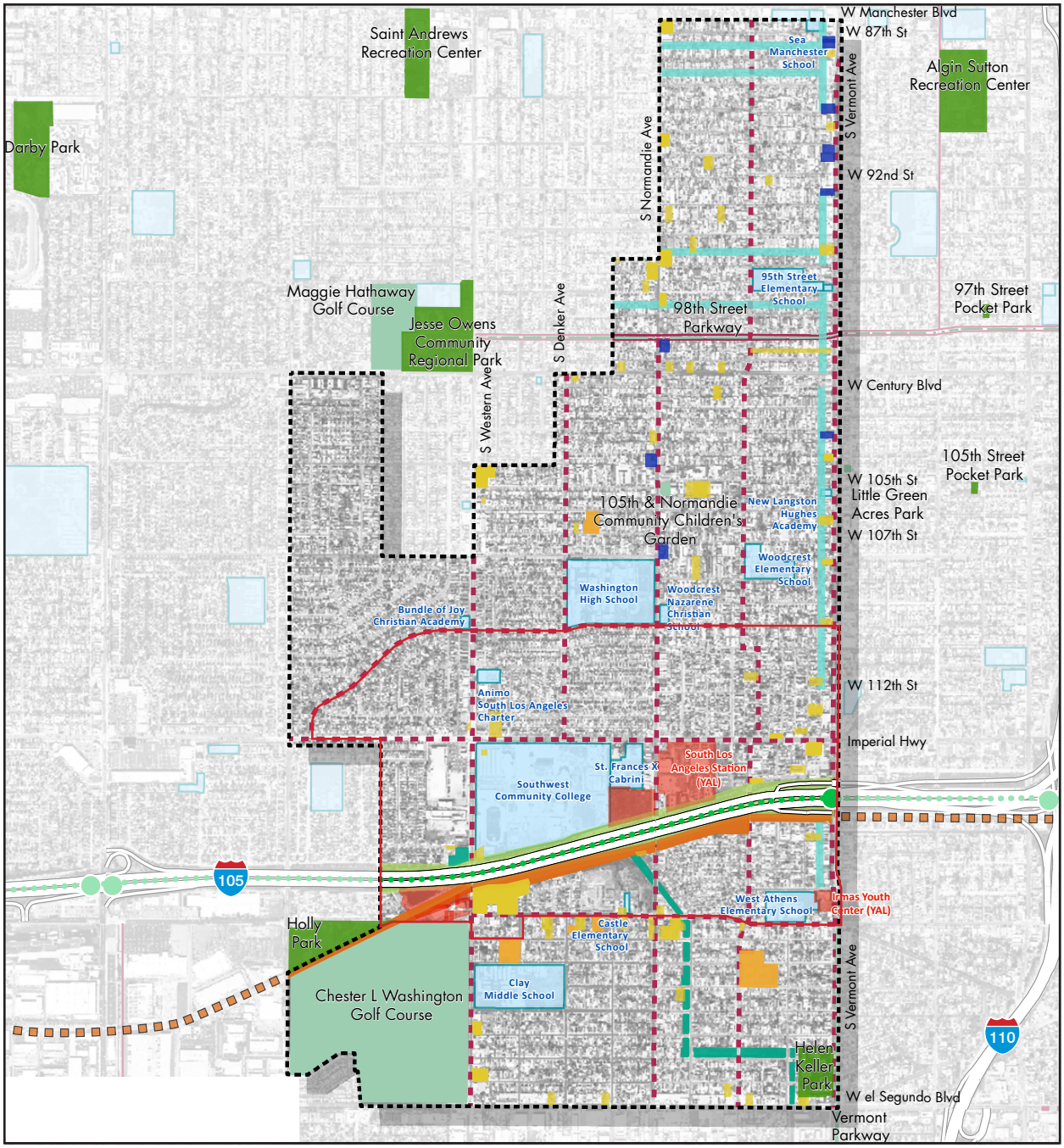
Impact 5.11-1: The proposed project would allow development of up to 1,061 additional residential units and 3,204 additional residents that would increase the use of existing park and recreational facilities. [Threshold R-1 and PS-1]

Impact Analysis: Buildout of the Specific Plan would allow development of up to 4,518 units—1,345 single-family residences (of which 67 units would be part of a residential planned development), 1,432 two-family residences, and 1,740 multifamily residences. Compared to existing conditions, the proposed project would allow 103 fewer single-family residences and 45 fewer two-family residences, but 1,208 additional multifamily residences. Using the local park space obligation formula for Park Planning Area West Athens/Westmont (PPA 19) from County Code Section 21.24.340, the additional multifamily residences allowed under the Specific Plan would require dedication of approximately 10.0 acres of local parkland to satisfy the County's park standard. The parkland dedication can be in the form of parkland space, payment of in-lieu fees, or a combination thereof.

A major factor limiting new park development in urban areas is the ability to acquire new land. However, as stated above, the County recently completed the West Athens-Westmont Community Parks and Recreation Plan (CPRP) in February 2016 which identifies various potential parkland and trail opportunities in the community. Potential parkland opportunities identified by the CPRP are shown on Figure 5.11-1, *Potential Parkland Opportunity Types*, and detailed in Table 5.11-4.

Figure 5.11-1 - Potential Parkland Opportunity Types

5. Environmental Analysis



Source: DRP, 2016

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Table 5.11-4 Potential Parkland Opportunities in West Athens-Westmont

Parkland Opportunity Type	Parcels	Acres
Vacant Land or Buildings	111	23
Vacant Land or Buildings on Corner	32	18
School Sites*	13	138
College Campus	1	64
Public Agency	20	28
Utility Corridors and Sites	35	24
Rail Corridors*	22	24
Freeways	NA	NA
Sidewalks and Street Right-of-Ways	NA	NA
TOTAL	234 parcels	319 acres

Source: DPR 2016.
* The acreage for schools and rail corridors include acreage to accommodate school buildings and rail lines, respectively.

Two projects identified in the CPRP are currently in the planning stage—the Normandie Avenue Pocket Park and the Woodcrest Learning Center (Jung 2017).

- **Normandie Avenue Pocket Park:** A 0.16-acre site located at 9501 South Normandie Avenue was acquired by the County in 2016. The CPRP included various concept designs for sites of this size and character and incorporated features such as a basketball court, small skate park, play space for young children, shade structures and picnic tables, community art, splash pad, exercise equipment, grass areas, running/walking paths, and benches.

- **Woodcrest Learning Center:** This project would repurpose an underused entry plaza to the Woodcrest Library at 1340 West 106th Street. The learning center would include musical instruments, educational panels, sensory and physical play equipment, exercise equipment, an aromatic pollinating garden, a story telling node, power towers for internet connection, and shaded seating. The Los Angeles County Library and Department of Parks and Recreation would partner together to implement this project.

Development in accordance with the Specific Plan would require dedication of approximately 10.0 acres of local parkland to satisfy the County's park standard. As shown in Figures 3.2 through 3.5 of the Specific Plan, conceptual site plans for mixed-use development near the Metro Green Line Vermont/Athens station and Civic Center Districts include potential joint-use open space areas. Table 5.11-4 also shows that there are approximately 319 acres identified as future parkland opportunity sites. Within the Specific Plan area, there are opportunities for park development on vacant lands (vacant lands on corners are more ideal for park development); on schools sites through the development of joint-use agreements with Los Angeles Southwest College and West Athens Elementary School; and on public agency lands near the South Los Angeles Sheriff's station and near the Department of Social Services building south of I-105. A potential trail could also be developed along I-105 and the rail corridor. In total, the CPRP identifies 15.9 acres of potential parkland opportunity sites and 1.6 miles of potential trail opportunity in the Specific Plan area.

It is likely that future developers of projects in accordance with the Specific Plan would pay in-lieu fees rather than develop traditional park space. Per Section 21.28.140 of the County's Code of Ordinances, the in-lieu fee is determined by multiplying the amount of park space not satisfied by the representative land value for the appropriate PPA. As of July 1, 2017, the representative land value for the West Athens/Westmont PPA (PPA 19) is $348,815. Payment of the in-lieu fees would be enforced as a condition of approval on the final approval of the subdivision. Additionally, residential subdivisions, such as condominium units, are subject to the County's Quimby Code (Sections 21.24.340, 21.240.350, and 21.28.140 of the County's municipal code) (Jung 2017). These in-lieu fees can then be used by the County's Parks and Recreation Department to acquire local park land identified in Figure 5.11-1, *Potential Parkland Opportunity Types*, or enhance/rehabilitate existing recreational facilities.

Overall, future developers would be required to develop parkland or pay in-lieu fees to comply with the County Code. Utilizing the in-lieu fees, the County's Department of Parks and Recreation can acquire and develop new park sites identified in the CPRP to serve the future residents within the Specific Plan area and general West Athens-Westmont community.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.11-1 would be less than significant.

Impact 5.11-2: Project implementation would not result in environmental impacts to provide new and/or expanded recreational facilities. [Threshold R-2]

Impact Analysis: As analyzed in Impact 5.11-1, it is likely that future developers of residential subdivisions in accordance with the Specific Plan would pay in-lieu fees rather than provide new parkland to meet the County's local parkland standard, given the built-out nature of the project site. Additionally, there is no specific zoning district pertaining to park or open space use under the Specific Plan.

The County's Parks and Recreation Department would utilize in-lieu fees to acquire local park land or construct/expand existing recreational facilities. Development and operation of future new or expanded parks and recreational facilities may have an adverse physical effect on the environment, including impacts relating to air quality, biological resources, lighting, noise, and traffic. However, addressing the site-specific impacts of future park projects at this time would be speculative since the future locations are unknown at this time and beyond the scope of this programmatic EIR. Subsequent environmental review for individual park developments would be required when the County pursues them. Furthermore, it is expected that new parkland would be developed within an allowable land use designation on previously developed or vacant land. Thus, the proposed project would not result in significant impacts relating to new or expanded recreational facilities.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.11-2 would be less than significant.

Impact 5.11-3: Development in accordance with the proposed project would not interfere with regional open space connectivity. [Threshold R-2]

Impact Analysis: Figures 9.1, *Open Space Resources Policy Map*, and 9.2, *Regional Habitat Linkages*, of the County of Los Angeles General Plan identify regional open space areas in the County. These areas include the Angeles National Forest, Los Padres National Forest, and Santa Monica Mountains. The project site is in an urbanized area of southern Los Angeles and does not provide any regional habitat linkages between these open space areas. Thus, implementation of the Specific Plan in the communities of West Athens and Westmont would have no impact on regional open space connectivity.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.11-3 would be less than significant.

5.11.5 Cumulative Impacts

The area considered for cumulative impacts to parks and recreational facilities is the West Athens-Westmont Community Plan area. As detailed in Table 4-1, buildout of the West Athens-Westmont Community Plan would allow 11,185 residential units and 40,539 residents. Based on the County local parkland standard of three acres per 1,000 residents, the community plan area would need a total of approximately 122 acres of local parkland. Currently, the only park in the West Athens-Westmont Community Plan area is the seven-acre Helen Keller Park.

The extent to which the County can implement parks, trails, and other recreational facilities is related to the availability of funding. As discussed, the Quimby Act is a funding mechanism for parkland acquisition. As allowed by this act and pursuant to the County Code, residential subdivisions must dedicate parkland or pay in-lieu fees (or both, in some circumstances) to enable the County to acquire a ratio of three acres of local parkland for every 1,000 residents (Section 21.24.340). This provision ensures that the funding for parkland acquisition will be proportional to increases in population. Other regulations—including the Mello-Roos Community Facilities Act of 1982, the Landscaping and Lighting Act of 1972, and Los Angeles County Proposition A (Safe Neighborhood Parks Proposition of 1992 and 1996)—would serve as supplemental sources of funding for parkland. Additionally, per Policy P/R 3.3, the County can require the provision of additional parks in communities with insufficient local parkland. The County can require a subdivider to dedicate three acres of local parkland per 1,000 residents in unincorporated areas, and six acres of regional parkland per 1,000 residents in the unincorporated areas, per Los Angeles County Ordinance 2013-0009. Enforcement of the General Plan goal of three acres of local parkland for every 1,000 residents as a condition of approval where an appropriate nexus exists would serve to reduce the potential for deterioration of facilities by allowing for adequate funding.

Further, the Sustainable Communities Planning Grant received by the County's Department of Parks and Recreation from the California Strategic Growth Council will allow the County to develop community parks and recreation plans for six unincorporated communities in Los Angeles County that have significant parks and recreation deficits, including West Athens-Westmont. Upon completion of each plan, the County will be

able to better evaluate each community's existing deficits and potential park opportunity sites to be developed with the use of in-lieu fees.

Therefore, existing regulations ensure that future funding for parkland acquisition would be proportional to increases in population pursuant to the Quimby Act in the County, and impacts would be less than significant.

5.11.6 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.11-1, 5.11-2, and 5.11-3.

5.11.7 Mitigation Measures

No mitigation measures are required.

5.11.8 Level of Significance After Mitigation

Impacts would be less than significant.

5.11.9 References

Ballotpedia. 2016, November 28. Los Angeles County, California, Parks and Open Space Parcel Tax, Measure A (November 2016). https://ballotpedia.org/Los_Angeles_County,_California,_Parks_and_Open_Space_Parcel_Tax,_Measure_A_(November_2016).

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5.12 TRANSPORTATION AND TRAFFIC

This section of the draft environmental impact report (DEIR) evaluates the potential for implementation of the Connect Southwest LA project to result in transportation and traffic impacts in the County of Los Angeles and surroundings. The analysis in this section is based in part on the following technical report:

- *West Athens-Westmont TOD Specific Plan Traffic Impact Study,* IBI Group, September 15, 2017

A complete copy of this study is included in Appendix H of this Draft EIR.

5.12.1 Methodology

The study area intersections for the proposed project are in various jurisdictions; therefore, the traffic analysis for the Connect Southwest LA project follows the requirements and guidelines set forth by the County of Los Angeles, City of Los Angeles, City of Inglewood, City of Hawthorne, City of Gardena, and Caltrans. The intersection analysis methodology and performance criteria used in this analysis conform to the County's and cities' requirements for traffic impact studies prepared under the California Environmental Quality Act (CEQA).

The traffic analysis conducted for the Connect Southwest LA project includes an assessment of traffic conditions for 34 existing intersections in unincorporated Los Angeles County and the cities of Inglewood and Hawthorne. Analysis scenarios and anticipated year of each scenario (horizon years) are:

- Existing Year (2017) No Project
- Existing Year (2017) With Project
- Future Year (2035) No Project
- Future Year (2035) With Project

Traffic Count Data

The existing intersection turning movement counts were taken on Tuesday, May 16, 2017, at 52 intersections during the morning peak period (7:00 AM to 9:00 AM) and the afternoon peak period (4:00 PM to 6:00 PM). The AM and PM peak analyses are based on the hour with the highest total intersection volume during the morning and afternoon periods. Average daily traffic volumes at 24 study roadway segments were also conducted on Tuesday, May 16, 2017.

Travel Demand Forecasting

The horizon year 2035 volumes are derived based on the Southern California Association of Governments (SCAG) regional model, which is the accepted regional model for forecasting travel demand in Los Angeles County. The SCAG regional model was used to develop Existing Year (2017) No Project and Future Year (2035) No Project volumes. Growth rates between 2017 and future year were developed and applied to existing turning movement volumes to determine future year turning movement volumes. A growth factor of 1.04 was applied, and the equivalent compound growth rate was determined to be 0.22 percent.

Level of Service Analysis

The efficiency of traffic operations is measured in terms of Level of Service (LOS). LOS refers to the quality of traffic flow along roadways and at intersections. Evaluation of intersections involves the assignment of grades from "A" to "F," with LOS "A" representing the highest level operating conditions and LOS "F" representing extremely congested and restricted operations. Each letter grade corresponds to a range of volume-to-capacity (V/C) values, as described in Table 5.12-1.

Intersection Capacity Utilization

The ICU method is based on intersection V/C ratios. The V/C value for each movement is the observed or forecast volume divided by the saturation flow volume. The intersection ICU value is the sum of the V/C values for the critical movement on each leg, where critical movements are the pairs of conflicting movements with the highest combined V/C values. ICU is expressed as a decimal value (e.g., 0.740), where 1.00 represents saturated conditions, that is, the volume of traffic flow is equal to the capacity. The total intersection V/C ratio is then matched to the appropriate LOS based on the definitions in the signalized column of Table 5.12-1. Detailed methodologies used to calculate intersection LOS are in Section 3.4 of the traffic impact assessment (TIA; see Appendix H).

Highway Capacity Manual 2010: Unsignalized Intersections

The County of Los Angeles traffic study guidelines do not specify a method for assessing unsignalized intersections. In these instances, the Highway Capacity Manual (HCM) 2010 All-Way Stop Control method was employed using the Synchro 9 software.

The HCM unsignalized intersection delay was used to determine the intersection delay in seconds and corresponding LOS for the turning movements and intersection characteristics at the unsignalized intersections. The calculation of delay represents the amount of delay experienced by vehicles passing through the intersection. The unsignalized intersections were analyzed using the all-way stop method and the two-way stop method from the HCM 2010. Delay was calculated based on the worst-case approach (in the case of one- or two-way stop-controlled intersections) or average delay (in the case of all-way stop-controlled intersections) and used to find the corresponding LOS, as presented in the unsignalized column of Table 5.12-1.

Table 5.12-1 Intersection Level of Service (LOS) Criteria

LOS	Description	Signalized ICU Value (Volume/Capacity)	Unsignalized HCM Average Total Delay (seconds/vehicle)
A	EXCELLENT. No Vehicle waits longer than one red light and no approach phase is fully used.	0.00–0.60	≤ 10.0
B	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.	0.61–0.70	> 10.0 and ≤ 15.0
C	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles	0.71–0.80	> 15.0 and ≤ 25.0
D	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.	0.81–0.90	> 25.0 and ≤ 35.0
E	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.	0.91–1.00	> 35.0 and ≤ 50.0
F	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.	>1.000	> 50.0

Source: IBI Group, September 2017.

City of Los Angeles Critical Movement Analysis

Per the traffic impact study guidelines of the City of Los Angeles, the critical movement analysis (CMA) method was utilized to assess intersection performance and impacts. The method was implemented with the Department of Transportation's (LADOT) CalcaDB software (CMA worksheets). Intersection phasing serving as the base upon which lane capacities are determined; therefore, lane capacities can vary. Per correspondence with LADOT, the number of phases input was determined to be the number of phase movements and not individual phases; the opposed phasing input was taken to be split phasing. A 10 percent increase in flow rate is taken into account on the worksheet when accounting for signal timing mitigations such as the implementation of Automated Traffic Surveillance and Control (ATSAC)/Adaptive Traffic Control System (ATCS). The V/C ratios for each LOS value corresponds with the ranges from the signalized ICU method. This methodology was used for signalized intersections in the jurisdiction of the City of Los Angeles.

Caltrans Highway Capacity Manual 2000: Signalized Intersections

The average control delay per vehicle is estimated for each land group and aggregated for each approach and for the intersection as a whole. LOS is directly related to the control delay value. The criteria are listed in Table 5.12-2. The Synchro 9 software was used to implement this method. Standard settings were utilized. A 10 percent increase in flow rate was established when accounting for signal timing mitigations such as the implementation of ATSAC/ATCS. This methodology was used for signalized intersections in the jurisdiction of Caltrans.

Table 5.12-2 Signalized Intersections Level of Service Criteria

LOS	Control Delay per Vehicle
A	≤ 10
B	> 10–20
C	> 20–35
D	> 35–55
E	> 55–80
F	> 80

Source: IBI Group, September 2017.

Peak Hour Roadway Segments Level of Service Analysis

The peak hour roadway segments level of service analysis was conducted by calculating the traffic volume in each direction for a specified roadway segment. Roadway segment volumes were derived from the peak hour turning movement volumes between the two adjacent study intersections. A V/C ratio was taken, and the LOS letter grade was assigned using the range of V/C values shown in Table 5.12-1. LOS D is generally taken to be the minimum acceptable.

State Highway Analysis

Peak hour analyses for basic freeway segments and freeway off-ramps were conducted at locations designated by Caltrans to assess the regional impacts on freeway facilities by project traffic. Analyses were performed for Congestion Management Program (CMP) monitoring stations, freeway main lines, and freeway off-ramp queues. The CMP monitoring station analysis complied with the traffic impact analysis procedures in the 2010 Congestion Management Program for Los Angeles County (Metro 2010). The freeway main line analysis used the procedure in the HCM 2010. Lastly, the freeway off-ramp queue analysis complied with Caltrans procedure.

CMP Monitoring Station Analysis

Peak hour traffic conditions at three CMP monitoring stations were analyzed using the CMP method, which assesses a freeway segment based on the density-to-capacity ratio in the No Project and With Project scenarios for an analysis year. The designation of LOS based on the density-to-capacity ratio observed is summarized in Table 5.12-3. LOS F(1) through F(3) designations are assigned where severely congested conditions prevail for more than an hour.

Table 5.12-3 CMP Level of Service

LOS	V/C Ratio
A	0.00–0.35
B	> 0.35–0.54
C	> 0.54–0.77
D	> 0.77–0.93
E	> 0.93–1.00
F(0)	> 1.00–1.25
F(1)	> 1.25–1.35
F(2)	> 1.35–1.45
F(3)	> 1.45

Source: IBI Group, September 2017.

The CMP defines a significant impact as:

- An increase in the V/C of 0.02 or more that causes LOS F (V/C > 1.00); or
- An increase in the V/C of 0.02 or more when the freeway segment operates at LOS F (V/C > 1.00) in the No Project scenario.

Freeway Main Line Analysis

The HCM 2010 methodology used to assess the freeway segments was implemented using the HCS 2010 software. The methodology technical details are described in Section 3.5.1 of the TIA. The HCM 2010 methodology uses lane density (passenger car per mile per lane) as the measure to determine a freeway segment's level of service. The designation of LOS based on the density observed is outlined in Table 5.12-4. Caltrans maintains that the target LOS is the transition between LOS C and LOS D. It should be noted that because there is a linear relationship between freeway main-line density and queues, estimates for freeway main-line densities cannot be provided for severe traffic conditions (i.e. LOS F). When freeway demand conditions exceed capacity, it results in forced flow, and the formulas used to estimate density are not appropriate. As a result, estimates for freeway main-line density are not provided for severe LOS F conditions. An over-capacity (OVR) designation is assigned in these cases.

Table 5.12-4 Basic Freeway Segments Level of Service Definition (HCM 2010)

LOS	Density (vehicles/lane/mile)	Description
A	≤ 11	Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.
B	11–18	Free-flow speeds are maintained. The ability to maneuver with the traffic stream is only slightly restricted.
C	18–26	Flow with speeds at or near free-flow speeds. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver.
D	26–35	Speeds decline slightly with increasing flows. Freedom to maneuver with the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort.
E	35–45	Operation at capacity. There are virtually no usable gaps within the traffic stream, leaving little room to maneuver. Any disruption can be expected to produce a breakdown with queuing.
F	> 45	Represents a breakdown in flow.

Source: IBI Group, September 2017.

Significant impacts are determined as follows:

- The addition of project trips causes a change from LOS C or better to LOS D or worse; or
- The addition of 50 or more project trips to a freeway main-line segment operating at LOS F in the No Project scenario (based on discussion with Caltrans staff).

Freeway On-Ramp Queue Analysis

Per a response from Caltrans to the Notice of Preparation for the project, it was advised that the TIA analyze the storage for left-turn pockets at on-ramps where appropriate. As a result, left-turn queue capacities and forecast queues were assessed at freeway on-ramp locations. Freeway on-ramp queue analysis summaries are provided in the respective scenario section.

Freeway Off-Ramp Queue Analysis

Per Caltrans traffic study guidelines, a queue analysis is provided for freeway off-ramps at intersections within a reasonable distance of the project location. The queue analysis was performed at off-ramps identified by Caltrans as having the potential to be significantly affected by the addition of project traffic. It was performed in accordance with the methodology produced from correspondence with Caltrans in which 85 percent of the measured queue length is used as the threshold for determining a significant impact. The storage capacity of off-ramps was measured on scaled online images (Google Maps). Utilizing the Synchro 9 traffic modeling software, a queue analysis report was generated for each scenario, and 95th percentile queue lengths were taken from these reports. Queue analysis summaries are provided in each scenario section.

Vehicle Miles Traveled Analysis

The vehicle miles traveled (VMT) analysis used the California Emissions Estimator Model (CalEEMod), a statewide land use emissions model for quantifying potential criteria pollutant and greenhouse gas emissions associated with construction and operation of a project. The model calculates these emissions based on the

amount of direct and indirect vehicle miles traveled during the construction and operation of the project. Additionally, CalEEMod identifies emission-reducing mitigation measures and calculates the potential benefits of the measures selected.

The model was developed for the California Air Pollution Control Officers Association in collaboration with California air districts. Default data such as emission factors and trip lengths are provided by various air districts in order to take into account local requirements and conditions.

For the purposes of this report, CalEEMod was used to demonstrate the benefits of the TOD-associated development benefits in the existing-year and future-year scenarios. In particular, the model was used to assess the change in total VMT and VMT per capita for the No Project, With Project, and With Project + Pass-By and Project Design Features (PDFs) Trip Reduction scenarios.

The With Project scenarios for 2017 and 2035 were evaluated using the Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA released by the Governor's Office of Planning and Research (OPR) in January 2016. The document outlines OPR's recommendations regarding methodology for VMT analysis and establishing thresholds for significant transportation impacts. These recommendations include:

- VMT is the primary metric for determining transportation impacts across the state.
- Land use development near transit or in VMT-efficient areas should be presumed to cause a less than significant impact.
- Transit, active transportation, and rehabilitation projects that do not add motor vehicle capacity should also be presumed to cause a less than significant impact.
- Implementation of a VMT metric should be phased in over time.

The County of Los Angeles has yet to adopt a VMT metric for assessing significant impacts . Therefore, a VMT metric and associated significance conclusion are not required or included in this section.

5.12.2 Environmental Setting

5.12.2.1 RELEVANT PROGRAMS AND REGULATIONS

A number of programs and regulations have been adopted by regional, County, and local agencies to promote the efficient transport of people or goods in the region. Those with direct relevance to traffic and circulation issues for the project are summarized below.

State

Senate Bill 743

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743, which created a process to change the analysis of transportation impacts under CEQA. On December 30, 2013, OPR released a preliminary evaluation of alternative methods of transportation analysis. In August 2014, OPR released a Preliminary Discussion Draft of Updates to CEQA Guidelines Implementing SB 743. The report recommends amendments to the CEQA Guidelines to replace the LOS, auto-delay-based standard with other metrics to measure transportation impacts. Other metrics may include VMT, VMT per capita, and automobile trips generated.

The SB 743 legislation does not authorize OPR to set thresholds, but it directs OPR to develop guidelines for determining the significance of transportation impacts for proposed projects. OPR circulated a revised guidance document in January 2016. It is unknown when the OPR amendment to the CEQA Guidelines will be officially adopted, thus no specific significance thresholds have yet been adopted for purposes of complying with SB 743. In addition, the OPR guidance does not preclude an agency from establishing its own significance thresholds prior to the adoption of the OPR amendment to the CEQA Guidelines and/or permitting additional analysis beyond the typical auto-delay-based standards in the interim.

The County of Los Angeles has not officially adopted elements of SB 743 into their current traffic study guidelines.

Regional/County

Regional Transportation Plan/Sustainable Communities Strategy

The 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) addresses the region's future needs for "mobility, economy, and sustainability." The RTP/SCS combines the need for mobility with a "sustainable future" through a reduction in the amount of emissions produced from transportation sources through the operation of low or no emission transportation systems by 2040.

To address the mobility challenge of the region's continuing roadway congestion, transportation investments will be made 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. These will indirectly create investment opportunities in the region. The RTP/SCS seeks to reduce GHG emissions; to create closer "high quality" transit for households; to decrease roadway congestion; to improve safety; and to generate average 539,900 jobs per year. This will improve and establish a platform for sustainable living for the region's existing and future population (SCAG 2016a).

Congestion Management Program for Los Angeles County

The Los Angeles County Metropolitan Transportation Authority (Metro) has developed and implements the Congestion Management Program for Los Angeles County. The CMP was last updated in 2010 and links

transportation, land use, and air quality decisions in the County and addresses the impact of local growth on the regional transportation system. The CMP calls for (1) monitoring the CMP highway and roadway system; (2) a multi-modal system performance analysis; (3) a transportation demand management program to promote alternative modes of transportation; (4) a land use analysis program; (5) a seven-year capital improvement program of proposed projects on the CMP highway and roadway system; and (6) a deficiency plan to maintain LOS standards.

The CMP requires monitoring of land use and roadway performance by individual jurisdictions and provides guidelines for conducting a TIA. The CMP sets the LOS standard in Los Angeles County at LOS E, except where base year LOS is worse than E (Metro 2010). US 101, Interstate 5 (I-5), I-10, and State Route 110 are all elements of the CMP highway system. The nearest CMP arterial roadway to the project site is the segment of Alameda Street extending south from US 101.

Los Angeles County General Plan Mobility Element

The mobility element in the Los Angeles County General Plan 2035 provides the policy foundation for achieving a transportation system that balances the needs of all road users. Each of the mobility element's seven goals has multiple policies that specify steps to achieve that goal. The seven transportation goals in the mobility element are:

- M1: Street designs that incorporate the needs of all users.
- M2: Interconnected and safe bicycle- and pedestrian-friendly streets, sidewalks, paths and trails that promote active transportation and transit use.
- M3: Streets that incorporate innovative designs.
- M4: An efficient multimodal transportation system that serves the needs of all residents.
- M5: Land use planning and transportation management that facilitates the use of transit.
- M6: The safe and efficient movement of goods.
- M7: Transportation networks that minimizes negative impacts to the environment and communities.

Under Goal M4, Policy M4.7 presents minimum LOS standards: Maintain a minimum LOS D, where feasible; however, allow LOS below D on a case-by-case basis in order to further other General Plan goals and policies, such as those related to environmental protection, infill development, and active transportation.

The mobility element also introduces several implementation programs that will increase the safety and efficiency of the Los Angeles County roadway network:

- Parking Ordinance
- Community Pedestrian Plans
- Safe Routes to School Program
- Multimodal Transportation Planning Function

The mobility element was prepared in compliance with the Complete Streets Act of 2008 (Assembly Bill 1358), which requires local jurisdictions to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation.

Los Angeles County Code

Title 15, Vehicles and Traffic, of the Los Angeles County Code regulates traffic signs and signals, traffic on public and private roads, parking restrictions, turning movement restrictions, allowable speed limit under different circumstances, crosswalks and bicycle lanes, etc.

5.12.2.2 EXISTING CONDITIONS

This section presents the Existing Year (2017) No Project scenario conditions of the project study area; this scenario will serve as the baseline by which all upcoming scenarios are assessed. The study area encompasses arterial roadways and signalized intersections within the project area as well as within a reasonable vicinity. A description of the study roadway segments and intersections and the results of the level of service analysis for the Existing Year (2017) are included in this section.

Existing Roadway Network

Selected arterials in the vicinity of the project corridor are described in this section. Items of note include existing geometry, pedestrian and bicycle facilities, and adjacent land uses.

Century Boulevard. Century Boulevard is classified as a Major Highway in the County Highway Plan and runs east-west within the Specific Plan boundaries. The land uses adjacent to the corridor are primarily residential, with small business, mixed use, and light industrial. The posted speed limit is 35 to 40 miles per hour. The roadway consists of three travel lanes in each direction. On-street parking is permitted along most but not all of the corridor within the project area. Metro operates bus lines along the corridor.

108th Street. 108th Street is classified as a Collector Street on the County Highway Plan and runs east and west within the Specific Plan boundary. Surrounding land uses are predominantly residential, with businesses and mixed use. The posted speed limit is 35 miles per hour. The roadway has one travel lane in each direction with a dedicated auxiliary lane in the center. Class II and Class III bike lanes are along the roadway in each direction. On-street parking is all along the corridor within the project area.

Imperial Highway. Imperial Highway is classified as a Major Highway (in the City of Los Angeles' Mobility Plan) that runs east and west in the project area. Surrounding land uses include residential, mixed use, light industrial, and public space. The posted speed limit is 35 to 40 miles per hour. Within the project boundaries, the roadway has three travel lanes in each direction, with a dedicated auxiliary and median strips along the center of the corridor. On-street parking is permitted along most, but not all of the corridor. Torrance Transit, Gardena Municipal, and Metro operate bus lines along the corridor.

El Segundo Boulevard. El Segundo Boulevard runs east and west and is classified as a Major Highway in the City of Los Angeles's Mobility Plan and the City of Gardena's General Plan. Surrounding land uses include residential, mixed use, light industrial, and public space. The posted speed limit within the study boundaries is 40 miles per hour. There are three lanes in each travel direction along the roadway with a dedicated auxiliary in the center. On-street parking is limited, but is permitted in certain areas of the corridor. Torrance Transit and Gardena Municipal operate bus lines along the roadway.

120th Street. 120th Street is classified as a Secondary Highway in the County Highway Plan and runs east and west within the project boundaries. Surrounding land uses are predominantly residential, with mixed use, light industrial, and public space. The posted speed limit is 30 to 40 miles per hour. In the project area, the roadway has two lanes in each direction, reduced to one lane in each direction further west. There is a dedicated auxiliary in the center of the roadway, and Class II bike lanes on both sides of the road, with a striped buffer between the general travel lanes and the bike lanes. On-street parking is along most of the roadway. The Torrance Transit route operates along the street.

Crenshaw Boulevard. Crenshaw Boulevard is classified as a Major Highway in the County Highway Plan and runs north and south. Surrounding land uses include residential, mixed use, light industrial, and public space. The posted speed limit is 40 miles per hour. There are three lanes running in each travel direction with a dedicated auxiliary and median strips. On-street parking is on much of the roadway. Torrance Transit and Metro operate bus routes along the corridor.

Van Ness Avenue. Van Ness Avenue is classified as a Secondary Highway in the County Highway Plan and runs north and south within the project boundary. Surrounding land uses include residential, mixed use, light industrial, and public space. The posted speed limit is 35 miles per hour. The roadway consists of two lanes in each direction where on-street parking is permitted along much, but not all of the corridor. Torrance Transit, Gardena Municipal, and Metro operate bus lines along the roadway.

Western Avenue: Western Avenue is classified as a Major Highway in the County Highway Plan and the City of Gardena General Plan. It runs north and south through the western project area. Surrounding land uses include residential, mixed use, light industrial, and public space. The posted speed limit is 40 miles per hour. The roadway has two travel lanes in each direction with a dedicated auxiliary in the center as well as median strips. On-street parking is permitted along much but not all of the corridor. Gardena Municipal and Metro operate bus lines along the corridor.

Hoover Street. Hoover Street is classified as a Collector Street in the City of Los Angeles' Mobility Plan and runs north and south within the project boundaries. Surrounding land uses are predominantly residential. On-street parking is available and permitted. The posted speed limit is 25 to 35 miles per hour. There is one travel lane in each direction with a dedicated auxiliary in the center of the roadway. Additionally, there are dedicated Class II bike lanes as well as Class III bike lanes.

135th Street. 135th Street is classified as a Secondary Highway in the City of Los Angeles's Mobility Plan and the City of Gardena's General Plan. It runs east and west. Surrounding land uses include residential, mixed used, light industrial, and public space. The posted speed limit is 40 miles per hour. There are two lanes in

each direction of the roadway. On-street parking is available and permitted along most, but not all of the corridor. Gardena Municipal and Metro operate bus lines along the corridor.

Vermont Avenue. Vermont Avenue is classified as a Major Highway on the County Highway Plan and runs north and south within the Specific Plan boundaries. Surrounding land uses include residential, mixed use, light industrial, and public space. The posted speed limit is 40 miles per hour. Within the project area, the roadway consists of two travel lanes in each direction with a dedicated auxiliary lane in the center. Class II striped bike lanes also exist in each direction within the project area. On-street parking is permitted along much, but not all of the corridor within the project area. Gardena Municipal and Metro operate bus lines along the corridor.

Normandie Avenue. Normandie Avenue is classified as a Secondary Highway on the County Highway Plan and runs north and south within the Specific Plan boundary. Surrounding land uses include residential, mixed use, and public space. The posted speed limit is 40 to 45 miles per hour. Within the project area, the roadway consists of two travel lanes in each direction with a dedicated auxiliary lane in the center. On-street parking is permitted along most, but not all of the corridor within the project area. Gardena Municipal and Metro operate bus lines along the corridor.

Figueroa Street. Figueroa Street is a Major Highway that runs north and south and is surrounded by commercial, residential, mixed use, and public space land uses. The posted speed limit ranges from 35 to 45 miles per hour. Within the project area, the roadway consists of two travel lanes in each direction divided by a center median. On-street parking is permitted along most but not all of the corridor. Dedicated Class II bike lanes run along the corridor. Torrance Transit and Metro operate bus routes along the corridor.

Study Area Intersections and Segments

In consultation with the County of Los Angeles, 52 existing intersections and 24 roadway segments were selected for analysis based on traffic impact and vehicle volumes. Figure 5.12-1, *Project Study Intersections,* and Figure 5.12-2, *Project Study Roadway Segments,* show the project location and the intersections and roadway segments analyzed. The existing study intersections are:

1. Century Boulevard and Prairie Avenue
2. Century Boulevard and Crenshaw Boulevard
3. Century Boulevard and Van Ness Avenue
4. Century Boulevard and Western Avenue
5. Century Boulevard and Normandie Avenue
6. Century Boulevard and Vermont Avenue
7. Century Boulevard and Hoover Street
8. Century Boulevard and Figueroa Street
9. Century Boulevard and I-110 SB Off-Ramp / Grand Avenue
10. Century Boulevard and I-110 NB On-Ramp / Olive Street
11. 108th Street and Crenshaw Boulevard
12. 108th Street and Van Ness Avenue
13. 108th Street and Western Avenue

14. 108th Street and Normandie Avenue
15. 108th Street and Vermont Avenue
16. 108th Street and Hoover Street
17. Imperial Highway and Crenshaw Boulevard
18. Imperial Highway and Van Ness Avenue
19. Imperial Highway and Western Avenue
20. Imperial Highway and Normandie Avenue
21. Imperial Highway and Vermont Avenue
22. Imperial Highway and Hoover Street
23. Imperial Highway and Figueroa Street
24. Imperial Highway and Grand Avenue / I-110 SB On-Ramp
25. Imperial Highway and Olive Street / I-110 NB Off-Ramp
26. Imperial Highway and Broadway
27. Imperial Highway and Main Street
28. Imperial Highway and Avalon Boulevard
29. I-105 WB Off-Ramp / 118th Place and Crenshaw Boulevard
30. I-105 WB Ramps and 120th Street
31. I-105 WB Ramps and Vermont Avenue
32. I-105 EB Off-Ramp / 116th Place and Vermont Avenue
33. I-105 EB On-Ramp / 116th Place and Hoover Street
34. 120th Street and Crenshaw Boulevard
35. 120th Street and Van Ness Avenue
36. 120th Street and Western Avenue
37. 120th Street and Normandie Avenue
38. 120th Street and Vermont Avenue
39. 120th Street and Hoover Street
40. 120th Street and Figueroa Street
41. El Segundo Boulevard and Crenshaw Boulevard
42. El Segundo Boulevard and Van Ness Avenue
43. El Segundo Boulevard and Western Avenue
44. El Segundo Boulevard and Normandie Avenue
45. El Segundo Boulevard and Vermont Avenue
46. El Segundo Boulevard and I-110 SB Ramps
47. El Segundo Boulevard and I-110 NB Ramps
48. El Segundo Boulevard and Figueroa Street
49. 135th Street and Crenshaw Boulevard
50. 135th Street and Normandie Avenue
51. Rosecrans Avenue and Crenshaw Boulevard
52. Rosecrans Avenue and Normandie Avenue

The existing roadway segments are:

1. Century Boulevard between Prairie Avenue and Crenshaw Boulevard
2. Century Boulevard between Western Avenue and Normandie Avenue
3. Century Boulevard between Hoover Street and Figueroa Street
4. Van Ness Avenue between Century Boulevard and 108th Street
5. Normandie Avenue between Century Boulevard and 108th Street
6. 108th Street between Van Ness Avenue and Western Avenue
7. Crenshaw Boulevard between 108th Street and Imperial Hwy
8. Western Avenue between 108th Street and Imperial Hwy
9. Vermont Avenue between 108th Street and Imperial Hwy
10. Imperial Highway between Prairie Avenue and Crenshaw Boulevard
11. Imperial Highway between Van Ness Avenue and Western Avenue
12. Imperial Highway between Normandie Avenue and Vermont Avenue
13. Imperial Highway between Hoover Street and Figueroa Street
14. Imperial Highway between Main Street and San Pedro Street
15. Van Ness Avenue between Imperial Highway and 120th Street
16. Normandie Avenue between Imperial Highway and 120th Street
17. 120th Street between Normandie Avenue and Vermont Avenue
18. Crenshaw Boulevard between 120th Street and El Segundo Boulevard
19. Western Avenue between 120th Street and El Segundo Boulevard
20. Vermont Avenue between 120th Street and El Segundo Boulevard
21. El Segundo Boulevard between Van Ness Avenue and Western Avenue
22. El Segundo Boulevard between Normandie Avenue and Vermont Avenue
23. Normandie Avenue between El Segundo Boulevard and 135th Street
24. Crenshaw Boulevard between 135th Street and Rosecrans Avenue

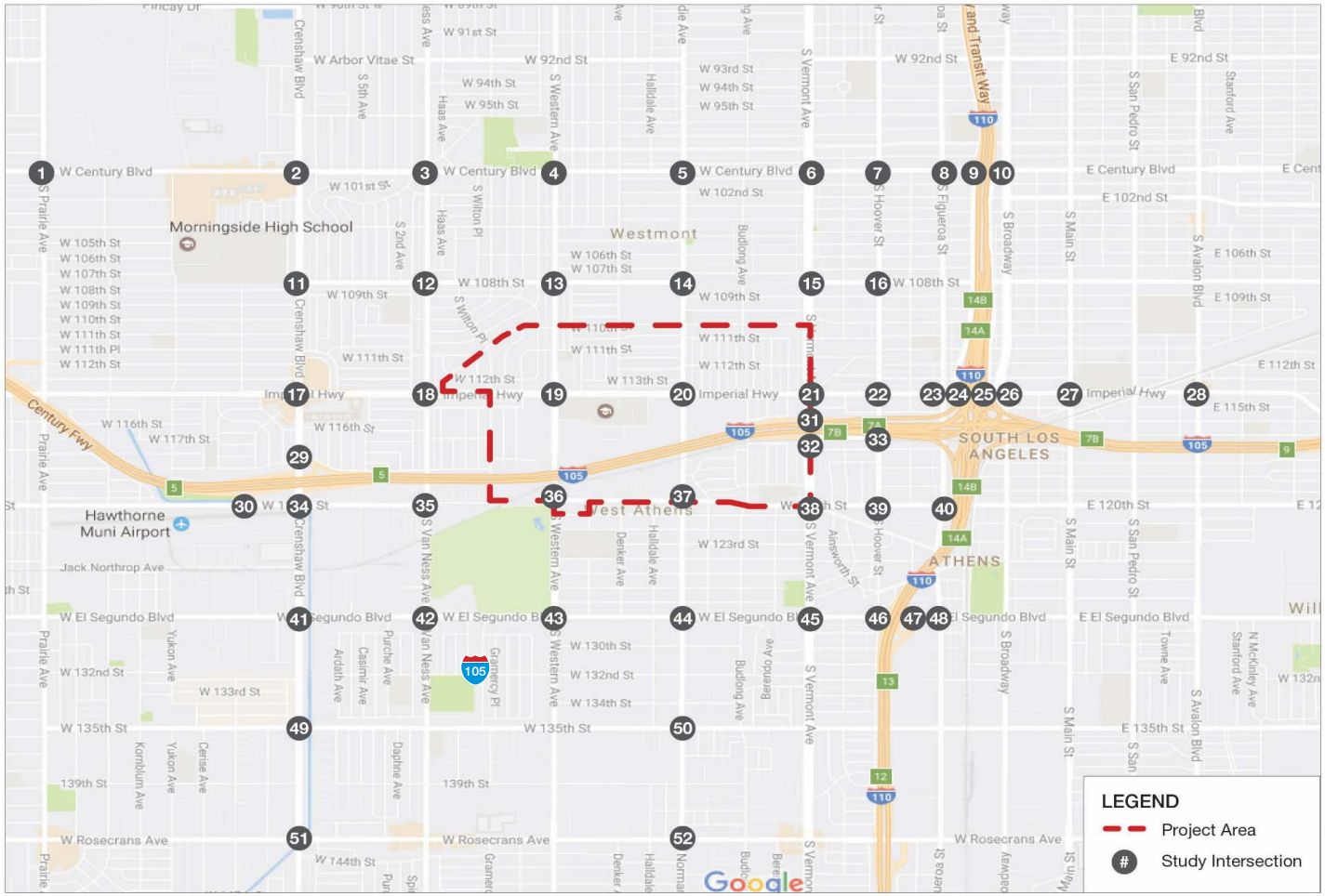
Existing Peak Hour Roadway Segments Level of Service

The level of service evaluation for roadway segments during the AM and PM peak hours is presented in Table 5.12-5. The following roadway segments are expected to operate at LOS E or worse:

- 21. El Segundo Boulevard between Van Ness Avenue and Western Avenue
- 22. El Segundo Boulevard between Normandie Avenue and Vermont Avenue

Figure 5.12-1 - Project Study Intersections

5. Environmental Analysis



Source: IBI Group, 2017

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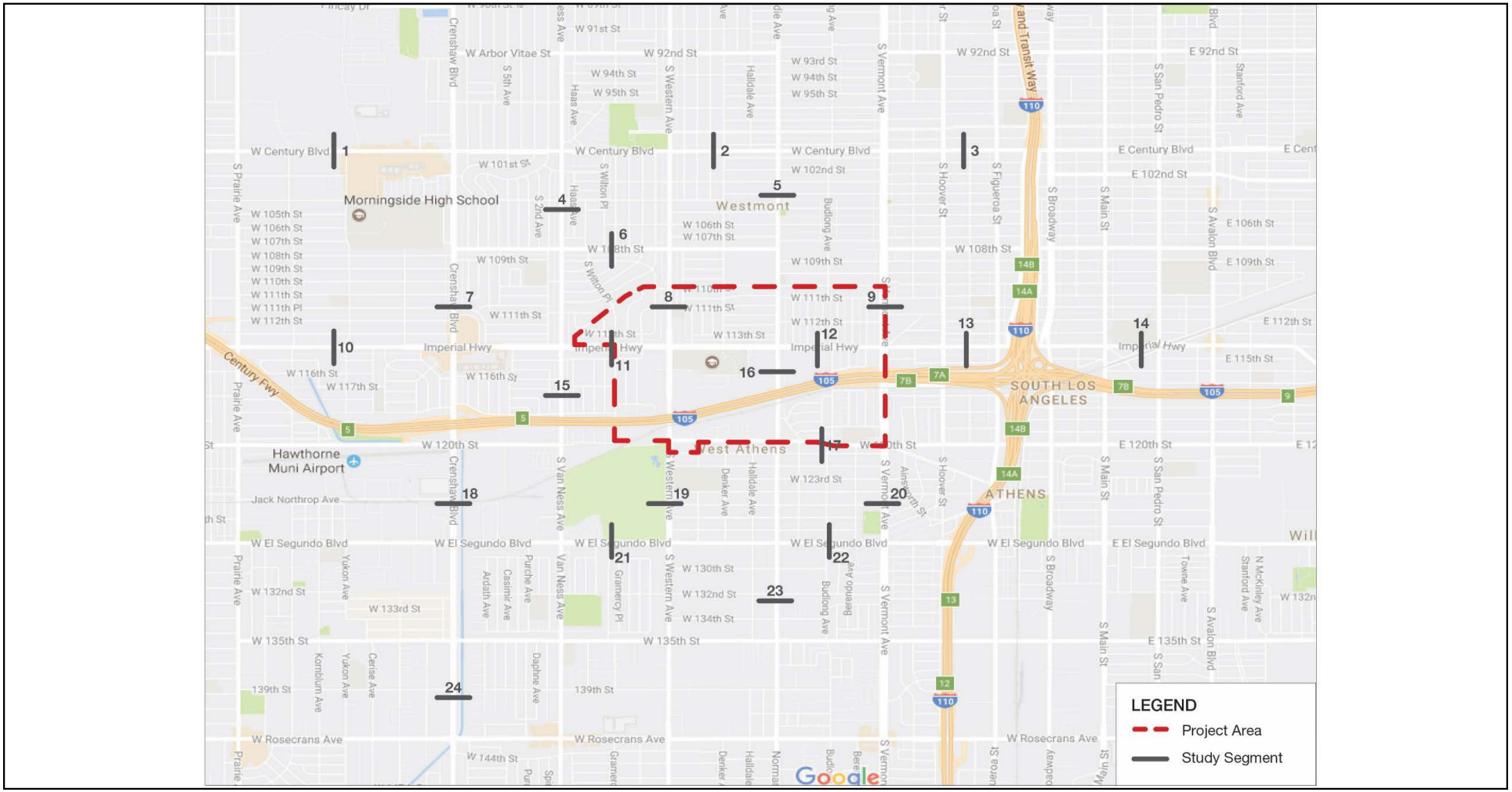
Figure 5.12-2 - Project Study Roadway Segments

5. Environmental Analysis



Source: IBI Group, 2017

5. Environmental Analysis
TRANSPORTATION AND TRAFFIC

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Table 5.12-5 Existing Year (2017) No Project Roadway Segments Level of Service Analysis

Link ID	Street	Segment		Class	Capacity per Lane	Number of Lanes		Volumes		V/C Ratio		Level of Service	
		From	To			NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
AM Peak Hour													
1	Century Boulevard	Prairie Avenue	Crenshaw Boulevard	Major Highway	800	2	2	1,034	870	0.646	0.544	B	A
2	Century Boulevard	Western Avenue	Normandie Avenue	Major Highway	800	2	2	783	1,266	0.489	0.791	A	C
3	Century Boulevard	Hoover Street	Figueroa Street	Major Highway	800	3	3	1,012	1,594	0.422	0.664	A	B
4	Van Ness Avenue	Century Boulevard	108th Street	Secondary Highway	800	2	2	830	973	0.519	0.608	A	B
5	Normandie Avenue	Century Boulevard	108th Street	Secondary Highway	800	3	3	991	949	0.413	0.395	A	A
6	108th Street	Van Ness Avenue	Western Avenue	Collector	800	1	1	343	527	0.429	0.659	A	B
7	Crenshaw Boulevard	108th Street	Imperial Highway	Major Highway	800	3	3	1,088	1,097	0.453	0.457	A	A
8	Western Avenue	108th Street	Imperial Highway	Major Highway	800	2	2	1,240	1,140	0.775	0.713	C	C
9	Vermont Avenue	108th Street	Imperial Highway	Major Highway	800	3	3	1,358	1,573	0.566	0.655	A	B
10	Imperial Highway	Prairie Avenue	Crenshaw Boulevard	Major Highway	800	3	3	746	1,590	0.311	0.663	A	B
11	Imperial Highway	Van Ness Avenue	Western Avenue	Major Highway	800	3	3	954	1,736	0.398	0.723	A	C
12	Imperial Highway	Normandie Avenue	Vermont Avenue	Major Highway	800	3	3	861	1,595	0.359	0.665	A	B
13	Imperial Highway	Hoover Street	Figueroa Street	Major Highway	800	3	3	912	1,439	0.380	0.600	A	A
14	Imperial Highway	Main Street	San Pedro Street	Major Highway	800	3	3	747	1,287	0.311	0.536	A	A
15	Van Ness Avenue	Imperial Highway	120th Street	Secondary Highway	800	2	2	891	1,079	0.557	0.674	A	B
16	Normandie Avenue	Imperial Highway	120th Street	Secondary Highway	800	2	2	896	871	0.560	0.544	A	A
17	120th Street	Normandie Avenue	Vermont Avenue	Secondary Highway	800	2	2	410	643	0.256	0.402	A	A

Table 5.12-5 Existing Year (2017) No Project Roadway Segments Level of Service Analysis

Link ID	Street	Segment		Class	Capacity per Lane	Number of Lanes		Volumes		V/C Ratio		Level of Service	
		From	To			NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
18	Crenshaw Boulevard	120th Street	El Segundo Boulevard	Major Highway	800	3	3	1,973	1,085	0.822	0.452	D	A
19	Western Avenue	120th Street	El Segundo Boulevard	Major Highway	800	2	2	946	947	0.591	0.592	A	A
20	Vermont Avenue	120th Street	El Segundo Boulevard	Major Highway	800	3	3	863	935	0.360	0.390	A	A
21	El Segundo Boulevard	Van Ness Avenue	Western Avenue	Major Highway	800	3	3	1,067	2,408	0.445	1.003	A	F
22	El Segundo Boulevard	Normandie Avenue	Vermont Avenue	Major Highway	800	3	3	989	2,303	0.412	0.960	A	E
23	Normandie Avenue	El Segundo Boulevard	135th Street	Major Highway	800	2	2	706	777	0.441	0.486	A	A
24	Crenshaw Boulevard	135th Street	Rosecrans Avenue	Secondary Highway	800	3	3	1,254	983	0.523	0.410	A	A
PM Peak Hour													
1	Century Boulevard	Prairie Avenue	Crenshaw Boulevard	Major Highway	800	2	2	1,098	935	0.686	0.584	B	B
2	Century Boulevard	Western Avenue	Normandie Avenue	Major Highway	800	2	2	1,221	910	0.763	0.569	C	A
3	Century Boulevard	Hoover Street	Figueroa Street	Major Highway	800	3	3	1,428	1,009	0.595	0.420	A	A
4	Van Ness Avenue	Century Boulevard	108th Street	Secondary Highway	800	2	2	896	788	0.560	0.493	A	A
5	Normandie Avenue	Century Boulevard	108th Street	Secondary Highway	800	3	3	971	875	0.405	0.365	A	A
6	108th Street	Van Ness Avenue	Western Avenue	Collector	800	1	1	574	283	0.718	0.354	C	A
7	Crenshaw Boulevard	108th Street	Imperial Highway	Major Highway	800	3	3	1,250	1,062	0.521	0.443	A	A
8	Western Avenue	108th Street	Imperial Highway	Major Highway	800	2	2	1,116	1,014	0.698	0.634	B	B
9	Vermont Avenue	108th Street	Imperial Highway	Major Highway	800	3	3	1,557	1,226	0.649	0.511	B	A
10	Imperial Highway	Prairie Avenue	Crenshaw Boulevard	Major Highway	800	3	3	1,447	921	0.603	0.384	B	A

Table 5.12-5 Existing Year (2017) No Project Roadway Segments Level of Service Analysis

Link ID	Street	Segment		Class	Capacity per Lane	Number of Lanes		Volumes		V/C Ratio		Level of Service	
		From	To			NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
11	Imperial Highway	Van Ness Avenue	Western Avenue	Major Highway	800	3	3	1,478	1,008	0.616	0.420	B	A
12	Imperial Highway	Normandie Avenue	Vermont Avenue	Major Highway	800	3	3	1,435	1,120	0.598	0.467	A	A
13	Imperial Highway	Hoover Street	Figueroa Street	Major Highway	800	3	3	1,352	1,007	0.563	0.420	A	A
14	Imperial Highway	Main Street	San Pedro Street	Major Highway	800	3	3	1,451	948	0.605	0.395	B	A
15	Van Ness Avenue	Imperial Highway	120th Street	Secondary Highway	800	2	2	1,041	949	0.651	0.593	B	A
16	Normandie Avenue	Imperial Highway	120th Street	Secondary Highway	800	2	2	871	707	0.544	0.442	A	A
17	120th Street	Normandie Avenue	Vermont Avenue	Secondary Highway	800	2	2	570	396	0.356	0.248	A	A
18	Crenshaw Boulevard	120th Street	El Segundo Boulevard	Major Highway	800	3	3	1,389	1,666	0.579	0.694	A	B
19	Western Avenue	120th Street	El Segundo Boulevard	Major Highway	800	2	2	1,059	888	0.662	0.555	B	A
20	Vermont Avenue	120th Street	El Segundo Boulevard	Major Highway	800	3	3	861	895	0.359	0.373	A	A
21	El Segundo Boulevard	Van Ness Avenue	Western Avenue	Major Highway	800	3	3	1,898	1,242	0.791	0.518	C	A
22	El Segundo Boulevard	Normandie Avenue	Vermont Avenue	Major Highway	800	3	3	2,053	1,092	0.855	0.455	D	A
23	Normandie Avenue	El Segundo Boulevard	135th Street	Major Highway	800	2	2	925	607	0.578	0.379	A	A
24	Crenshaw Boulevard	135th Street	Rosecrans Avenue	Secondary Highway	800	3	3	1,122	1,360	0.468	0.567	A	A

Source: IBI Group, September 2017
Note: **Bold** = unacceptable LOS

5. Environmental Analysis
TRANSPORTATION AND TRAFFIC

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Intersections Existing Year (2017) Level of Service

The peak hour turning movement volumes were utilized in order to assess intersection performance. Intersection performance was determined using the methods outlined in Section 5.12.1 above. A summary of the AM and PM peak hour intersection level of service analysis results for the Existing Year (2017) No Project condition is presented in Table 5.12-6.

All 52 study intersections currently operate at an acceptable level of service during both peak hour time periods under their respective standards with the exception of:

- 29. I-105 WB Off-Ramp/118th Place and Crenshaw Boulevard (AM peak hour)
- 32. I-105 EB Off-Ramp / 116th Place and Vermont Avenue (AM peak hour)
- 35. 120th and Van Ness Avenue (AM peak hour)
- 42. El Segundo Boulevard and Van Ness Avenue (AM and PM peak hours)
- 46. El Segundo Boulevard and I-110 SB Ramps (AM peak hour)

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Table 5.12-6 Existing Year (2017) No Project Intersection LOS

	Intersection	Jurisdiction	Analysis Method	Intersection Control	AM Peak Hour		PM Peak Hour	
					V/C or Delay (S)	LOS	V/C or Delay (S)	LOS
1	Century / Prairie	City of Inglewood [a]	ICU	Signalized	0.664	B	0.678	B
2	Century / Crenshaw	City of Inglewood [a]	ICU	Signalized	0.563	A	0.768	C
3	Century / Van Ness	City of Inglewood / County of Los Angeles [a]	ICU	Signalized	0.826	D	0.819	D
4	Century / Western	County of Los Angeles [a]	ICU	Signalized	0.787	C	0.758	C
5	Century / Normandie	County of Los Angeles [a]	ICU	Signalized	0.881	D	0.854	D
6	Century / Vermont	City of Los Angeles	CMA	Signalized	0.672	B	0.590	A
		County of Los Angeles [a]	ICU	Signalized	0.665	B	0.594	A
7	Century / Hoover	City of Los Angeles	CMA	Signalized	0.517	A	0.433	A
8	Century / Figueroa	City of Los Angeles	CMA	Signalized	0.810	D	0.697	B
9	Century / I-110 SB Ramps	City of Los Angeles	CMA	Signalized	0.347	A	0.358	A
		Caltrans	HCM	Signalized	12.3	B	12.7	B
10	Century / I-110 NB Ramps	City of Los Angeles	CMA	Signalized	0.443	A	0.341	A
		Caltrans	HCM	Signalized	14.0	B	12.0	B
11	108th / Crenshaw	City of Inglewood [a]	ICU	Signalized	0.547	A	0.518	A
12	108th / Van Ness	City of Inglewood / County of Los Angeles [a]	ICU	Signalized	0.681	B	0.679	B
13	108th / Western	County of Los Angeles [a]	ICU	Signalized	0.695	B	0.658	B
14	108th / Normandie	County of Los Angeles [a]	ICU	Signalized	0.595	A	0.515	A
15	108th / Vermont	City of Los Angeles	CMA	Signalized	0.487	A	0.403	A
		County of Los Angeles [a]	ICU	Signalized	0.550	A	0.472	A
16	108th / Hoover	City of Los Angeles	CMA	Signalized	0.454	A	0.246	A
17	Imperial Hwy / Crenshaw	City of Inglewood [a]	ICU	Signalized	0.716	C	0.846	D

Table 5.12-6 Existing Year (2017) No Project Intersection LOS

	Intersection	Jurisdiction	Analysis Method	Intersection Control	AM Peak Hour		PM Peak Hour	
					V/C or Delay (S)	LOS	V/C or Delay (S)	LOS
18	Imperial Hwy / Van Ness	City of Inglewood / County of Los Angeles / Hawthorne [a]	ICU	Signalized	0.787	C	0.842	D
19	Imperial Hwy / Western	County of Los Angeles [a]	ICU	Signalized	0.848	D	0.839	D
20	Imperial Hwy / Normandie	County of Los Angeles [a]	ICU	Signalized	0.842	D	0.758	C
21	Imperial Hwy / Vermont	City of Los Angeles	CMA	Signalized	0.699	B	0.720	C
		County of Los Angeles [a]	ICU	Signalized	0.689	B	0.706	C
22	Imperial Hwy / Hoover	City of Los Angeles	CMA	Signalized	0.391	A	0.385	A
23	Imperial Hwy / Figueroa	City of Los Angeles	CMA	Signalized	0.747	C	0.714	C
24	Imperial Hwy / I-110 SB Ramps	City of Los Angeles	CMA	Signalized	0.489	A	0.515	A
		Caltrans	HCM	Signalized	19.9	B	22.2	C
25	Imperial Hwy / I-110 NB Ramps	City of Los Angeles	CMA	Signalized	0.465	A	0.562	A
		Caltrans	HCM	Signalized	21.0	C	16.7	B
26	Imperial Hwy / Broadway	City of Los Angeles	CMA	Signalized	0.600	A	0.509	A
27	Imperial Hwy / Main	City of Los Angeles	CMA	Signalized	0.573	A	0.679	B
28	Imperial Hwy / Avalon	City of Los Angeles	CMA	Signalized	0.723	C	0.765	C
29	118th & I-105 WB Ramp / Crenshaw	City of Inglewood [a]	ICU	Signalized	1.971	F	0.724	C
		Caltrans	HCM	Signalized	14.5	B	19.8	B
30	I-105 EB Ramps / 120th	City of Hawthorne [a]	ICU	Signalized	0.798	C	0.733	C
		Caltrans	HCM	Signalized	29.2	C	26.5	C
31	I-105 WB Ramps / Vermont	City of Los Angeles	CMA	Signalized	0.847	D	0.816	D
		County of Los Angeles [a]	ICU	Signalized	0.781	C	0.638	B
		Caltrans	HCM	Signalized	26.6	C	21.9	C

Table 5.12-6 Existing Year (2017) No Project Intersection LOS

Intersection		Jurisdiction	Analysis Method	Intersection Control	AM Peak Hour		PM Peak Hour	
					V/C or Delay (S)	LOS	V/C or Delay (S)	LOS
32	116th & I-105 EB Ramp / Vermont	City of Los Angeles	CMA	Signalized	0.541	A	0.419	A
		County of Los Angeles [a]	ICU	Signalized	0.944	E	0.471	A
		Caltrans	HCM	Signalized	19.8	B	16.0	B
33	116th & I-105 EB On-Ramp / Hoover	City of Los Angeles	HCM	AWSC	14.2	B	12.8	B
		Caltrans	HCM	AWSC	14.2	B	12.8	B
34	120th / Crenshaw	City of Hawthorne [a]	ICU	Signalized	0.769	C	0.774	C
35	120th / Van Ness	City of Hawthorne [a]	ICU	Signalized	1.021	F	0.888	D
36	120th / Western	County of Los Angeles [a]	ICU	Signalized	0.760	C	0.650	B
37	120th / Normandie	County of Los Angeles [a]	ICU	Signalized	0.657	B	0.507	A
38	120th / Vermont	City of Los Angeles	CMA	Signalized	0.519	A	0.500	A
		County of Los Angeles [a]	ICU	Signalized	0.580	A	0.563	A
39	120th / Hoover	City of Los Angeles	CMA	Signalized	0.577	A	0.397	A
40	120th / Figueroa	City of Los Angeles	CMA	Signalized	0.580	A	0.544	A
41	El Segundo / Crenshaw	City of Hawthorne [a]	ICU	Signalized	0.831	D	0.839	D
		City of Gardena	ICU	Signalized	0.831	D	0.839	D
42	El Segundo / Van Ness	City of Hawthorne [a]	ICU	Signalized	1.042	F	0.949	E
		City of Gardena	ICU	Signalized	1.042	F	0.949	E
43	El Segundo / Western	County of Los Angeles [a]	ICU	Signalized	0.884	D	0.806	D
		City of Gardena	ICU	Signalized	0.884	D	0.806	D
44	El Segundo / Normandie	County of Los Angeles [a]	ICU	Signalized	0.861	D	0.834	D
		City of Gardena	ICU	Signalized	0.861	D	0.834	D

Table 5.12-6 Existing Year (2017) No Project Intersection LOS

Intersection		Jurisdiction	Analysis Method	Intersection Control	AM Peak Hour		PM Peak Hour	
					V/C or Delay (S)	LOS	V/C or Delay (S)	LOS
45	El Segundo / Vermont	City of Los Angeles	CMA	Signalized	0.775	C	0.699	B
		County of Los Angeles [a]	ICU	Signalized	0.752	C	0.686	B
		City of Gardena	ICU	Signalized	0.752	C	0.686	B
46	El Segundo / I-110 SB Ramps	City of Los Angeles	CMA	Signalized	0.802	D	0.676	B
		Caltrans	HCM	Signalized	46.4	D	25.1	C
47	El Segundo / I-110 NB Ramps	City of Los Angeles	CMA	Signalized	0.621	B	0.762	C
		Caltrans	HCM	Signalized	20.2	C	26.1	C
48	El Segundo / Figueroa	City of Los Angeles	CMA	Signalized	0.514	A	0.678	B
49	135th / Crenshaw	City of Hawthorne [a]	ICU	Signalized	0.811	D	0.709	C
		City of Gardena	ICU	Signalized	0.811	D	0.709	C
50	135th / Normandie	City of Gardena	ICU	Signalized	0.770	C	0.718	C
51	Rosecrans / Crenshaw	City of Hawthorne [a]	ICU	Signalized	0.757	C	0.810	D
		City of Gardena	ICU	Signalized	0.757	C	0.810	D
52	Rosecrans / Normandie	City of Gardena	ICU	Signalized	0.733	C	0.733	C

Source: IBI Group, September 2017.
Notes: [a] = Uses County of Los Angeles analysis methodology; AWSC = all way stop control; **Bold and shaded** = intersection operates at an unacceptable LOS using the methodology listed.

CMP Monitoring Station Analysis

The three CMP monitoring station locations include:

2. I-105 at Western Avenue
4. I-105 w/o I-710 (at Harris Avenue)
6. I-110 at Manchester Avenue

The CMP monitoring station analysis results for the AM and PM peak hours are summarized in Table 5.12-7. The analysis was performed in accordance with the methodology outlined above in Section 5.12.1. An unacceptable LOS (LOS F) was observed at the following locations:

- 2. I-105 at Western Avenue (PM peak hour)
- 6. I-110 at Manchester Avenue (AM and PM peak hours)

Table 5.12-7 Existing Year (2017) No Project CMP Monitoring Station Analysis

							AM Peak Hour			PM Peak Hour		
ID	Freeway	Segment	Station	Lanes	Capacity	Direction	Volume	V/C	LOS	Volume	V/C	LOS
2	I-105	at Western Avenue	1042	4	8,000	EB	6,434	0.804	D	8,219	**1.027**	**F(0)**
						WB	7,793	0.974	E	7,749	0.969	E
4	I-105	w/o I-710 (at Harris Avenue)	1043	4	12,000	EB	6,999	0.875	D	7,064	0.883	D
						WB	5,949	0.744	C	5,717	0.715	C
6	I-110	at Manchester Avenue	1046	4	12,000	NB	8,482	**1.060**	**F(0)**	9,325	**1.166**	**F(0)**
						SB	10,334	**1.292**	**F(1)**	11,379	**1.422**	**F(2)**

Source: IBI Group, September 2017
Note: **Bold** = unacceptable LOS

Freeway Main-Line Analysis

The ten freeway main-line study locations include:

1. I-105 at Hawthorne Boulevard
2. I-105 at Western Avenue
3. I-105 at Wilmington Avenue
4. I-105 west of I-719 (Harris Avenue)
5. I-110 south of I-10 (at Adams Boulevard)
6. I-110 at Manchester Avenue
7. I-110 north of I-105 (at 110th Street)
8. I-110 south of I-105 (at 126th Street)
9. I-110 at 135th Street
10. I-110 north of SR-91 (Gardena Boulevard)

The freeway main-line analysis results for the AM and PM peak hours are summarized in Table 5.12-8. The analysis was conducted using the methodology and settings outlined above in Section 5.12.1. All freeway segments operate at an unacceptable level of service (LOS D or worse).

Table 5.12-8 Existing Year (2017) Freeway Main Line Analysis

				AM Peak Hour		PM Peak Hour	
ID	Freeway	Location	Direction	Density (pc/mi/ln)	LOS	Density (pc/mi/ln)	LOS
1	I-105	at Hawthorne Boulevard	EB	23.2	C	33.9	D
			WB	22.3	C	22.2	C
2	I-105	at Western Avenue	EB	26.9	D	44.2	E
			WB	25.7	C	25.6	C
3	I-105	at Wilmington Avenue	EB	OVR	F	OVR	F
			WB	45.0	F	45.0	F
4	I-105	w/o I-710 (Harris Avenue)	EB	31.8	D	32.5	D
			WB	24.7	C	23.5	C
5	I-110	s/o I-10 (at Adams Boulevard)	NB	21.3	C	23.8	C
			SB	30.5	D	30.0	D
6	I-110	at Manchester Avenue	NB	OVR	F	OVR	F
			SB	45.	F	45	F
7	I-110	n/o I-105 (at 110th Street)	NB	OVR	F	OVR	F
			SB	31.6	D	34.0	D
8	I-110	s/o I-105 (at 126th Street)	NB	33.1	D	31.4	D
			SB	45.0	F	45.0	F
9	I-110	at 135th Street	NB	30.5	D	29.0	D
			SB	45.0	F	44.4	E
10	I-110	n/o SR-91 (Gardena Boulevard)	NB	26.8	D	20.9	C
			SB	24.6	C	29.4	D

Source: IBI Group, September 2017.
Notes: **Bold and shaded** = unacceptable level of service (LOS D or worse); pc/mi/ln = passenger car per mile per lane; OVR = over capacity, density value not available.

Freeway On-Ramp Queue Analysis

Table 5.12-9 summarizes the storage capacities and projected queue lengths for the study freeway on-ramps. The following freeway on-ramp locations are anticipated to experience queues for left-turns that exceed the measured storage length:

- 24. I-110 SB On-Ramp at Imperial Highway (AM and PM peak hours)
- 30. I-105 EB On-Ramp at 120th Street (AM and PM peak hours)
- 31. I-105 WB On-Ramp at Vermont Avenue (AM peak hour)
- 32. I-105 EB On-Ramp at Vermont Avenue[1] (AM peak hour)
- 47. I-110 NB On-Ramp at El Segundo Boulevard (PM peak hour)

Freeway Off-Ramp Queue Analysis

Table 5.12-10 summarizes the storage capacities and queue lengths expected for the study freeway off-ramps. All freeway off-ramps provide sufficient storage capacity such that the 85 percent storage capacity is not exceeded by expected queues.

[1] It should be noted that the I-105 EB On-Ramp at Vermont Avenue is not at this intersection but approximately one-quarter mile east at the intersection of 116th Place and Hoover Street. However, the on-ramp serves as the primary access point for I-105 in the eastbound direction.

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Table 5.12-9 Existing Year (2017) No Project Freeway On-Ramp Queue Analysis

ID	Ramp	Cross Street	Pocket Length (ft) [a]	Ramp Turn Lanes at Intersection				AM Queue		PM Queue		Queue Exceeds Storage?	
				Direction	Lanes	Movement	Length [a]	Lane (ft)	Max (ft)	Lane (ft)	Max (ft)	AM Peak Hour	PM Peak Hour
10	I-110 NB On-Ramp	Century Boulevard	220	EB	2 [b]	Left	160	50	50	74	74	No	No
						Left	220	50		74			
24	I-110 SB On-Ramp	Imperial Highway	120	WB	1	Left	120	254	254	187	187	Yes	Yes
30	I-105 EB On-Ramp	120th Street	200	EB	1	Left	200	366	366	464	464	Yes	Yes
31	I-105 WB On-Ramp	Vermont Avenue	200	NB	1	Left	200	391	391	168	168	Yes	No
32	I-105 EB On-Ramp*	Vermont Avenue	200	SB	1	Left	200	204	204	149	149	Yes	No
33	I-105 EB On-Ramp	Hoover Street	90	SB	1	Left	90	70	70	8	8	No	No
46	I-110 SB On-Ramp	El Segundo Boulevard	240	WB	1	Left	240	217	217	152	152	No	No
47	I-110 NB On-Ramp	El Segundo Boulevard	250	WB	1	Left	250	124	124	313	313	No	Yes

Notes: [a] = Length measured from scaled aerial images; [b] = Approach consists of one left-turn pocket and one left-turn lane; pocket length and lane length to downstream intersection where cars may queue uninterrupted are provided.
*On-ramp is not at intersection, but this is the primary route by which traffic accesses the ramp.

Table 5.12-10 Existing Year (2017) No Project Freeway Off-Ramp Queue Analysis

ID	Ramp	Cross Street	Ramp Length (ft) [a]	85% Ramp Length (ft)	Ramp Turn Lanes at Intersection			AM Queue		PM Queue		Queue Exceeds 85% Storage?	
					Lanes	Movement	Length [a]	Lane (ft)	Max (ft)	Lane (ft)	Max (ft)	AM Peak Hour	PM Peak Hour
9	I-110 Southbound Off-Ramp	Century Boulevard	850	725	3	Left	725	91	91	115	115	No	No
						Left/Through/Right	250	87		113			
						Right	250	47		65			
25	I-110 Northbound Off-Ramp	Imperial Highway	2,000	1,700	3	Left	1,700	325	354	164	219	No	No
						Left/Through/Right	280	354		219			
						Right	280	145		134			
29	I-105 Westbound Off-Ramp	Crenshaw Boulevard	1,300	1,100	3	Left	1,140	100	105	300	361	No	No
						Left/Through/Right*	1,140	105		361			
						Right	525	40		230			
30	I-105 Eastbound Off-Ramp	120th Street	1,500	1,300	3	Left*	1,300	264	264	118	118	No	No
						Left	1,000	264		118			
						Right	425	15		13			
31	I-105 Westbound Off-Ramp	Vermont Avenue	1,150	980	2	Left/Through/Right	980	312	312	300	300	No	No
						Right	750	248		266			
32	I-105 Eastbound Off-Ramp	Vermont Avenue	1,120	950	3	Left	950	187	208	161	173	No	No
						Left/Through/Right	420	208		173			
						Right	420	37		85			
46	I-110 Southbound Off-Ramp	El Segundo Boulevard	875	740	3	Left	740	145	291	123	123	No	No
						Left/Right	450	291		98			
						Right	150	270		86			
47	I-110 Northbound Off-Ramp	El Segundo Boulevard	1,400	1,200	2	Left	1,200	254	254	316	316	No	No
						Left/Right	500	254		316			

Note: [a] = Length measured from scaled aerial images.
*Lane continues on freeway main line as its own lane; length shown is to gore point of lane or adjacent lane.

Vehicle Miles Traveled Analysis

VMT calculations were prepared based on the land use characteristics in the Existing Year (2017) No Project scenario using the existing land use zoning map. A summary of the results for this scenario is presented in Table 5.12-11.

Table 5.12-11 Existing Year (2017) Vehicle Miles Traveled

Land Use	Average Daily Trip Rate			Annual VMT	Population/ Employees	Annual VMT per Capita
	Weekday	Saturday	Sunday			
Single Family	13,785	14,350	12,482	46,744,803	5,074	9,213
Multifamily	13,360	12,838	11,773	44,622,878	6,084	7,334
Hotel	735	737	536	1,687,057	202	8,352
Bowling Alley	841	533	683	1,656	39	42
Private School (K-12)	1,046	348	142	3,490,663	53	65,862
Church	746	849	2,999	2,308,895	82	28,157
Cemetery	0	0	0	642	2	321
Lodge/Fraternal Organization	159	242	197	359,759	15	23,984
Nursing Home	30	24	27	98,482	11	8,953
General Office Building	3,922	875	373	9,598,372	293	32,759
Shopping Center	16,591	19,416	9,807	34,660,585	536	64,665
Specialty Retail Center	4,206	3,990	1,939	7,327,232	146	50,187
Supermarket	649	1,128	1,057	1,023,666	10	102,367
High-Turnover (Sit-Down) Restaurant	1,657	2,064	1,718	2,348,986	20	117,449
Gasoline/Service Station w/ Convenience Market	1,854	1,854	1,854	1,199,250	2	599,625
Total	59,582	59,247	45,587	155,472,926	12,569	12,370

Source: IBI Group, September 2017.

5.12.3 Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, a project would normally have a significant effect on the environment if the project could:

T-1 Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

T-2 Conflict with an applicable congestion management program (CMP), including, but not limited to level of service standards and travel demand measures, or other standards established by the CMP for designated roads or highways.

T-3 Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

T-4 Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

T-5 Result in inadequate emergency access.

T-6 Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

5.12.3.1 INTERSECTION LEVEL OF SERVICE ANALYSIS AND IMPACT CRITERIA

The study area intersections for the proposed project are in various jurisdictions—County of Los Angeles, City of Los Angeles, City of Inglewood, City of Hawthorne, City of Gardena, and Caltrans. Intersections were assessed using all applicable jurisdiction assessment criteria. Study intersections were selected for analysis based on the forecast project trip generation and distribution, particularly in consideration of each agency's guidelines. The Los Angeles County Department of Public Works reviewed and approved the proposed study intersections locations. The analysis also considered a comment letter provided to the County by Caltrans District 7 during the Notice of Preparation comment period and Caltrans consultation. Caltrans-controlled intersections have been included as study locations based on a review of Caltrans guidelines of forecast trip generation. In cases where intersections suggested by Caltrans for analysis are not included, the project team discussed with Caltrans the existing level of service and the relatively small number of project trips expected at these locations.

County of Los Angeles

Traffic conditions at signalized intersections are evaluated using the Intersection Capacity Utilization method.

The County of Los Angeles traffic study guidelines do not specify a method for assessing unsignalized intersections. In these instances, the HCM 2010 All-Way Stop Control method was employed using the Synchro 9 software.

The Existing Year (2017) No Project was used as the baseline for comparison to the other scenarios. The County of Los Angeles criteria for impact thresholds are shown in Table 5.12-12.

Table 5.12-12 County of Los Angeles Significant Impact Threshold Criteria

LOS	Range of V/C Ratio	Significant Impact Threshold Project V/C Increase
A	0–0.600	0.750
B	> 0.600–0.700	0.750
C	> 0.700–0.800	0.04 or more
D	> 0.800–0.900	0.02 or more
E	> 0.900–1.000	0.01 or more
F	> 1.000	0.01 or more

Source: IBI Group, 2017.

City of Los Angeles

Per the traffic impact study guidelines set forth by the City of Los Angeles, the CMA method was used to assess intersection performance and impacts. LOS D is generally the minimum level of service for both signalized and unsignalized intersections.

LADOT outlines guidelines for threshold criteria to determine significant traffic impacts. The thresholds used by the City of Los Angeles are consistent with the thresholds used by Los Angeles County, shown above in Table 5.12-5.

City of Gardena

The City of Gardena assesses intersection performance and impacts using the ICU method.

The City of Gardena uses the following thresholds of significance to assess project impacts:

- The addition of project trips causes an intersection to exceeded LOS D for residential and LOS E for commercial intersections.
- For intersections operating at LOS F, the addition of project trips causes an intersection V/C ratio increase of 0.01 or more.

City of Hawthorne and City of Inglewood

Although the project is in the unincorporated area of Los Angeles County, it was found that two of the surrounding cities have not developed their own traffic impact analysis guidelines—Hawthorne and Inglewood. For the purpose of this analysis, study intersections in Hawthorne and Inglewood were analyzed according to the guidelines for Los Angeles County.

Caltrans

Caltrans assesses facility performance and impacts utilizing the HCM 2010 method. Facilities evaluated with this method include freeway terminals (intersections) and off-ramps (queues). LOS C is the minimum level of service for signalized intersections. Caltrans traffic impact analysis guidelines do not specify a minimum LOS for unsignalized intersections; therefore, LOS C was taken to be the minimum as well. LOS designations for signalized intersections are presented in Table 5.12-1.

Caltrans traffic impact analysis guidelines do not explicitly define a significant impact in terms of existing level of service and change in that level of service; therefore, a significant impact is considered to occur when:

- The addition of project trips causes a change from LOS C or better to LOS D or worse.
- The addition of project trips causes a change from LOS D or worse to degrade to a lower LOS.

- If the intersection is operating at LOS F in the baseline condition, any increase in vehicle delay is taken to be an impact; LOS should be returned to, at least, the pre-project conditions.

5.12.4 Plans, Programs, and Policies

5.12.4.1 Regulatory Requirements

RR TRANS-1 The proposed project's construction activities will be conducted in accordance with the provision of traffic-control devices in compliance with the California Manual for Uniform Traffic Control Devices to ensure traffic safety on public streets, highways, pedestrian walkways, and bikeways.

RR TRANS-2 The proposed project's construction activities on public rights-of-way will be conducted in accordance with the current standard Specifications for Public Works construction, including traffic control provisions.

5.12.5 Environmental Impacts

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.12-1: The project would result in a significant increase in intersection and roadway levels of service. [Threshold T-1]

Impact Analysis:

Project Trip Generation

The trip generation for the TIA was estimated using rates published in the Institute of Transportation Engineers' *Trip Generation Manual* (9th edition). The proposed project's volumes were calculated by subtracting the generated trips under the existing land use from the proposed land use zoning. Trip reductions were also applied to account for pass-by, internal capture, and/or PDF trip reductions. The methodology is described in detail in Section 6.1 of the TIA.

The project is expected to generate 10,339 net daily trips, with 972 trips (792 inbound / 180 outbound) during the AM peak hour and 712 trips (9 inbound / 703 outbound) during the PM peak hour. The trip generation for the existing land use zoning, proposed land use zoning, and project are presented in Table 5.12-13.

Table 5.12-13 Project Trip Generation

Land Use Zoning	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
Existing	46,511	1,358	1,742	3,100	2,062	1,750	3,812
Proposed Buildout	56,850	2,150	1,922	4,072	2,071	2,453	4,524
Project (net)	10,339	792	180	972	9	703	712

Source: IBI 2017.

The project trip distribution for this study was developed with consideration of a select zone analysis from the SCAG regional model and trip percentages in the 2010 CMP for Los Angeles County. The resulting regional- and local-street project trip distributions are depicted in Figure 5.12-3. Additional details regarding the methodology and assumptions to calculate project trip generation and distributions are included in Sections 6.1 and 6.2 of the TIA.

Intersection Level of Service

Existing Year (2017) With Project Conditions

Study intersections were evaluated to determine if they were significantly impacted by the addition of project-generated traffic. A summary of the AM and PM peak hour intersection level of service analysis results for the Existing Year (2017) With Project condition is presented in Table 5.12-14. The significant impact thresholds used to determine the impacts are summarized in Section 5.12.4.

The following 10 intersections are expected to be significantly impacted due to the addition of project traffic:

- 17. Imperial Highway and Crenshaw Boulevard (PM peak hour)
- 19. Imperial Highway and Western Avenue (AM and PM peak hours)
- 20. Imperial Highway and Normandie Avenue (AM and PM peak hours)
- 21. Imperial Highway and Vermont Avenue (AM and PM peak hours)
- 23. Imperial Highway and Figueroa Street (PM peak hour)
- 29. I-105 WB Off-Ramp / 118th Place and Crenshaw Boulevard (AM peak hour)
- 31. I-105 WB Ramps and Vermont Avenue (AM and PM peak hours)
- 36. 120th Street and Western Avenue (AM peak hour)
- 43. El Segundo Boulevard and Western Avenue (AM peak hour)
- 44. El Segundo Boulevard and Normandie Avenue (AM peak hour)

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Table 5.12-14 Existing Year (2017) With Project Intersection LOS

	Intersection	Jurisdiction	Analysis Method	Intersection Control	No Project		With Project		Change in V/C or Delay	Significant Impact?
					V/C or Delay (S)	LOS	V/C or Delay (S)	LOS		
AM Peak Hour										
1	Century / Prairie	City of Inglewood [a]	ICU	Signalized	0.664	B	0.669	B	0.005	No
2	Century / Crenshaw	City of Inglewood [a]	ICU	Signalized	0.563	A	0.501	A	0.062	No
3	Century / Van Ness	City of Inglewood / County of Los Angeles [a]	ICU	Signalized	0.826	D	0.838	D	0.012	No
4	Century / Western	County of Los Angeles [a]	ICU	Signalized	0.787	C	0.796	C	0.009	No
5	Century / Normandie	County of Los Angeles [a]	ICU	Signalized	0.881	D	0.891	D	0.010	No
6	Century / Vermont	City of Los Angeles	CMA	Signalized	0.672	B	0.674	B	0.002	No
		County of Los Angeles [a]	ICU	Signalized	0.665	B	0.667	B	0.002	No
7	Century / Hoover	City of Los Angeles	CMA	Signalized	0.517	A	0.519	A	0.002	No
8	Century / Figueroa	City of Los Angeles	CMA	Signalized	0.810	D	0.812	D	0.002	No
9	Century / I-110 SB Ramps	City of Los Angeles	CMA	Signalized	0.347	A	0.349	A	0.002	No
		Caltrans	HCM	Signalized	12.3	B	12.3	B	0.0	No
10	Century / I-110 NB Ramps	City of Los Angeles	CMA	Signalized	0.443	A	0.445	A	0.002	No
		Caltrans	HCM	Signalized	14.0	B	13.9	B	-0.1	No
11	108th / Crenshaw	City of Inglewood [a]	ICU	Signalized	0.547	A	0.548	A	0.001	No
12	108th / Van Ness	City of Inglewood / County of Los Angeles [a]	ICU	Signalized	0.681	B	0.686	B	0.005	No
13	108th / Western	County of Los Angeles [a]	ICU	Signalized	0.695	B	0.708	C	0.013	No
14	108th / Normandie	County of Los Angeles [a]	ICU	Signalized	0.595	A	0.602	B	0.007	No
15	108th / Vermont	City of Los Angeles	CMA	Signalized	0.487	A	0.488	A	0.001	No
		County of Los Angeles [a]	ICU	Signalized	0.550	A	0.551	A	0.001	No
16	108th / Hoover	City of Los Angeles	CMA	Signalized	0.454	A	0.454	A	0.000	No

Table 5.12-14 Existing Year (2017) With Project Intersection LOS

	Intersection	Jurisdiction	Analysis Method	Intersection Control	No Project		With Project		Change in V/C or Delay	Significant Impact?
					V/C or Delay (S)	LOS	V/C or Delay (S)	LOS		
17	Imperial Hwy / Crenshaw	City of Inglewood [a]	ICU	Signalized	0.716	C	0.720	C	0.004	No
18	Imperial Hwy / Van Ness	City of Inglewood / County of Los Angeles / Hawthorne [a]	ICU	Signalized	0.787	C	0.797	C	0.010	No
19	Imperial Hwy / Western	County of Los Angeles [a]	ICU	Signalized	0.848	D	0.908	E	0.060	Yes
20	Imperial Hwy / Normandie	County of Los Angeles [a]	ICU	Signalized	0.842	D	0.880	D	0.038	Yes
21	Imperial Hwy / Vermont	City of Los Angeles	CMA	Signalized	0.699	B	0.777	C	0.078	No
		County of Los Angeles [a]	ICU	Signalized	0.689	B	0.756	C	0.067	Yes
22	Imperial Hwy / Hoover	City of Los Angeles	CMA	Signalized	0.391	A	0.409	A	0.018	No
23	Imperial Hwy / Figueroa	City of Los Angeles	CMA	Signalized	0.747	C	0.776	C	0.029	No
24	Imperial Hwy / I-110 SB Ramps	City of Los Angeles	CMA	Signalized	0.489	A	0.638	B	0.149	No
		Caltrans	HCM	Signalized	19.9	B	20.0	B	0.1	No
25	Imperial Hwy / I-110 NB Ramps	City of Los Angeles	CMA	Signalized	0.465	A	0.478	A	0.013	No
		Caltrans	HCM	Signalized	21.0	C	21.7	C	0.7	No
26	Imperial Hwy / Broadway	City of Los Angeles	CMA	Signalized	0.600	A	0.600	A	0.000	No
27	Imperial Hwy / Main	City of Los Angeles	CMA	Signalized	0.573	A	0.573	A	0.000	No
28	Imperial Hwy / Avalon	City of Los Angeles	CMA	Signalized	0.723	C	0.723	C	0.000	No
29	118th & I-105 WB Ramp / Crenshaw	City of Inglewood [a]	ICU	Signalized	1.971	F	2.015	F	0.044	Yes
		Caltrans	HCM	Signalized	14.5	B	15.9	B	1.4	No
30	I-105 EB Ramps / 120th	City of Hawthorne [a]	ICU	Signalized	0.798	C	0.814	D	0.016	No
		Caltrans	HCM	Signalized	29.2	C	30.0	C	0.8	No

Table 5.12-14 Existing Year (2017) With Project Intersection LOS

Intersection		Jurisdiction	Analysis Method	Intersection Control	No Project		With Project		Change in V/C or Delay	Significant Impact?
					V/C or Delay (S)	LOS	V/C or Delay (S)	LOS		
31	I-105 WB Ramps / Vermont	City of Los Angeles	CMA	Signalized	0.847	D	0.928	E	0.081	Yes
		County of Los Angeles [a]	ICU	Signalized	0.781	C	0.833	D	0.052	Yes
		Caltrans	HCM	Signalized	26.6	C	32.9	C	6.3	No
32	116th & I-105 EB Ramp / Vermont	City of Los Angeles	CMA	Signalized	0.541	A	0.523	A	-0.018	No
		County of Los Angeles [a]	ICU	Signalized	0.944	E	0.872	D	-0.072	No
		Caltrans	HCM	Signalized	19.8	B	20.3	C	0.5	No
33	116th & I-105 EB On-Ramp / Hoover	City of Los Angeles	CMA	AWSC	14.2	B	14.5	B	0.300	No
		Caltrans	HCM	AWSC	14.2	B	14.5	B	0.3	No
34	120th / Crenshaw	City of Hawthorne [a]	ICU	Signalized	0.769	C	0.795	C	0.026	No
35	120th / Van Ness	City of Hawthorne [a]	ICU	Signalized	1.021	F	1.023	F	0.002	No
36	120th / Western	County of Los Angeles [a]	ICU	Signalized	0.760	C	0.814	D	0.054	Yes
37	120th / Normandie	County of Los Angeles [a]	ICU	Signalized	0.657	B	0.675	B	0.018	No
38	120th / Vermont	City of Los Angeles	CMA	Signalized	0.519	A	0.539	A	0.020	No
		County of Los Angeles [a]	ICU	Signalized	0.580	A	0.599	A	0.019	No
39	120th / Hoover	City of Los Angeles	CMA	Signalized	0.577	A	0.577	A	0.000	No
40	120th / Figueroa	City of Los Angeles	CMA	Signalized	0.580	A	0.580	A	0.000	No
41	El Segundo / Crenshaw	City of Hawthorne [a]	ICU	Signalized	0.831	D	0.833	D	0.002	No
		City of Gardena	ICU	Signalized	0.831	D	0.833	D	0.002	No
42	El Segundo / Van Ness	City of Hawthorne [a]	ICU	Signalized	1.042	F	1.048	F	0.006	No
		City of Gardena	ICU	Signalized	1.042	F	1.048	F	0.006	No
43	El Segundo / Western	County of Los Angeles [a]	ICU	Signalized	0.884	D	0.908	E	0.024	Yes
		City of Gardena	ICU	Signalized	0.884	D	0.908	E	0.024	Yes

Table 5.12-14 Existing Year (2017) With Project Intersection LOS

	Intersection	Jurisdiction	Analysis Method	Intersection Control	No Project		With Project		Change in V/C or Delay	Significant Impact?
					V/C or Delay (S)	LOS	V/C or Delay (S)	LOS		
44	El Segundo / Normandie	County of Los Angeles [a]	ICU	Signalized	0.861	D	0.886	D	0.025	Yes
		City of Gardena	ICU	Signalized	0.861	D	0.886	D	0.025	No
45	El Segundo / Vermont	City of Los Angeles	CMA	Signalized	0.775	C	0.790	C	0.015	No
		County of Los Angeles [a]	ICU	Signalized	0.752	C	0.765	C	0.013	No
		City of Gardena	ICU	Signalized	0.752	C	0.765	C	0.013	No
46	El Segundo / I-110 SB Ramps	City of Los Angeles	CMA	Signalized	0.802	D	0.810	D	0.008	No
		Caltrans	HCM	Signalized	46.4	D	47.8	D	1.4	No
47	El Segundo / I-110 NB Ramps	City of Los Angeles	CMA	Signalized	0.621	B	0.638	B	0.017	No
		Caltrans	HCM	Signalized	20.2	C	20.9	C	0.7	No
48	El Segundo / Figueroa	City of Los Angeles	CMA	Signalized	0.514	A	0.465	A	-0.049	No
49	135th / Crenshaw	City of Hawthorne [a]	ICU	Signalized	0.811	D	0.813	D	0.002	No
		City of Gardena	ICU	Signalized	0.811	D	0.813	D	0.002	No
50	135th / Normandie	City of Gardena	ICU	Signalized	0.770	C	0.773	C	0.003	No
51	Rosecrans / Crenshaw	City of Hawthorne [a]	ICU	Signalized	0.757	C	0.762	C	0.005	No
		City of Gardena	ICU	Signalized	0.757	C	0.762	C	0.005	No
52	Rosecrans / Normandie	City of Gardena	ICU	Signalized	0.733	C	0.746	C	0.013	No
PM Peak Hour										
1	Century / Prairie	City of Inglewood [a]	ICU	Signalized	0.678	B	0.682	B	0.004	No
2	Century / Crenshaw	City of Inglewood [a]	ICU	Signalized	0.768	C	0.681	B	-0.087	No
3	Century / Van Ness	City of Inglewood / County of Los Angeles [a]	ICU	Signalized	0.819	D	0.828	D	0.009	No
4	Century / Western	County of Los Angeles [a]	ICU	Signalized	0.758	C	0.766	C	0.008	No

Table 5.12-14 Existing Year (2017) With Project Intersection LOS

	Intersection	Jurisdiction	Analysis Method	Intersection Control	No Project		With Project		Change in V/C or Delay	Significant Impact?
					V/C or Delay (S)	LOS	V/C or Delay (S)	LOS		
5	Century / Normandie	County of Los Angeles [a]	ICU	Signalized	0.854	D	0.864	D	0.010	No
6	Century / Vermont	City of Los Angeles	CMA	Signalized	0.590	A	0.595	A	0.005	No
		County of Los Angeles [a]	ICU	Signalized	0.594	A	0.597	A	0.003	No
7	Century / Hoover	City of Los Angeles	CMA	Signalized	0.433	A	0.435	A	0.002	No
8	Century / Figueroa	City of Los Angeles	CMA	Signalized	0.697	B	0.699	B	0.002	No
9	Century / I-110 SB Ramps	City of Los Angeles	CMA	Signalized	0.358	A	0.360	A	0.002	No
		Caltrans	HCM	Signalized	12.7	B	12.7	B	0.0	No
10	Century / I-110 NB Ramps	City of Los Angeles	CMA	Signalized	0.341	A	0.343	A	0.002	No
		Caltrans	HCM	Signalized	12.0	B	12.0	B	0.0	No
11	108th / Crenshaw	City of Inglewood [a]	ICU	Signalized	0.518	A	0.523	A	0.005	No
12	108th / Van Ness	City of Inglewood / County of Los Angeles [a]	ICU	Signalized	0.679	B	0.684	B	0.005	No
13	108th / Western	County of Los Angeles [a]	ICU	Signalized	0.658	B	0.669	B	0.011	No
14	108th / Normandie	County of Los Angeles [a]	ICU	Signalized	0.515	A	0.516	A	0.001	No
15	108th / Vermont	City of Los Angeles	CMA	Signalized	0.403	A	0.410	A	0.007	No
		County of Los Angeles [a]	ICU	Signalized	0.472	A	0.478	A	0.006	No
16	108th / Hoover	City of Los Angeles	CMA	Signalized	0.246	A	0.246	A	0.000	No
17	Imperial Hwy / Crenshaw	City of Inglewood [a]	ICU	Signalized	0.846	D	0.926	E	0.080	Yes
18	Imperial Hwy / Van Ness	City of Inglewood / County of Los Angeles / Hawthorne [a]	ICU	Signalized	0.842	D	0.849	D	0.007	No
19	Imperial Hwy / Western	County of Los Angeles [a]	ICU	Signalized	0.839	D	0.887	D	0.048	Yes
20	Imperial Hwy / Normandie	County of Los Angeles [a]	ICU	Signalized	0.758	C	0.802	D	0.044	Yes

Table 5.12-14 Existing Year (2017) With Project Intersection LOS

Intersection		Jurisdiction	Analysis Method	Intersection Control	No Project		With Project		Change in V/C or Delay	Significant Impact?
					V/C or Delay (S)	LOS	V/C or Delay (S)	LOS		
21	Imperial Hwy / Vermont	City of Los Angeles	CMA	Signalized	0.720	C	0.770	C	0.050	Yes
		County of Los Angeles [a]	ICU	Signalized	0.706	C	0.748	C	0.042	Yes
22	Imperial Hwy / Hoover	City of Los Angeles	CMA	Signalized	0.385	A	0.410	A	0.025	No
23	Imperial Hwy / Figueroa	City of Los Angeles	CMA	Signalized	0.714	C	0.755	C	0.041	Yes
24	Imperial Hwy / I-110 SB Ramps	City of Los Angeles	CMA	Signalized	0.515	A	0.541	A	0.026	No
		Caltrans	HCM	Signalized	22.2	C	21.7	C	-0.5	No
25	Imperial Hwy / I-110 NB Ramps	City of Los Angeles	CMA	Signalized	0.562	A	0.612	B	0.050	No
		Caltrans	HCM	Signalized	16.7	B	18.2	B	1.5	No
26	Imperial Hwy / Broadway	City of Los Angeles	CMA	Signalized	0.509	A	0.509	A	0.000	No
27	Imperial Hwy / Main	City of Los Angeles	CMA	Signalized	0.679	B	0.679	B	0.000	No
28	Imperial Hwy / Avalon	City of Los Angeles	CMA	Signalized	0.765	C	0.765	C	0.000	No
29	118th & I-105 WB Ramp / Crenshaw	City of Inglewood [a]	ICU	Signalized	0.724	C	0.751	C	0.027	No
		Caltrans	HCM	Signalized	19.8	B	21.1	C	1.3	No
30	I-105 EB Ramps / 120th	City of Hawthorne [a]	ICU	Signalized	0.733	C	0.752	C	0.019	No
		Caltrans	HCM	Signalized	26.5	C	28.2	C	1.7	No
31	I-105 WB Ramps / Vermont	City of Los Angeles	CMA	Signalized	0.816	D	0.848	D	0.032	Yes
		County of Los Angeles [a]	ICU	Signalized	0.638	B	0.667	B	0.029	No
		Caltrans	HCM	Signalized	21.9	C	23.4	C	1.5	No
32	116th & I-105 EB Ramp / Vermont	City of Los Angeles	CMA	Signalized	0.419	A	0.431	A	0.012	No
		County of Los Angeles [a]	ICU	Signalized	0.471	A	0.481	A	0.010	No
		Caltrans	HCM	Signalized	16.0	B	16.2	B	0.2	No

Table 5.12-14 Existing Year (2017) With Project Intersection LOS

	Intersection	Jurisdiction	Analysis Method	Intersection Control	No Project		With Project		Change in V/C or Delay	Significant Impact?
					V/C or Delay (S)	LOS	V/C or Delay (S)	LOS		
33	116th & I-105 EB On-Ramp / Hoover	City of Los Angeles	HCM	AWSC	12.8	B	14.0	B	1.200	No
		Caltrans	HCM	AWSC	12.8	B	14.0	B	1.2	No
34	120th / Crenshaw	City of Hawthorne [a]	ICU	Signalized	0.774	C	0.781	C	0.007	No
35	120th / Van Ness	City of Hawthorne [a]	ICU	Signalized	0.888	D	0.895	D	0.007	No
36	120th / Western	County of Los Angeles [a]	ICU	Signalized	0.650	B	0.683	D	0.033	No
37	120th / Normandie	County of Los Angeles [a]	ICU	Signalized	0.507	A	0.521	B	0.014	No
38	120th / Vermont	City of Los Angeles	CMA	Signalized	0.500	A	0.501	A	0.001	No
		County of Los Angeles [a]	ICU	Signalized	0.563	A	0.563	A	0.000	No
39	120th / Hoover	City of Los Angeles	CMA	Signalized	0.397	A	0.397	A	0.000	No
40	120th / Figueroa	City of Los Angeles	CMA	Signalized	0.544	A	0.544	A	0.000	No
41	El Segundo / Crenshaw	City of Hawthorne [a]	ICU	Signalized	0.839	D	0.844	D	0.005	No
		City of Gardena	ICU	Signalized	0.839	D	0.844	D	0.005	No
42	El Segundo / Van Ness	City of Hawthorne [a]	ICU	Signalized	0.949	E	0.950	E	0.001	No
		City of Gardena	ICU	Signalized	0.949	E	0.950	E	0.001	No
43	El Segundo / Western	County of Los Angeles [a]	ICU	Signalized	0.806	D	0.824	D	0.018	No
		City of Gardena	ICU	Signalized	0.806	D	0.824	D	0.018	No
44	El Segundo / Normandie	County of Los Angeles [a]	ICU	Signalized	0.834	D	0.850	D	0.016	No
		City of Gardena	ICU	Signalized	0.834	D	0.850	D	0.016	No
45	El Segundo / Vermont	City of Los Angeles	CMA	Signalized	0.699	B	0.715	C	0.016	No
		County of Los Angeles [a]	ICU	Signalized	0.686	B	0.700	B	0.014	No
		City of Gardena	ICU	Signalized	0.686	B	0.700	B	0.014	No

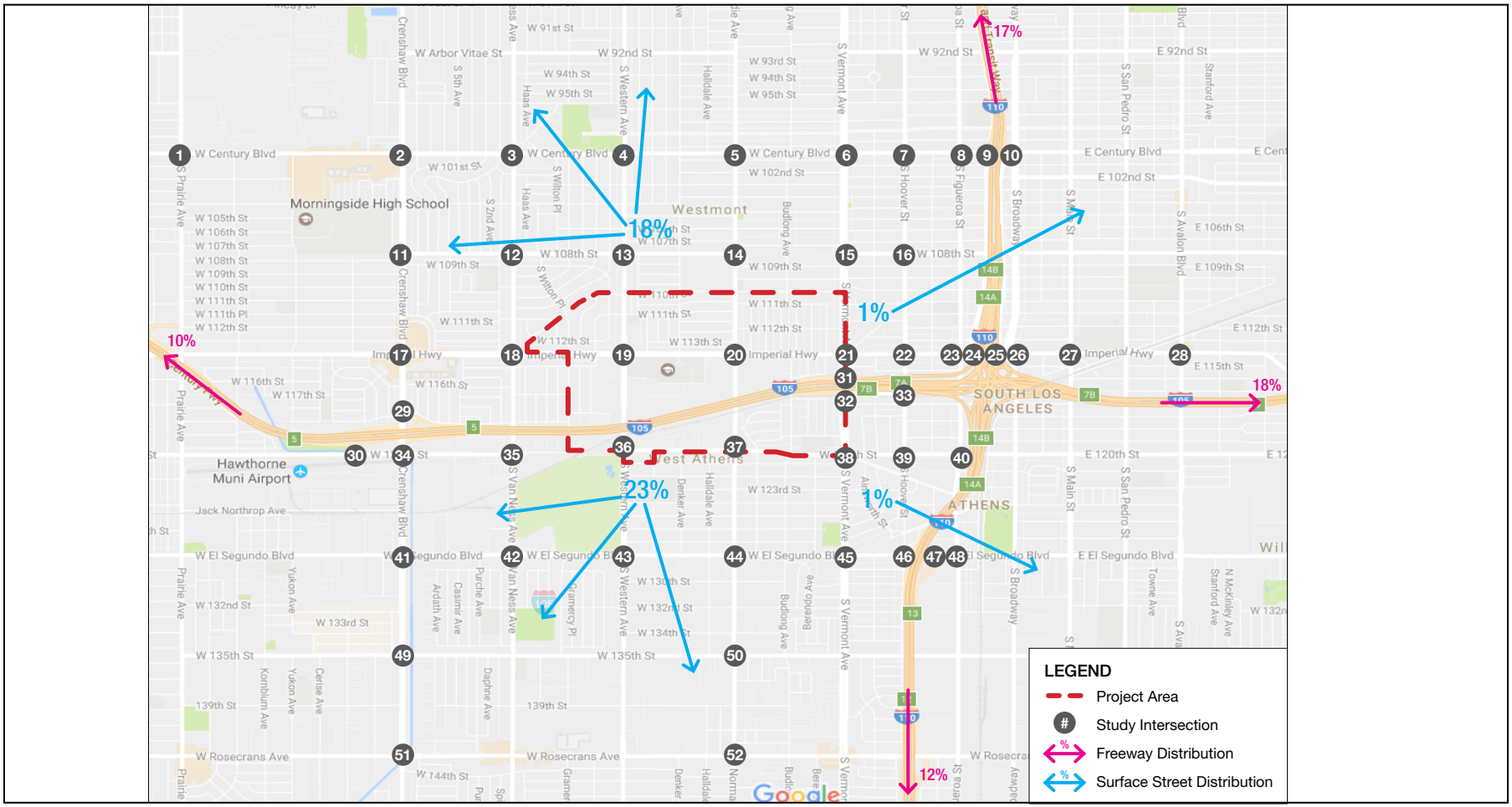
Table 5.12-14 Existing Year (2017) With Project Intersection LOS

Intersection		Jurisdiction	Analysis Method	Intersection Control	No Project		With Project		Change in V/C or Delay	Significant Impact?
					V/C or Delay (S)	LOS	V/C or Delay (S)	LOS		
46	El Segundo / I-110 SB Ramps	City of Los Angeles	CMA	Signalized	0.676	B	0.688	B	0.012	No
		Caltrans	HCM	Signalized	25.1	C	26.2	C	1.1	No
47	El Segundo / I-110 NB Ramps	City of Los Angeles	CMA	Signalized	0.762	C	0.765	C	0.003	No
		Caltrans	HCM	Signalized	26.1	C	26.3	C	0.2	No
48	El Segundo / Figueroa	City of Los Angeles	CMA	Signalized	0.678	B	0.681	B	0.003	No
49	135th / Crenshaw	City of Hawthorne [a]	ICU	Signalized	0.709	C	0.709	C	0.000	No
		City of Gardena	ICU	Signalized	0.709	C	0.709	C	0.000	No
50	135th / Normandie	City of Gardena	ICU	Signalized	0.718	C	0.718	C	0.000	No
51	Rosecrans / Crenshaw	City of Hawthorne [a]	ICU	Signalized	0.810	D	0.814	D	0.004	No
		City of Gardena	ICU	Signalized	0.810	D	0.814	D	0.004	No
52	Rosecrans / Normandie	City of Gardena	ICU	Signalized	0.733	C	0.741	C	0.008	No

Notes: [a] = utilizes County of Los Angeles analysis methodology; AWSC = all way stop control; **Bold and shaded** = intersection operates at an unacceptable LOS using the methodology listed.

Figure 5.12-3 - Project Trip Distribution

5. Environmental Analysis



Source: IBI Group, 2017

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Future (2035) With Project Conditions

A summary of the AM and PM peak hour intersection level of service analysis results for the Future Year (2035) With Project condition is presented in Table 5.12-15. The intersection impact thresholds are outlined in Section 5.12.4.

The following 21 intersections are expected to be significantly impacted by project traffic:

- 3. Century Boulevard and Van Ness Avenue (AM peak hour)
- 5. Century Boulevard and Normandie Avenue (AM and PM peak hours)
- 17. Imperial Highway and Crenshaw Boulevard (PM peak hour)
- 18. Imperial Highway and Van Ness Avenue (PM peak hour)
- 19. Imperial Highway and Western Avenue (AM and PM peak hours)
- 20. Imperial Highway and Normandie Avenue (AM and PM peak hours)
- 21. Imperial Highway and Vermont Avenue (AM and PM peak hours)
- 23. Imperial Highway and Figueroa Street (PM peak hour)
- 29. 118th and I-105 WB Ramp and Crenshaw Boulevard(AM and PM peak hours)
- 30. I-105 EB Ramps and 120th Street(AM and PM peak hours)
- 31. I-105 WB Ramps and Vermont Avenue (AM and PM peak hour)
- 34. Crenshaw Boulevard and 120th Street (AM peak hour)
- 35. Van Ness Avenue and 120th Street (AM and PM peak hours)
- 36. 120th and Western Avenue (AM peak hour)
- 41. El Segundo Boulevard and Crenshaw Boulevard (AM and PM peak hours)
- 42. El Segundo Boulevard and Van Ness Avenue(AM and PM peak hours)
- 43. El Segundo Boulevard and Western Avenue (AM and PM peak hours)
- 44. El Segundo Boulevard and Normandie Avenue (AM and PM peak hours)
- 45. El Segundo Boulevard and Vermont Avenue (AM peak hour)
- 49. 135th and Crenshaw Boulevard (AM peak hour)
- 51. Crenshaw Boulevard and Rosecrans Avenue (PM peak hour)

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Table 15.12-15 Future Year (2035) With Project Intersection LOS

	Intersection	Jurisdiction	Analysis Method	Intersection Control	No Project		W/ Project		Change in V/C or Delay	Significant Impact?
					V/C or Delay (S)	LOS	V/C or Delay (S)	LOS		
AM Peak Hour										
1	Century / Prairie	City of Inglewood [a]	ICU	Signalized	0.664	B	0.665	B	0.001	No
2	Century / Crenshaw	City of Inglewood [a]	ICU	Signalized	0.563	A	0.408	A	-0.155	No
3	Century / Van Ness	City of Inglewood / County of Los Angeles [a]	ICU	Signalized	0.826	D	0.867	D	0.041	Yes
4	Century / Western	County of Los Angeles [a]	ICU	Signalized	0.787	C	0.823	D	0.036	No
5	Century / Normandie	County of Los Angeles [a]	ICU	Signalized	0.881	D	0.922	E	0.041	Yes
6	Century / Vermont	City of Los Angeles	CMA	Signalized	0.704	C	0.706	C	0.002	No
		County of Los Angeles [a]	ICU	Signalized	0.665	B	0.694	B	0.029	No
7	Century / Hoover	City of Los Angeles	CMA	Signalized	0.541	A	0.543	A	0.002	No
8	Century / Figueroa	City of Los Angeles	CMA	Signalized	0.847	D	0.849	D	0.002	No
9	Century / I-110 SB Ramps	City of Los Angeles	CMA	Signalized	0.365	A	0.367	A	0.002	No
		Caltrans	HCM	Signalized	12.6	B	12.6	B	0.0	No
10	Century / I-110 NB Ramps	City of Los Angeles	CMA	Signalized	0.464	A	0.466	A	0.002	No
		Caltrans	HCM	Signalized	14.3	B	14.4	B	0.1	No
11	108th / Crenshaw	City of Inglewood [a]	ICU	Signalized	0.547	A	0.566	A	0.019	No
12	108th / Van Ness	City of Inglewood / County of Los Angeles [a]	ICU	Signalized	0.681	B	0.710	C	0.029	No
13	108th / Western	County of Los Angeles [a]	ICU	Signalized	0.695	B	0.732	C	0.037	No
14	108th / Normandie	County of Los Angeles [a]	ICU	Signalized	0.595	A	0.622	B	0.027	No
15	108th / Vermont	City of Los Angeles	CMA	Signalized	0.510	A	0.511	A	0.001	No
		County of Los Angeles [a]	ICU	Signalized	0.550	A	0.570	A	0.020	No
16	108th / Hoover	City of Los Angeles	CMA	Signalized	0.477	A	0.477	A	0.000	No

Table 15.12-15 Future Year (2035) With Project Intersection LOS

	Intersection	Jurisdiction	Analysis Method	Intersection Control	No Project		W/ Project		Change in V/C or Delay	Significant Impact?
					V/C or Delay (S)	LOS	V/C or Delay (S)	LOS		
17	Imperial Hwy / Crenshaw	City of Inglewood [a]	ICU	Signalized	0.716	C	0.745	C	0.029	No
18	Imperial Hwy / Van Ness	City of Inglewood / County of Los Angeles / Hawthorne [a]	ICU	Signalized	0.787	C	0.825	D	0.038	No
19	Imperial Hwy / Western	County of Los Angeles [a]	ICU	Signalized	0.848	D	0.938	E	0.090	Yes
20	Imperial Hwy / Normandie	County of Los Angeles [a]	ICU	Signalized	0.842	D	0.910	E	0.068	Yes
21	Imperial Hwy / Vermont	City of Los Angeles	CMA	Signalized	0.732	C	0.808	D	0.076	Yes
		County of Los Angeles [a]	ICU	Signalized	0.689	B	0.783	C	0.094	Yes
22	Imperial Hwy / Hoover	City of Los Angeles	CMA	Signalized	0.412	A	0.430	A	0.018	No
23	Imperial Hwy / Figueroa	City of Los Angeles	CMA	Signalized	0.781	C	0.811	D	0.030	No
24	Imperial Hwy / I-110 SB Ramps	City of Los Angeles	CMA	Signalized	0.513	A	0.667	B	0.154	No
		Caltrans	HCM	Signalized	17.9	B	18.3	B	0.4	No
25	Imperial Hwy / I-110 NB Ramps	City of Los Angeles	CMA	Signalized	0.488	A	0.501	A	0.013	No
		Caltrans	HCM	Signalized	22.2	C	23.0	C	0.8	No
26	Imperial Hwy / Broadway	City of Los Angeles	CMA	Signalized	0.628	B	0.628	B	0.000	No
27	Imperial Hwy / Main	City of Los Angeles	CMA	Signalized	0.600	A	0.600	A	0.000	No
28	Imperial Hwy / Avalon	City of Los Angeles	CMA	Signalized	0.756	C	0.756	C	0.000	No
29	118th & I-105 WB Ramp / Crenshaw	City of Inglewood [a]	ICU	Signalized	1.971	F	2.092	F	0.121	Yes
		Caltrans	HCM	Signalized	15.4	B	16.5	B	1.1	No
30	I-105 EB Ramps / 120th	City of Hawthorne [a]	ICU	Signalized	0.798	C	0.842	D	0.044	Yes
		Caltrans	HCM	Signalized	31.1	C	32.2	C	1.1	No
31	I-105 WB Ramps / Vermont	City of Los Angeles	CMA	Signalized	0.886	D	0.967	E	0.081	Yes
		County of Los Angeles [a]	ICU	Signalized	0.781	C	0.864	D	0.083	Yes

Table 15.12-15 Future Year (2035) With Project Intersection LOS

	Intersection	Jurisdiction	Analysis Method	Intersection Control	No Project		W/ Project		Change in V/C or Delay	Significant Impact?
					V/C or Delay (S)	LOS	V/C or Delay (S)	LOS		
		Caltrans	HCM	Signalized	28.7	C	37.4	D	8.7	Yes
32	116th & I-105 EB Ramp / Vermont	City of Los Angeles	CMA	Signalized	0.533	A	0.547	A	0.014	No
		County of Los Angeles [a]	ICU	Signalized	0.944	E	0.907	E	-0.037	No
		Caltrans	HCM	Signalized	21.3	C	21.8	C	0.5	No
33	116th & I-105 EB On-Ramp / Hoover	City of Los Angeles	HCM	AWSC	14.8	B	15.2	C	0.400	No
		Caltrans	HCM	AWSC	14.8	B	15.2	C	0.4	No
34	120th / Crenshaw	City of Hawthorne [a]	ICU	Signalized	0.769	C	0.821	D	0.052	Yes
35	120th / Van Ness	City of Hawthorne [a]	ICU	Signalized	1.021	F	1.060	F	0.039	Yes
36	120th / Western	County of Los Angeles [a]	ICU	Signalized	0.760	C	0.841	D	0.081	Yes
37	120th / Normandie	County of Los Angeles [a]	ICU	Signalized	0.657	B	0.697	B	0.040	No
38	120th / Vermont	City of Los Angeles	CMA	Signalized	0.544	A	0.563	A	0.019	No
		County of Los Angeles [a]	ICU	Signalized	0.580	A	0.622	B	0.042	No
39	120th / Hoover	City of Los Angeles	CMA	Signalized	0.605	B	0.605	B	0.000	No
40	120th / Figueroa	City of Los Angeles	CMA	Signalized	0.607	B	0.607	B	0.000	No
41	El Segundo / Crenshaw	City of Hawthorne [a]	ICU	Signalized	0.831	D	0.863	D	0.032	Yes
		City of Gardena	ICU	Signalized	0.860	D	0.863	D	0.003	No
42	El Segundo / Van Ness	City of Hawthorne [a]	ICU	Signalized	1.042	F	1.086	F	0.044	Yes
		City of Gardena	ICU	Signalized	1.079	F	1.086	F	0.007	No
43	El Segundo / Western	County of Los Angeles [a]	ICU	Signalized	0.884	D	0.940	E	0.056	Yes
		City of Gardena	ICU	Signalized	0.916	E	0.940	E	0.024	No
44	El Segundo / Normandie	County of Los Angeles [a]	ICU	Signalized	0.861	D	0.917	E	0.056	Yes
		City of Gardena	ICU	Signalized	0.892	D	0.917	E	0.025	Yes

Table 15.12-15 Future Year (2035) With Project Intersection LOS

Intersection		Jurisdiction	Analysis Method	Intersection Control	No Project		W/ Project		Change in V/C or Delay	Significant Impact?
					V/C or Delay (S)	LOS	V/C or Delay (S)	LOS		
45	El Segundo / Vermont	City of Los Angeles	CMA	Signalized	0.811	D	0.826	D	0.015	No
		County of Los Angeles [a]	ICU	Signalized	0.752	C	0.795	C	**0.043**	**Yes**
		City of Gardena	ICU	Signalized	0.782	C	0.795	C	0.013	No
46	El Segundo / I-110 SB Ramps	City of Los Angeles	CMA	Signalized	0.840	D	0.847	D	0.007	No
		Caltrans	HCM	Signalized	51.8	D	54.3	D	2.5	No
47	El Segundo / I-110 NB Ramps	City of Los Angeles	CMA	Signalized	0.650	B	0.668	B	0.018	No
		Caltrans	HCM	Signalized	20.5	C	21.7	C	1.2	No
48	El Segundo / Figueroa	City of Los Angeles	CMA	Signalized	0.485	A	0.487	A	0.002	No
49	135th / Crenshaw	City of Hawthorne [a]	ICU	Signalized	0.811	D	0.841	D	0.030	Yes
		City of Gardena	ICU	Signalized	0.840	D	0.841	D	0.001	No
50	135th / Normandie	City of Gardena	ICU	Signalized	0.797	C	0.800	C	0.003	No
51	Rosecrans / Crenshaw	City of Hawthorne [a]	ICU	Signalized	0.757	C	0.788	C	0.031	No
		City of Gardena	ICU	Signalized	0.783	C	0.788	C	0.005	No
52	Rosecrans / Normandie	City of Gardena	ICU	Signalized	0.762	C	0.771	C	0.009	No
PM Peak Hour										
1	Century / Prairie	City of Inglewood [a]	ICU	Signalized	0.678	B	0.679	B	0.001	No
2	Century / Crenshaw	City of Inglewood [a]	ICU	Signalized	0.768	C	0.459	A	-0.309	No
3	Century / Van Ness	City of Inglewood / County of Los Angeles [a]	ICU	Signalized	0.819	D	0.836	D	0.017	No
4	Century / Western	County of Los Angeles [a]	ICU	Signalized	0.758	C	0.792	C	0.034	No
5	Century / Normandie	County of Los Angeles [a]	ICU	Signalized	0.854	D	0.895	D	0.041	Yes
6	Century / Vermont	City of Los Angeles	CMA	Signalized	0.617	B	0.621	B	0.004	No
		County of Los Angeles [a]	ICU	Signalized	0.594	A	0.621	B	0.027	No

Table 15.12-15 Future Year (2035) With Project Intersection LOS

	Intersection	Jurisdiction	Analysis Method	Intersection Control	No Project		W/ Project		Change in V/C or Delay	Significant Impact?
					V/C or Delay (S)	LOS	V/C or Delay (S)	LOS		
7	Century / Hoover	City of Los Angeles	CMA	Signalized	0.455	A	0.457	A	0.002	No
8	Century / Figueroa	City of Los Angeles	CMA	Signalized	0.730	C	0.732	C	0.002	No
9	Century / I-110 SB Ramps	City of Los Angeles	CMA	Signalized	0.376	A	0.377	A	0.001	No
		Caltrans	HCM	Signalized	13.0	B	13.0	B	0.0	No
10	Century / I-110 NB Ramps	City of Los Angeles	CMA	Signalized	0.359	A	0.361	A	0.002	No
		Caltrans	HCM	Signalized	13.2	B	13.2	B	0.0	No
11	108th / Crenshaw	City of Inglewood [a]	ICU	Signalized	0.518	A	0.541	A	0.023	No
12	108th / Van Ness	City of Inglewood / County of Los Angeles [a]	ICU	Signalized	0.679	B	0.707	C	0.028	No
13	108th / Western	County of Los Angeles [a]	ICU	Signalized	0.658	B	0.691	B	0.033	No
14	108th / Normandie	County of Los Angeles [a]	ICU	Signalized	0.515	A	0.532	A	0.017	No
15	108th / Vermont	City of Los Angeles	CMA	Signalized	0.423	A	0.430	A	0.007	No
		County of Los Angeles [a]	ICU	Signalized	0.472	A	0.497	A	0.025	No
16	108th / Hoover	City of Los Angeles	CMA	Signalized	0.260	A	0.260	A	0.000	No
17	Imperial Hwy / Crenshaw	City of Inglewood [a]	ICU	Signalized	0.846	D	0.956	E	0.110	Yes
18	Imperial Hwy / Van Ness	City of Inglewood / County of Los Angeles / Hawthorne [a]	ICU	Signalized	0.842	D	0.879	D	0.037	Yes
19	Imperial Hwy / Western	County of Los Angeles [a]	ICU	Signalized	0.839	D	0.916	E	0.077	Yes
20	Imperial Hwy / Normandie	County of Los Angeles [a]	ICU	Signalized	0.758	C	0.829	D	0.071	Yes
21	Imperial Hwy / Vermont	City of Los Angeles	CMA	Signalized	0.754	C	0.803	D	0.049	Yes
		County of Los Angeles [a]	ICU	Signalized	0.706	C	0.776	C	0.070	Yes
22	Imperial Hwy / Hoover	City of Los Angeles	CMA	Signalized	0.357	A	0.382	A	0.025	No
23	Imperial Hwy / Figueroa	City of Los Angeles	CMA	Signalized	0.747	C	0.789	C	0.042	Yes

Table 15.12-15 Future Year (2035) With Project Intersection LOS

	Intersection	Jurisdiction	Analysis Method	Intersection Control	No Project		W/ Project		Change in V/C or Delay	Significant Impact?
					V/C or Delay (S)	LOS	V/C or Delay (S)	LOS		
24	Imperial Hwy / I-110 SB Ramps	City of Los Angeles	CMA	Signalized	0.539	A	0.566	A	0.027	No
		Caltrans	HCM	Signalized	22.5	C	24.0	C	1.5	No
25	Imperial Hwy / I-110 NB Ramps	City of Los Angeles	CMA	Signalized	0.588	A	0.638	B	0.050	No
		Caltrans	HCM	Signalized	17.4	B	19.1	B	1.7	No
26	Imperial Hwy / Broadway	City of Los Angeles	CMA	Signalized	0.533	A	0.533	A	0.000	No
27	Imperial Hwy / Main	City of Los Angeles	CMA	Signalized	0.711	C	0.711	C	0.000	No
28	Imperial Hwy / Avalon	City of Los Angeles	CMA	Signalized	0.800	C	0.800	C	0.000	No
29	118th & I-105 WB Ramp / Crenshaw	City of Inglewood [a]	ICU	Signalized	0.724	C	0.767	C	0.043	Yes
		Caltrans	HCM	Signalized	21.6	C	23.3	C	1.7	No
30	I-105 EB Ramps / 120th	City of Hawthorne [a]	ICU	Signalized	0.733	C	0.777	C	0.044	Yes
		Caltrans	HCM	Signalized	27.9	C	29.7	C	1.8	No
31	I-105 WB Ramps / Vermont	City of Los Angeles	CMA	Signalized	0.852	D	0.885	D	0.033	Yes
		County of Los Angeles [a]	ICU	Signalized	0.638	B	0.692	B	0.054	No
		Caltrans	HCM	Signalized	24.1	C	23.1	C	-1.0	No
32	116th & I-105 EB Ramp / Vermont	City of Los Angeles	CMA	Signalized	0.439	A	0.451	A	0.012	No
		County of Los Angeles [a]	ICU	Signalized	0.471	A	0.500	A	0.029	No
		Caltrans	HCM	Signalized	16.4	B	16.7	B	0.3	No
33	116th & I-105 EB On-Ramp / Hoover	City of Los Angeles	HCM	AWSC	13.2	B	14.6	B	1.400	No
		Caltrans	HCM	AWSC	13.2	B	14.6	B	1.4	No
34	120th / Crenshaw	City of Hawthorne [a]	ICU	Signalized	0.774	C	0.808	D	0.034	No
35	120th / Van Ness	City of Hawthorne [a]	ICU	Signalized	0.888	D	0.927	E	0.039	Yes
36	120th / Western	County of Los Angeles [a]	ICU	Signalized	0.650	B	0.705	C	0.055	No

Table 15.12-15 Future Year (2035) With Project Intersection LOS

	Intersection	Jurisdiction	Analysis Method	Intersection Control	No Project		W/ Project		Change in V/C or Delay	Significant Impact?
					V/C or Delay (S)	LOS	V/C or Delay (S)	LOS		
37	120th / Normandie	County of Los Angeles [a]	ICU	Signalized	0.507	A	0.537	A	0.030	No
38	120th / Vermont	City of Los Angeles	CMA	Signalized	0.525	A	0.525	A	0.000	No
		County of Los Angeles [a]	ICU	Signalized	0.563	A	0.585	A	0.022	No
39	120th / Hoover	City of Los Angeles	CMA	Signalized	0.417	A	0.417	A	0.000	No
40	120th / Figueroa	City of Los Angeles	CMA	Signalized	0.570	A	0.570	A	0.000	No
41	El Segundo / Crenshaw	City of Hawthorne [a]	ICU	Signalized	0.839	D	0.874	D	0.035	Yes
		City of Gardena	ICU	Signalized	0.868	D	0.874	D	0.006	No
42	El Segundo / Van Ness	City of Hawthorne [a]	ICU	Signalized	0.949	E	0.984	E	0.035	Yes
		City of Gardena	ICU	Signalized	0.983	E	0.984	E	0.001	No
43	El Segundo / Western	County of Los Angeles [a]	ICU	Signalized	0.806	D	0.844	D	0.038	Yes
		City of Gardena	ICU	Signalized	0.834	D	0.844	D	0.010	No
44	El Segundo / Normandie	County of Los Angeles [a]	ICU	Signalized	0.834	D	0.879	D	0.045	Yes
		City of Gardena	ICU	Signalized	0.864	D	0.879	D	0.015	No
45	El Segundo / Vermont	City of Los Angeles	CMA	Signalized	0.731	C	0.747	C	0.016	No
		County of Los Angeles [a]	ICU	Signalized	0.686	B	0.728	C	0.042	No
		City of Gardena	ICU	Signalized	0.714	C	0.728	C	0.014	No
46	El Segundo / I-110 SB Ramps	City of Los Angeles	CMA	Signalized	0.707	C	0.719	C	0.012	No
		Caltrans	HCM	Signalized	28.1	C	28.4	C	0.3	No
47	El Segundo / I-110 NB Ramps	City of Los Angeles	CMA	Signalized	0.797	C	0.800	C	0.003	No
		Caltrans	HCM	Signalized	27.9	C	27.9	C	0.0	No
48	El Segundo / Figueroa	City of Los Angeles	CMA	Signalized	0.709	C	0.712	C	0.003	No

Table 15.12-15 Future Year (2035) With Project Intersection LOS

Intersection		Jurisdiction	Analysis Method	Intersection Control	No Project		W/ Project		Change in V/C or Delay	Significant Impact?
					V/C or Delay (S)	LOS	V/C or Delay (S)	LOS		
49	135th / Crenshaw	City of Hawthorne [a]	ICU	Signalized	0.709	C	0.733	C	0.024	No
		City of Gardena	ICU	Signalized	0.733	C	0.733	C	0.000	No
50	135th / Normandie	City of Gardena	ICU	Signalized	0.743	C	0.743	C	0.000	No
51	Rosecrans / Crenshaw	City of Hawthorne [a]	ICU	Signalized	0.810	D	**0.843**	D	**0.033**	Yes
		City of Gardena	ICU	Signalized	0.838	D	0.843	D	0.005	No
52	Rosecrans / Normandie	City of Gardena	ICU	Signalized	0.758	C	0.759	C	0.001	No

Notes: [a] = Uses County of Los Angeles analysis methodology; AWSC = all way stop control; **Bold and shaded** = intersection operates at an unacceptable LOS using the methodology listed.

In summary, the proposed project is anticipated to create significant traffic impacts at 10 of the study intersections in the Existing Year (2017) With Project Scenario, and at 21 study intersections for the Future Year (2035) With Project scenario. A summary of these impacts and their scenarios is provided below:

- 3. Century Boulevard and Van Ness Avenue: Future (AM peak hour)
- 5. Century Boulevard and Normandie Avenue: Future (AM and PM peak hours)
- 17. Imperial Highway and Crenshaw Boulevard: Existing (PM peak hour), Future (PM peak hour)
- 18. Imperial Highway and Van Ness Avenue: Future (PM peak hour)
- 19. Imperial Highway and Western Avenue: Existing (AM and PM peak hours), Future (AM and PM peak hours)
- 20. Imperial Highway and Normandie Avenue: Existing (AM and PM peak hours), Future (AM and PM peak hours)
- 21. Imperial Highway and Vermont Avenue: Existing (AM and PM peak hours), Future (AM and PM peak hours)
- 23. Imperial Highway and Figueroa Street: Existing (PM peak hour), Future (PM peak hour)
- 29. I-105 WB Off-Ramp / 118th Place and Crenshaw Boulevard: Existing (AM peak hour), Future (AM and PM peak hours)
- 30. I-105 EB Ramps and 120th Street: Future (AM and PM peak hours)
- 31. I-105 WB Ramps and Vermont Avenue: Existing (AM and PM), Future (AM and PM peak hours)
- 34. Crenshaw Boulevard and 120th Street: Future (AM peak hour)
- 35. Van Ness Avenue and 120th Street: Future (AM and PM peak hours)
- 36. Western Avenue and 120th Street: Existing (AM peak hour), Future (AM peak hour)
- 41. El Segundo Boulevard and Crenshaw Boulevard: Future (AM and PM peak hours)
- 42. El Segundo Boulevard and Van Ness Avenue: Future (AM and PM peak hours)
- 43. El Segundo Boulevard and Western Avenue: Existing (AM peak hour), Future (AM and PM peak hours)

- 44. El Segundo Boulevard and Normandie Avenue: Existing (AM peak hour), Future (AM and PM peak hours)
- 45. El Segundo Boulevard and Vermont Avenue: Future (AM peak hour)
- 49. Crenshaw Boulevard and 135th Street: Future (AM peak hour)
- 51. Crenshaw Boulevard and Rosecrans Avenue : Future (PM peak hour)

Level of Significance before Mitigation: Upon implementation of regulatory requirements, Impact 5.12-1 would be potentially significant.

Impact 5.12-2: The proposed project would not result in a significant increase in peak hour roadway segments level of service. [Threshold T-1]

Impact Analysis:

Existing Year (2017) With Project Conditions

AM and PM peak hour roadway segment analyses are presented in Table 5.12-16. The peak hour volumes are derived from intersection turning movement volumes—specifically, the arriving and departing volumes between two intersections joined by that segment. In the event that the departures from one intersection did not equal the arrivals at the other intersection, the average of the two volumes was used for the segment volume. A loss or gain in volumes between two intersections is not uncommon, especially where additional intersections or driveways are between the intersections. The following roadway segments are expected to operate at LOS E or worse:

- 21. El Segundo Boulevard between Van Ness Avenue and Western Avenue (AM peak hour)
- 22. El Segundo Boulevard between Normandie Avenue and Vermont Avenue (AM peak hour)

Future (2035) With Project Conditions

Under 2035 No Project conditions and also under 2035 With Project conditions, the following roadway segments are expected to operate at LOS E or worse:

- 21. El Segundo Boulevard between Van Ness Avenue to Western Avenue (AM peak hour)
- 22. El Segundo Boulevard between Normandie Avenue and Vermont Avenue (AM peak hour)

Tables 5.12-17 and 5.12-18 present peak hour roadway segment analysis for 2035 No Project and 2035 With Project conditions, respectively. No significant impacts were identified at roadway segments.

Table 5.12-16 Existing Year (2017) With Project Roadway Segment Level of Service Analysis

Link ID	Roadway	Segment		Volumes		V/C Ratio		Level of Service	
		From	To	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
AM Peak Hour									
1	Century Boulevard	Prairie Avenue	Crenshaw Boulevard	1,050	874	0.656	0.546	B	A
2	Century Boulevard	Western Avenue	Normandie Avenue	785	1,274	0.491	0.796	A	C
3	Century Boulevard	Hoover Street	Figueroa Street	1,014	1,602	0.423	0.668	A	B
4	Van Ness Avenue	Century Boulevard	108th Street	834	989	0.521	0.618	A	B
5	Normandie Avenue	Century Boulevard	108th Street	996	973	0.415	0.405	A	A
6	108th Street	Van Ness Avenue	Western Avenue	343	527	0.429	0.659	A	B
7	Crenshaw Boulevard	108th Street	Imperial Highway	1,093	1,121	0.455	0.467	A	A
8	Western Avenue	108th Street	Imperial Highway	1,275	1,176	0.797	0.735	C	C
9	Vermont Avenue	108th Street	Imperial Highway	1,373	1,607	0.572	0.67	A	B
10	Imperial Highway	Prairie Avenue	Crenshaw Boulevard	786	1,599	0.328	0.666	A	B
11	Imperial Highway	Van Ness Avenue	Western Avenue	976	1,740	0.407	0.725	A	C
12	Imperial Highway	Normandie Avenue	Vermont Avenue	862	1,615	0.359	0.673	A	B
13	Imperial Highway	Hoover Street	Figueroa Street	941	1,518	0.392	0.633	A	B
14	Imperial Highway	Main Street	San Pedro Street	747	1,287	0.311	0.536	A	A
15	Van Ness Avenue	Imperial Highway	120th Street	899	1,081	0.562	0.676	A	B
16	Normandie Avenue	Imperial Highway	120th Street	936	880	0.585	0.55	A	A
17	120th Street	Normandie Avenue	Vermont Avenue	451	690	0.282	0.431	A	A
18	Crenshaw Boulevard	120th Street	El Segundo Boulevard	1,981	1,095	0.825	0.456	D	A
19	Western Avenue	120th Street	El Segundo Boulevard	1,037	963	0.648	0.602	B	B
20	Vermont Avenue	120th Street	El Segundo Boulevard	895	942	0.373	0.393	A	A
21	El Segundo Boulevard	Van Ness Avenue	Western Avenue	1,091	2,413	0.455	1.005	A	F

Table 5.12-16 Existing Year (2017) With Project Roadway Segment Level of Service Analysis

Link ID	Roadway	Segment		Volumes		V/C Ratio		Level of Service	
		From	To	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
22	El Segundo Boulevard	Normandie Avenue	Vermont Avenue	1,000	2,351	0.417	0.98	A	E
23	Normandie Avenue	El Segundo Boulevard	135th Street	746	786	0.466	0.491	A	B
24	Crenshaw Boulevard	135th Street	Rosecrans Avenue	1,262	988	0.526	0.412	A	B
PM Peak Hour									
1	Century Boulevard	Prairie Avenue	Crenshaw Boulevard	1,098	949	0.686	0.593	B	A
2	Century Boulevard	Western Avenue	Normandie Avenue	1,228	910	0.768	0.569	C	A
3	Century Boulevard	Hoover Street	Figueroa Street	1,430	1,017	0.596	0.424	A	A
4	Van Ness Avenue	Century Boulevard	108th Street	910	788	0.569	0.493	A	A
5	Normandie Avenue	Century Boulevard	108th Street	992	875	0.413	0.365	A	A
6	108th Street	Van Ness Avenue	Western Avenue	574	283	0.718	0.354	C	A
7	Crenshaw Boulevard	108th Street	Imperial Highway	1,271	1,062	0.53	0.443	A	A
8	Western Avenue	108th Street	Imperial Highway	1,158	1,028	0.724	0.643	C	B
9	Vermont Avenue	108th Street	Imperial Highway	1,585	1,233	0.66	0.514	B	A
10	Imperial Highway	Prairie Avenue	Crenshaw Boulevard	1,447	956	0.603	0.398	B	A
11	Imperial Highway	Van Ness Avenue	Western Avenue	1,482	1,030	0.618	0.429	B	A
12	Imperial Highway	Normandie Avenue	Vermont Avenue	1,455	1,121	0.606	0.467	B	A
13	Imperial Highway	Hoover Street	Figueroa Street	1,464	1,008	0.61	0.42	B	A
14	Imperial Highway	Main Street	San Pedro Street	1,451	948	0.605	0.395	B	A
15	Van Ness Avenue	Imperial Highway	120th Street	1,041	956	0.651	0.598	B	A
16	Normandie Avenue	Imperial Highway	120th Street	871	742	0.544	0.464	A	A
17	120th Street	Normandie Avenue	Vermont Avenue	605	424	0.378	0.265	A	A
18	Crenshaw Boulevard	120th Street	El Segundo Boulevard	1,389	1,673	0.579	0.697	A	B

Table 5.12-16 Existing Year (2017) With Project Roadway Segment Level of Service Analysis

Link ID	Roadway	Segment		Volumes		V/C Ratio		Level of Service	
		From	To	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
19	Western Avenue	120th Street	El Segundo Boulevard	1,074	951	0.671	0.594	B	A
20	Vermont Avenue	120th Street	El Segundo Boulevard	861	923	0.359	0.385	A	A
21	El Segundo Boulevard	Van Ness Avenue	Western Avenue	1,898	1,263	0.791	0.526	C	A
22	El Segundo Boulevard	Normandie Avenue	Vermont Avenue	2,095	1,093	0.873	0.455	D	A
23	Normandie Avenue	El Segundo Boulevard	135th Street	925	642	0.578	0.401	A	A
24	Crenshaw Boulevard	135th Street	Rosecrans Avenue	1,122	1,381	0.468	0.575	A	A

Source: IBI Group, September 2017.
Note: **Bold** = unacceptable LOS

Table 5.12-17 Future Year (2035) No Project Roadway Segment Level of Service Analysis

Link ID	Roadway	Segment		Volumes		V/C Ratio		Level of Service	
		From	To	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
AM Peak Hour									
1	Century Boulevard	Prairie Avenue	Crenshaw Boulevard	1,075	905	0.672	0.566	B	A
2	Century Boulevard	Western Avenue	Normandie Avenue	814	1,317	0.509	0.823	A	D
3	Century Boulevard	Hoover Street	Figueroa Street	1,052	1,658	0.438	0.691	A	B
4	Van Ness Avenue	Century Boulevard	108th Street	863	1,012	0.539	0.633	A	B
5	Normandie Avenue	Century Boulevard	108th Street	1,031	987	0.430	0.411	A	A
6	108th Street	Van Ness Avenue	Western Avenue	357	548	0.446	0.685	A	B
7	Crenshaw Boulevard	108th Street	Imperial Highway	1,132	1,141	0.472	0.475	A	A
8	Western Avenue	108th Street	Imperial Highway	1,290	1,186	0.806	0.741	D	C
9	Vermont Avenue	108th Street	Imperial Highway	1,412	1,636	0.588	0.682	A	B
10	Imperial Highway	Prairie Avenue	Crenshaw Boulevard	776	1,654	0.323	0.689	A	B
11	Imperial Highway	Van Ness Avenue	Western Avenue	992	1,805	0.413	0.752	A	C
12	Imperial Highway	Normandie Avenue	Vermont Avenue	895	1,659	0.373	0.691	A	B
13	Imperial Highway	Hoover Street	Figueroa Street	948	1,497	0.395	0.624	A	B
14	Imperial Highway	Main Street	San Pedro Street	777	1,338	0.324	0.558	A	A
15	Van Ness Avenue	Imperial Highway	120th Street	927	1,122	0.579	0.701	A	C
16	Normandie Avenue	Imperial Highway	120th Street	932	906	0.583	0.566	A	A
17	120th Street	Normandie Avenue	Vermont Avenue	426	669	0.266	0.418	A	A
18	Crenshaw Boulevard	120th Street	El Segundo Boulevard	2,052	1,128	0.855	0.470	D	A
19	Western Avenue	120th Street	El Segundo Boulevard	984	985	0.615	0.616	B	B
20	Vermont Avenue	120th Street	El Segundo Boulevard	898	972	0.374	0.405	A	A

Table 5.12-17 Future Year (2035) No Project Roadway Segment Level of Service Analysis

Link ID	Roadway	Segment		Volumes		V/C Ratio		Level of Service	
		From	To	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
21	El Segundo Boulevard	Van Ness Avenue	Western Avenue	1,110	2,504	0.463	1.043	A	F
22	El Segundo Boulevard	Normandie Avenue	Vermont Avenue	1,029	2,395	0.429	0.998	A	E
23	Normandie Avenue	El Segundo Boulevard	135th Street	734	808	0.459	0.505	A	A
24	Crenshaw Boulevard	135th Street	Rosecrans Avenue	1,304	1,022	0.543	0.426	A	A
PM Peak Hour									
1	Century Boulevard	Prairie Avenue	Crenshaw Boulevard	1,142	972	0.714	0.608	C	B
2	Century Boulevard	Western Avenue	Normandie Avenue	1,270	946	0.794	0.591	C	A
3	Century Boulevard	Hoover Street	Figueroa Street	1,485	1,049	0.619	0.437	B	A
4	Van Ness Avenue	Century Boulevard	108th Street	932	820	0.583	0.513	A	A
5	Normandie Avenue	Century Boulevard	108th Street	1,010	910	0.421	0.379	A	A
6	108th Street	Van Ness Avenue	Western Avenue	597	294	0.746	0.368	C	A
7	Crenshaw Boulevard	108th Street	Imperial Highway	1,300	1,104	0.542	0.460	A	A
8	Western Avenue	108th Street	Imperial Highway	1,161	1,055	0.726	0.659	C	B
9	Vermont Avenue	108th Street	Imperial Highway	1,619	1,275	0.675	0.531	B	A
10	Imperial Highway	Prairie Avenue	Crenshaw Boulevard	1,505	958	0.627	0.399	B	A
11	Imperial Highway	Van Ness Avenue	Western Avenue	1,537	1,048	0.640	0.437	B	A
12	Imperial Highway	Normandie Avenue	Vermont Avenue	1,492	1,165	0.622	0.485	B	A
13	Imperial Highway	Hoover Street	Figueroa Street	1,406	1,047	0.586	0.436	A	A
14	Imperial Highway	Main Street	San Pedro Street	1,509	986	0.629	0.411	B	A
15	Van Ness Avenue	Imperial Highway	120th Street	1,083	987	0.677	0.617	B	B
16	Normandie Avenue	Imperial Highway	120th Street	906	735	0.566	0.459	A	A

Table 5.12-17 Future Year (2035) No Project Roadway Segment Level of Service Analysis

Link ID	Roadway	Segment		Volumes		V/C Ratio		Level of Service	
		From	To	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
17	120th Street	Normandie Avenue	Vermont Avenue	593	412	0.371	0.258	A	A
18	Crenshaw Boulevard	120th Street	El Segundo Boulevard	1,445	1,733	0.602	0.722	B	C
19	Western Avenue	120th Street	El Segundo Boulevard	1,101	924	0.688	0.578	B	A
20	Vermont Avenue	120th Street	El Segundo Boulevard	895	931	0.373	0.388	A	A
21	El Segundo Boulevard	Van Ness Avenue	Western Avenue	1,974	1,292	0.823	0.538	D	A
22	El Segundo Boulevard	Normandie Avenue	Vermont Avenue	2,135	1,136	0.890	0.473	D	A
23	Normandie Avenue	El Segundo Boulevard	135th Street	962	631	0.601	0.394	B	A
24	Crenshaw Boulevard	135th Street	Rosecrans Avenue	1,167	1,414	0.486	0.589	A	A

Source: IBI Group, September 2017
Note: **Bold** = unacceptable LOS

Table 5.12-18 Future Year (2035) With Project Roadway Segment Level of Service Analysis

Link ID	Roadway	Segment		Volumes		V/C Ratio		Level of Service	
		From	To	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
AM Peak Hour									
1	Century Boulevard	Prairie Avenue	Crenshaw Boulevard	1,091	909	0.682	0.568	B	A
2	Century Boulevard	Western Avenue	Normandie Avenue	816	1,325	0.510	0.828	A	D
3	Century Boulevard	Hoover Street	Figueroa Street	1,054	1,666	0.439	0.694	A	B
4	Van Ness Avenue	Century Boulevard	108th Street	867	1,028	0.542	0.643	A	B
5	Normandie Avenue	Century Boulevard	108th Street	1,036	1,011	0.432	0.421	A	A
6	108th Street	Van Ness Avenue	Western Avenue	357	548	0.446	0.685	A	B
7	Crenshaw Boulevard	108th Street	Imperial Highway	1,137	1,165	0.474	0.485	A	A
8	Western Avenue	108th Street	Imperial Highway	1,325	1,222	0.828	0.764	D	C
9	Vermont Avenue	108th Street	Imperial Highway	1,427	1,670	0.595	0.696	A	B
10	Imperial Highway	Prairie Avenue	Crenshaw Boulevard	816	1,663	0.340	0.693	A	B
11	Imperial Highway	Van Ness Avenue	Western Avenue	1,014	1,809	0.423	0.754	A	C
12	Imperial Highway	Normandie Avenue	Vermont Avenue	896	1,679	0.373	0.700	A	B
13	Imperial Highway	Hoover Street	Figueroa Street	977	1,576	0.407	0.657	A	B
14	Imperial Highway	Main Street	San Pedro Street	777	1,338	0.324	0.558	A	A
15	Van Ness Avenue	Imperial Highway	120th Street	935	1,124	0.584	0.703	A	C
16	Normandie Avenue	Imperial Highway	120th Street	972	915	0.608	0.572	B	A
17	120th Street	Normandie Avenue	Vermont Avenue	467	716	0.292	0.448	A	A
18	Crenshaw Boulevard	120th Street	El Segundo Boulevard	2,060	1,138	0.858	0.474	D	A
19	Western Avenue	120th Street	El Segundo Boulevard	1,075	1,001	0.672	0.626	B	B
20	Vermont Avenue	120th Street	El Segundo Boulevard	930	979	0.388	0.408	A	A

Table 5.12-18 Future Year (2035) With Project Roadway Segment Level of Service Analysis

Link ID	Roadway	Segment		Volumes		V/C Ratio		Level of Service	
		From	To	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
21	El Segundo Boulevard	Van Ness Avenue	Western Avenue	1,134	2,509	0.473	1.045	A	F
22	El Segundo Boulevard	Normandie Avenue	Vermont Avenue	1,040	2,443	0.433	1.018	A	F
23	Normandie Avenue	El Segundo Boulevard	135th Street	774	817	0.484	0.511	A	A
24	Crenshaw Boulevard	135th Street	Rosecrans Avenue	1,312	1,027	0.547	0.428	A	A
PM Peak Hour									
1	Century Boulevard	Prairie Avenue	Crenshaw Boulevard	1,142	986	0.714	0.616	C	B
2	Century Boulevard	Western Avenue	Normandie Avenue	1,277	946	0.798	0.591	C	A
3	Century Boulevard	Hoover Street	Figueroa Street	1,487	1,057	0.620	0.440	B	A
4	Van Ness Avenue	Century Boulevard	108th Street	946	820	0.591	0.513	A	A
5	Normandie Avenue	Century Boulevard	108th Street	1,031	910	0.430	0.379	A	A
6	108th Street	Van Ness Avenue	Western Avenue	597	294	0.746	0.368	C	A
7	Crenshaw Boulevard	108th Street	Imperial Highway	1,321	1,104	0.550	0.460	A	A
8	Western Avenue	108th Street	Imperial Highway	1,203	1,069	0.752	0.668	C	B
9	Vermont Avenue	108th Street	Imperial Highway	1,647	1,282	0.686	0.534	B	A
10	Imperial Highway	Prairie Avenue	Crenshaw Boulevard	1,505	993	0.627	0.414	B	A
11	Imperial Highway	Van Ness Avenue	Western Avenue	1,541	1,070	0.642	0.446	B	A
12	Imperial Highway	Normandie Avenue	Vermont Avenue	1,512	1,166	0.630	0.486	B	A
13	Imperial Highway	Hoover Street	Figueroa Street	1,518	1,048	0.633	0.437	B	A
14	Imperial Highway	Main Street	San Pedro Street	1,509	986	0.629	0.411	B	A
15	Van Ness Avenue	Imperial Highway	120th Street	1,083	994	0.677	0.621	B	B
16	Normandie Avenue	Imperial Highway	120th Street	906	770	0.566	0.481	A	A

Table 5.12-18 Future Year (2035) With Project Roadway Segment Level of Service Analysis

Link ID	Roadway	Segment		Volumes		V/C Ratio		Level of Service	
		From	To	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB
17	120th Street	Normandie Avenue	Vermont Avenue	628	440	0.393	0.275	A	A
18	Crenshaw Boulevard	120th Street	El Segundo Boulevard	1,445	1,740	0.602	0.725	B	C
19	Western Avenue	120th Street	El Segundo Boulevard	1,116	987	0.698	0.617	B	B
20	Vermont Avenue	120th Street	El Segundo Boulevard	895	959	0.373	0.400	A	A
21	El Segundo Boulevard	Van Ness Avenue	Western Avenue	1,974	1,313	0.823	0.547	D	A
22	El Segundo Boulevard	Normandie Avenue	Vermont Avenue	2,177	1,137	0.907	0.474	E	A
23	Normandie Avenue	El Segundo Boulevard	135th Street	962	666	0.601	0.416	B	A
24	Crenshaw Boulevard	135th Street	Rosecrans Avenue	1,167	1,435	0.486	0.598	A	A

Source: IBI Group, September 2017.
Note: **Bold** = unacceptable LOS

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Level of Significance before Mitigation: Based on the analysis above, there would be no impact.

Impact 5.12-3: The project would result in a significant increase in freeway main-line level of service. [Threshold T-1]

Impact Analysis: The freeway mainline analysis results for the AM and PM peak hours for existing and future conditions are summarized in Tables 5.12-19 and 5.12-20, respectively. The proposed project is anticipated to create significant traffic impacts at the following freeway main-line study locations in the Existing Year (2017) With Project and Future Year (2035) With Project scenarios (location numbers are from Table 5.12-19):

- 3. I-105 at Wilmington Avenue (AM and PM peak hours)
- 6. I-110 at Manchester Avenue (AM and PM peak hours)
- 7. I-110 north of I-105 (at 110th Street) (PM peak hour)
- 8. I-110 south of I-105 (at 126th Street) (PM peak hour)
- 9. I-110 at 135th Street (PM peak hour)

Table 5.12-19 Existing Year (2017) Freeway Main Line Analysis

ID	Freeway	Location	Direction	Existing Year (2017) No Project		Project Trips	Existing Year (2017) With Project		Change in Density	Project Impact?
				Density (pc/mi/ln)	LOS		Density (pc/mi/ln)	LOS		
AM Peak Hour										
1	I-105	at Hawthorne Boulevard	EB	23.2	C	55	23.5	C	0.3	No
			WB	22.3	C	13	22.4	C	0.1	No
2	I-105	at Western Avenue	EB	26.9	D	79	27.5	D	0.6	No
			WB	25.7	C	18	25.8	C	0.1	No
3	I-105	at Wilmington Avenue	EB	OVR	F	32	OVR	F	-	No
			WB	45.0	F	143	45.0	F	0	Yes
4	I-105	w/o I-710 (Harris Avenue)	EB	31.8	D	13	32.0	D	0.2	No
			WB	24.7	C	55	25.0	C	0.3	No
5	I-110	s/o I-10 (at Adams Boulevard)	NB	21.3	C	13	21.4	C	0.1	No
			SB	30.5	D	55	30.9	D	0.4	No
6	I-110	at Manchester Avenue	NB	OVR	F	22	OVR	F	-	No
			SB	45.0	F	95	45.0	F	0	Yes
7	I-110	n/o I-105 (at 110th Street)	NB	OVR	F	31	OVR	F	-	No
			SB	31.6	D	135	32.4	D	0.8	No
8	I-110	s/o I-105 (at 126th Street)	NB	33.1	D	95	33.8	D	0.7	No
			SB	45.0	F	22	45.0	F	0	No
9	I-110	at 135th Street	NB	30.5	D	79	31.0	D	0.5	No

Table 5.12-19 Existing Year (2017) Freeway Main Line Analysis

ID	Freeway	Location	Direction	Existing Year (2017) No Project		Project Trips	Existing Year (2017) With Project		Change in Density	Project Impact?
				Density (pc/mi/ln)	LOS		Density (pc/mi/ln)	LOS		
			SB	45.0	F	18	45.0	F	0	No
10	I-110	n/o SR-91 (Gardena Boulevard)	NB	26.8	D	55	27.0	D	0.2	No
			SB	24.6	C	13	24.6	C	0	No
PM Peak Hour										
1	I-105	at Hawthorne Boulevard	EB	33.9	D	1	33.9	D	0	No
			WB	22.2	C	49	22.4	C	0.2	No
2	I-105	at Western Avenue	EB	44.2	E	1	44.2	E	0	No
			WB	25.6	C	70	25.9	C	0.3	No
3	I-105	at Wilmington Avenue	EB	OVR	F	127	OVR	F	-	Yes
			WB	45.0	F	2	45.0	F	0	No
4	I-105	w/o I-710 (Harris Avenue)	EB	32.5	D	49	32.8	D	0.3	No
			WB	23.5	C	1	23.5	C	0	No
5	I-110	s/o I-10 (at Adams Boulevard)	NB	23.8	C	49	24.0	C	0.2	No
			SB	30.0	D	1	30.0	D	0	No
6	I-110	at Manchester Avenue	NB	OVR	F	84	OVR	F	-	Yes
			SB	45.0	F	1	45.0	F	0	No
7	I-110	n/o I-105 (at 110th Street)	NB	OVR	F	120	OVR	F	-	Yes
			SB	34.0	D	2	34.0	D	0	No
8	I-110	s/o I-105 (at 126th Street)	NB	31.4	D	1	31.4	D	0	No
			SB	45.0	F	84	45.0	F	0	Yes
9	I-110	at 135th Street	NB	29.0	D	1	29.0	D	0	No
			SB	44.4	E	70	45.0	F	0.6	Yes
10	I-110	n/o SR-91 (Gardena Boulevard)	NB	20.9	C	1	20.9	C	0	No
			SB	29.4	D	49	29.7	D	0.3	No

Source: IBI Group, September 2017
Notes: **Bold** = unacceptable level of service (LOS D or worse); pc/mi/ln = passenger-car per mile per lane; OVR = over capacity, density value not available.

Table 5.12-20 Future Year (2035) Freeway Main Line Analysis

ID	Freeway	Location	Direction	Existing Year (2017) No Project		Project Trips	Existing Year (2017) With Project		Change in Density	Project Impact?
				Density (pc/mi/ln)	LOS		Density (pc/mi/ln)	LOS		
AM Peak Hour										
1	I-105	at Hawthorne Boulevard	EB	25.0	C	55	25.3	C	0.3	No
			WB	24.0	C	13	24.1	C	0.1	No
2	I-105	at Western Avenue	EB	29.7	D	79	30.2	D	0.5	No
			WB	28.2	D	18	28.2	D	0.0	No
3	I-105	at Wilmington Avenue	EB	OVR	F	32	OVR	F	-	No
			WB	45.0	F	143	45.0	F	0.0	Yes
4	I-105	w/o I-710 (Harris Avenue)	EB	35.9	E	13	36.1	E	0.2	No
			WB	26.9	D	55	27.2	D	0.3	No
5	I-110	s/o I-10 (at Adams Boulevard)	NB	22.9	C	13	22.9	C	0.0	No
			SB	34.2	D	55	34.6	D	0.4	No
6	I-110	at Manchester Avenue	NB	OVR	F	22	OVR	F	-	No
			SB	45.0	F	95	45.0	F	0.0	Yes
7	I-110	n/o I-105 (at 110th Street)	NB	OVR	F	31	OVR	F	-	No
			SB	35.6	E	135	36.6	E	1.0	No
8	I-110	s/o I-105 (at 126th Street)	NB	37.7	E	95	38.6	E	0.9	No
			SB	45.0	F	22	45.0	F	0.0	No
9	I-110	at 135th Street	NB	34.1	D	79	34.8	D	0.7	No
			SB	45.0	F	18	45.0	F	0.0	No
10	I-110	n/o SR-91 (Gardena Boulevard)	NB	29.5	D	55	29.7	D	0.2	No
			SB	26.8	D	13	26.8	D	0.0	No
PM Peak Hour										
1	I-105	at Hawthorne Boulevard	EB	38.7	E	1	38.7	E	0.0	No
			WB	23.9	C	49	24.1	C	0.2	No
2	I-105	at Western Avenue	EB	OVR	F	1	OVR	F	-	No
			WB	27.9	D	70	28.3	D	0.4	No
3	I-105	at Wilmington Avenue	EB	OVR	F	127	OVR	F	-	Yes
			WB	45.0	F	2	45.0	F	0.0	No
4	I-105	w/o I-710 (Harris Avenue)	EB	36.7	E	49	37.2	E	0.5	No
			WB	25.4	C	1	25.4	C	0.0	No
5	I-110	s/o I-10 (at Adams Boulevard)	NB	25.7	C	49	26.0	C	0.3	No
			SB	33.6	D	1	33.6	D	0.0	No

Table 5.12-20 Future Year (2035) Freeway Main Line Analysis

ID	Freeway	Location	Direction	Existing Year (2017) No Project		Project Trips	Existing Year (2017) With Project		Change in Density	Project Impact?
				Density (pc/mi/ln)	LOS		Density (pc/mi/ln)	LOS		
6	I-110	at Manchester Avenue	NB	OVR	F	84	OVR	F	-	Yes
			SB	45.0	F	1	45.0	F	0.0	No
7	I-110	n/o I-105 (at 110th Street)	NB	OVR	F	120	OVR	F	-	Yes
			SB	38.8	E	2	38.8	E	0.0	No
8	I-110	s/o I-105 (at 126th Street)	NB	35.3	E	1	35.3	E	0.0	No
			SB	45.0	F	84	45.0	F	0.0	Yes
9	I-110	at 135th Street	NB	32.2	D	1	32.2	D	0.0	No
			SB	45.0	F	70	45.0	F	0.0	Yes
10	I-110	n/o SR-91 (Gardena Boulevard)	NB	22.3	C	1	22.3	C	0.0	No
			SB	32.7	D	49	33.0	D	0.3	No

Source: IBI Group, September 2017
Notes: **Bold** = unacceptable level of service (LOS D or worse); pc/mi/ln = passenger-car per mile per lane; OVR = over capacity, density value not available

Level of Significance before Mitigation: Upon implementation of regulatory requirements, Impact 5.12-3 would be potentially significant.

Impact 5.12-4: Project-related trip generation in combination with existing and proposed cumulative development would not exceed the capacity at freeway on-ramps. [Threshold T-1]

Impact Analysis: In response to a request by Caltrans, a queue analysis for left-turns at freeway on-ramps was conducted. A queue analysis for freeway off-ramps at study intersections is also provided per Caltrans traffic study guidelines. The queue analyses for freeway on-ramps and off-ramps are summarized below.

Existing Year (2017) With Project Conditions

Freeway On-Ramps

Table 7.11 of the TIA summarizes the storage capacities and projected queue lengths for on-ramps for Existing Year (2017) With Project conditions. The on-ramp locations that would experience queues that exceed storage length under existing conditions would continue to do so under Existing Year (2017) With Project conditions. Additional storage deficiencies are not expected as a result of the addition of project traffic when compared to the Existing Year (2017) No Project scenario (see Section 5.12.3, *Existing Conditions*).

Freeway Off-Ramps

Table 7.12 of the TIA summarizes the storage capacities and queue lengths expected for the study freeway off-ramps. All freeway off-ramps are expected to provide sufficient storage capacity such that the 85 percent storage capacity is not exceeded with the addition of project traffic.

Future (2035) No Project Conditions

Freeway On-Ramps

Table 5.9 of the TIA summarizes the storage capacities and projected queue lengths for on-ramps for Existing Year (2017) With Project conditions. The freeway on-ramp locations listed below are anticipated to experience left-turn queues that exceed the measured storage length:

- 24. I-110 SB On-Ramp at Imperial Highway (AM and PM peak hours)
- 30. I-105 EB On-Ramp at 120th Street (AM and PM peak hours)
- 31. I-105 WB On-Ramp at Vermont Avenue (AM peak hour)
- 32. I-105 EB On-Ramp at Vermont Avenue (AM peak hour)
- 47. I-110 NB On-Ramp at El Segundo Boulevard (PM peak hour)

Freeway Off-Ramps

Table 5.10 of the TIA summarizes the storage capacities and queue lengths expected for the study freeway off-ramps. All freeway off-ramps are expected to provide sufficient storage capacity such that the 85 percent storage capacity is not exceeded with the addition of project traffic.

Future (2035) With Project Conditions

Freeway On-Ramps

Table 8.11 of the TIA summarizes the storage capacities and projected queue lengths for on-ramps for Future (2035) With Project Conditions. The freeway on-ramp locations listed below are anticipated to experience left-turn queues that exceed the measured storage length:

- 24. I-110 SB On-Ramp at Imperial Highway (AM and PM peak hours)
- 30. I-105 EB On-Ramp at 120th Street (AM and PM peak hours)
- 31. I-105 WB On-Ramp at Vermont Avenue (AM and PM peak hours)
- 32. I-105 EB On-Ramp at Vermont Avenue (AM peak hour)
- 47. I-110 NB On-Ramp at El Segundo Boulevard (PM peak hour)

The project would not cause new on-ramp locations to be deficient. However, the project would increase queues at locations that are anticipated to exceed storage capacity without the project. This would be a less than significant impact to freeway on-ramp storage capacities.

Freeway Off-Ramps

Table 8.12 of the TIA summarizes the storage capacities and queue lengths expected for the study freeway off-ramps. All freeway off-ramps are expected to provide sufficient storage capacity such that the 85 percent storage capacity is not exceeded with the addition of project traffic. The project would not cause queues to exceed 85 percent storage capacity at freeway off-ramps, and this would be a less than significant impact to freeway off-ramp storage capacities.

Level of Significance before Mitigation: Upon implementation of regulatory requirements, Impact 5.12-4 would be less than significant.

Impact 5.12-5: Project-related trip generation in combination with existing and proposed cumulative development would result in designated road and/or highways exceeding county congestion management agency service standards. [Threshold T-2]

Impact Analysis: This analysis was conducted in accordance with the procedures in the Los Angeles County CMP (Metro 2010). The criteria for determining the study area for CMP arterial monitoring intersections and for freeway monitoring locations are:

- All CMP arterial monitoring intersections where the proposed project will add 50 or more trips during either the AM or PM peak hours of adjacent street traffic.
- All CMP main-line freeway monitoring locations where the proposed project will add 150 or more trips, in either direction, during either the AM or PM peak hours.

The CMP traffic impact analysis guidelines establish that a significant proposed project impact occurs when a certain threshold is exceeded. If the proposed project increases traffic demand on a CMP facility by 2 percent of capacity ($V/C \geq 0.02$) causing LOS F ($V/C > 1.00$), a significant impact would occur. If the facility is already at LOS F, a significant impact occurs when the proposed project increases traffic demand on a CMP facility by 2 percent of capacity ($V/C \geq 0.02$).

Existing Year (2017) With Project Conditions

As discussed in Section 5.12-1, peak hour traffic conditions at six CMP monitoring stations were analyzed using the procedures outlined in the CMP. The CMP methodology assesses a freeway segment based on the density-to-capacity ratio in the No Project and With Project scenarios for an analysis year. The designation of LOS based on the density-to-capacity ratio observed is summarized in Table 5.12-3. LOS F(1) through F(3) designations are assigned where severely congested conditions prevail for more than an hour.

The CMP monitoring station analysis results for 2017 conditions for the AM and PM peak hours are summarized in Table 5.12-21. The analysis was performed in accordance with the CMP methodology outlined above. An unacceptable LOS (LOS F) is observed at the following locations:

- 2. I-105 at Western Avenue (PM peak hour)

- 6. I-110 at Manchester Avenue (AM and PM peak hours)

Per CMP significant impact criteria, no significant impacts are expected due to the addition of project traffic under 2017 conditions.

Future (2035) With Project Conditions

The CMP monitoring station analysis results for 2035 conditions for the AM and PM peak hours are summarized in Table 5.12-22. The analysis was performed in accordance with the CMP methodology outlined above. An unacceptable LOS (LOS F) is observed at the following locations:

- 2. I-105 at Western Avenue (AM and PM peak hours)
- 6. I-110 at Manchester Avenue (AM and PM peak hours)

Per CMP significant impact criteria, no significant impacts are expected due to the addition of project traffic under Future Year (2035) conditions.

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Table 5.12-21 2017 CMP Monitoring Stations Analysis

ID	Freeway	Segment	Station	Direction	Existing Year (2017) No Project			Project Trips	Existing Year (2017) With Project			Change in V/C	Significant Impact?
					Peak Hour Volume	V/C	LOS		Peak Hour Volume	V/C	LOS		
AM Peak Hour													
2	I-105	at Western Avenue	1042	EB	6,434	0.804	D	79	6,513	0.814	D	0.010	No
				WB	7,793	0.974	E	18	7,811	0.976	E	0.002	No
4	I-105	w/o I-710 (at Harris Avenue)	1043	EB	6,999	0.875	D	13	7,012	0.876	D	0.002	No
				WB	5,949	0.744	C	55	6,004	0.751	C	0.007	No
6	I-110	at Manchester Avenue	1046	NB	8,482	1.060	F(0)	22	8,504	1.063	F(0)	0.003	No
				SB	10,334	1.292	F(1)	95	10,429	1.304	F(1)	0.012	No
PM Peak Hour													
2	I-105	at Western Avenue	1042	EB	8,219	1.027	F(0)	1	8,220	1.028	F(0)	0.000	No
				WB	7,749	0.969	E	70	7,819	0.977	E	0.009	No
4	I-105	w/o I-710 (at Harris Avenue)	1043	EB	7,064	0.883	D	49	7,113	0.889	D	0.006	No
				WB	5,717	0.715	C	1	5,718	0.715	C	0.000	No
6	I-110	at Manchester Avenue	1046	NB	9,325	1.166	F(0)	84	9,409	1.176	F(0)	0.011	No
				SB	11,379	1.422	F(2)	1	11,380	1.423	F(2)	0.000	No

Source: IBI Group, September 2017.
Notes: **Bold** = unacceptable level of service (LOS F).
All study segments are 4 lanes with a capacity of 8,000 vehicles per hour.

Table 5.12-22 Future Year (2035) CMP Monitoring Stations Analysis

ID	Freeway	Segment	Station	Direction	Existing Year (2017) No Project			Project Trips	Existing Year (2017) With Project			Change in V/C	Significant Impact?
					Peak Hour Volume	V/C	LOS		Peak Hour Volume	V/C	LOS		
AM Peak Hour													
2	I-105	at Western Avenue	1042	EB	6,832	0.854	D	79	6,911	0.864	D	0.010	No
				WB	8,276	1.035	F(0)	18	8,294	1.037	F(0)	0.002	No
4	I-105	w/o I-710 (at Harris Avenue)	1043	EB	7,433	0.929	D	13	7,446	0.931	E	0.002	No
				WB	6,318	0.790	D	55	6,373	0.797	D	0.007	No
6	I-110	at Manchester Avenue	1046	NB	9,008	1.126	F(0)	22	9,030	1.129	F(0)	0.003	No
				SB	10,974	1.372	F(2)	95	11,069	1.384	F(2)	0.012	No
PM Peak Hour													
2	I-105	at Western Avenue	1042	EB	8,729	1.091	F(0)	1	8,730	1.091	F(0)	0.000	No
				WB	8,230	1.029	F(0)	70	8,300	1.037	F(0)	0.009	No
4	I-105	w/o I-710 (at Harris Avenue)	1043	EB	7,502	0.938	E	49	7,551	0.944	E	0.006	No
				WB	6,072	0.759	C	1	6,073	0.759	C	0.000	No
6	I-110	at Manchester Avenue	1046	NB	9,903	1.238	F(0)	84	9,987	1.248	F(0)	0.011	No
				SB	12,085	1.511	F(3)	1	12,086	1.511	F(3)	0.000	No

Source: IBI Group, September 2017.
Notes: **Bold** = unacceptable level of service (LOS F).
All study segments are 4 lanes with a capacity of 8,000 vehicles per hour.

Level of Significance before Mitigation: Upon implementation of regulatory requirements, Impact 5.12-5 would be less than significant.

Impact 5.12-6: The project would not affect air travel or result in substantial safety risks. [Threshold T-3]

Impact Analysis: The project site is not in an airport influence area or near a public-use or private airport identified in the Los Angeles County Airport Land Use Plan, revised by the Los Angeles County Airport Land Use Commission in 2004. No airport-related impacts would occur.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.12-6 would have no impact.

Impact 5.12-7: Project development would not increase air traffic levels or require relocation of air traffic patterns. [Threshold T-3]

Impact Analysis: The project site is outside of the Airport Influence Areas for Los Angeles International Airport, about 3.1 miles west of the site, and for Hawthorne Municipal Airport, about 0.8 mile southwest of the site (LACALUC 2003). There are no heliports within one mile of the project site (Airnav.com 2017). Specific Plan buildout would not cause airport-related hazards to persons onsite and would not impact air traffic levels at these airports. In addition, the development standards in the Specific Plan would not allow for the development of buildings with more than five stories, keeping building heights well under 100 feet. Therefore, the proposed development would not require relocation of air traffic patterns to or from these airports.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.12-7 would be less than significant.

Impact 5.12-8: Project circulation improvements would not substantially increase hazards due to design features (e.g., sharp curves or dangerous intersections, etc.), potential conflicting uses, and emergency access. [Thresholds T-4 and T-5]

Impact Analysis: The Specific Plan proposes streetscape improvements and pedestrian and bicycle amenities to promote bicycle and pedestrian travel along key arterials. There would be no major changes in street alignment or new streets. Much of the street network within the Specific Plan area will remain the same. Project development would not add incompatible uses to roadways. Design and construction of projects pursuant to the Specific Plan would comply with requirements of the Los Angeles County Public Works Department and the Los Angeles County Fire Department respecting maintaining roadway access to developed properties.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.12-8 would be less than significant.

Impact 5.12-9: The proposed project complies with adopted policies, plans, and programs for alternative transportation. [Threshold T-6]

Impact Analysis: A key component of the Specific Plan is the transformation of the current circulation network, which largely supports vehicular travel, into a network with a higher priority on complete streets and multimodal design that better accommodates walking, biking, and transit. The mobility strategy of the Specific Plan has two major goals to promote alternative transportation:

- **Goal 1:** Improve accessibility to transit through the provision of streetscape improvements, high quality bicycle and pedestrian infrastructure, wayfinding signage, and other enhancements consistent with Metro's First and Last Mile Strategic Plan.

- **Goal 2:** Design streets to facilitate safe, accessible, connections between major destinations for multiple modes of transportation.

Streetscape improvements are proposed along key arterials, including improved landscaping, wider sidewalks, reduced vehicle travel lane widths, pedestrian and bicyclist amenities (e.g., street lights, benches, signage), and buffered bike lanes. These improvements are intended to transform the existing auto-oriented streetscape into a more sustainable multimodal design.

The Specific Plan proposes a sidewalk hierarchy to establish a physical framework for sidewalk design and support various levels of pedestrian activity. Pedestrian-crossing design strategies include curb extensions, curb ramps, crossing signage, safety islands, and marked crosswalks. Pedestrian amenities are also proposed, such as street trees, seating, street lights, and public art.

The Specific Plan proposes to add approximately 11 miles of bikeways to the existing network and a multiuse path from Los Angeles Southwest College to Vermont Avenue (red dotted line on Figure 3-8, *Bicycle Network Map*) that would be designed as a Class I bike path—that is, with a completely separated right-of way designated exclusively for bicyclists and pedestrians and with cross-traffic minimized. Bicycle infrastructure amenities are also recommended, including bicycle parking, crossing signals, and wayfinding signage. Additionally, safe routes to school—as suggested by the County of Los Angeles Public Works Department—are identified in the Specific Plan for West Athens Elementary School.

The Specific Plan proposes widening the sidewalk along the Vermont/Athens Green Line Station corridor on Vermont Avenue, reducing the width of the travel lanes, adding buffered bike lanes, and introducing additional wayfinding to the station to improve visibility and encourage walking, biking, and transit use. Additional transit amenities can include shelters, benches, lighting, transit information, bicycle racks, and public art.

Such implementation would have a favorable impact respecting policies and programs for alternative transportation and would not interfere with operation of the area transit facilities and services. The proposed project would comply with regional (RTP/SCS and CMP) and Los Angeles County's adopted policies, plans, and programs for alternative transportation (see Tables 5.6-1 through 5.6-3 in Section 5.6, *Land Use and Planning*). Therefore, there would be no impacts.

Consistency with SB 743

As discussed previously, in light of SB 743, metrics related to VMT and VMT per capita will replace the current LOS metrics to evaluate transportation impacts, but specific significance thresholds have not yet been adopted. Neither have the City nor the County of Los Angeles specifically adopted elements of SB 743 into their current traffic study guidelines. Therefore, this evaluation is provided for information purposes only.

The Specific Plan facilitates implementation of the goals and policies of the County's 2035 General Plan, including the vision for the TOD priority areas. It expands opportunities for compact, infill development, which is in line with the goals of SB 743. Detailed VMT calculations are in the TIA, Tables 4.11, 5.11, 7.14, and 8.14. For "With Project" scenarios, reductions related to project design features were applied. These project design features were included according to planned community improvements in preliminary concepts of the Specific Plan and are discussed in detail in Section 6.1 of the TIA. Table 5.12-23 summarizes the total VMT of population and employees as well as the VMT per capita for the 2017 and 2035 scenarios without and with the project. The project would increase the total VMT, but would result in a decrease in VMT per capita.

Table 5.12-23 VMT Summary Table

Land Use	Annual VMT	Population/ Employees	Annual VMT per Capita
Existing 2017	155,472,926	12,569	12,370
2017 With Project	208,780,125	19,576	10,665
2035 No Project	160,087,025	12,735	12,571
2035 With Project	194,516,430	20,000	9,726
Difference (Existing 2017 – 2035 With Project)	+39,043,504	+7.431	-2,644

Source: Derived from Tables 4.11, 5.11, 7.14, and 8.14 in the TIA (IBI, June 2017).
With-Project VMT includes pass-bys, internal trip capture, and reductions from PDF trip reduction measures.

Level of Significance before Mitigation: Based on the analysis above, there would be no impacts.

5.12.6 Cumulative Impacts

The TIA considered both project-specific impacts and the project's cumulative contribution to traffic in the project vicinity (IBI 2017). The traffic forecasts are based on a regional transportation demand model and incorporates regional growth projections identified by SCAG.

Cumulative traffic impacts are addressed in Impacts 5.12-1 to 5.12-5 under the Future Year (2035) scenarios, which account for traffic generation by both regional (ambient) growth and related projects. Significant cumulative traffic impacts at intersections, roadway segments, and freeway facilities are discussed in Section 5.12.8.

5.12.7 Level of Significance Before Mitigation

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.12-2, and 5.12-4 through 5.12-9.

Without mitigation, the following impacts would be **potentially significant**:

- **Impact 5.12-1** The proposed project is anticipated to create significant traffic impacts at 10 of the study intersections in the Existing Year (2017) With Project scenario, and at 21 study intersections for the Future Year (2035) With Project scenario.

- **Impact 5.12-3** The proposed project is anticipated to create significant impacts five freeway main-line study locations in the Existing Year (2017) and Future Year (2035) With Project scenarios.

5.12.8 Mitigation Measures

Impact 5.12-1

T-1 Prior to issuance of building permits for any project forecast to generate 100 or more peak hour trips—as determined by the Los Angeles County Department of Public Works, Traffic and Lighting Division—the property owner/developer shall submit to the County a traffic study to identify when the improvements identified in Chapter 9, *Mitigation Measures*, of the West Athens-Westmont Specific Plan EIR Traffic Impact Study (IBI Group, September 2017; Appendix H of this DEIR) shall be designed and constructed.

a) The traffic study will specify the timing, funding, construction, and fair-share responsibilities for all traffic improvements necessary to maintain satisfactory levels of service within the Specific Plan area and surrounding jurisdictions, as defined by the County's General Plan and Traffic Impact Analysis Guidelines, Metro's CMP Program, and based on the thresholds of significance, performance standards, and methodologies in this DEIR.

b) The property applicant shall construct, bond for, or enter into a funding agreement for necessary circulation system improvements, as determined by the Los Angeles County Department of Public Works, Traffic and Lighting Division. At minimum, fair-share calculations shall include intersection improvements, rights-of-way, and construction costs, unless alternative funding sources have been identified to help pay for the improvement.

Impact 5.12-3

T-3 The County of Los Angeles shall continue to secure the funding needed to implement the future planned improvements within the Specific Plan area. A variety of funding sources

shall be explored, such as Metro's CMP Fee Program, Metro Call for Project funds, and federal and state grant opportunities. If the CMP fee program is not adopted by Metro and the County of Los Angeles, other funding sources for regional transportation needs, including Caltrans facilities, in the Specific Plan area shall be pursued—such as a potential Connect Southwest LA Specific Plan Impact Fee Program, development agreements for large projects, and/or mitigation agreements between future applicants and Caltrans for projects that impact Caltrans facilities.

T-4 The County shall work with Caltrans as Caltrans prepares plans to add additional lanes or complete other improvements to various freeways within and adjacent to unincorporated areas. This includes adding or extending mixed flow general purpose lanes, adding or extending existing HOV lanes, adding express lanes (high occupancy toll lanes), incorporating truck climbing lanes, improving interchanges, and other freeway-related improvements.

T-5 Future traffic engineering firms retained to prepare traffic impact studies are required to consult with Caltrans when a development proposal meets the requirements of statewide, regional, or area-wide significance per CEQA Guidelines Section 15206(b). When preparing traffic impact studies, the most up-to-date Guide for the Preparation of Traffic Impact Studies from Caltrans shall be followed. When the CEQA criteria of regional significance are not met, Caltrans recommends that project applicants consult with Caltrans.

5.12.9 Level of Significance After Mitigation

Impact 5.12-1

The proposed project is anticipated to create significant impacts at several study intersections for the Future Year (2035) With Project scenario.

Mitigation Measures T-1 through T-5 would require various improvements at study area intersections to mitigate project impacts. These include, but are not limited to, adding turn lanes, widening lanes, restriping lanes, expanding the Automated Traffic Surveillance and Control network, and improving traffic signal lights.

Improvements to seven of the roadway intersections would require the acquisition of right-of-way—Century Boulevard at Van Ness Avenue, Imperial Highway at Crenshaw Boulevard, Imperial Highway at Western Avenue, Imperial Highway at Normandie Avenue, El Segundo at Crenshaw Boulevard, El Segundo Boulevard at Normandie Avenue, Rosecrans Avenue at Crenshaw Boulevard. Right-of-way acquisition at these intersections is believed to be infeasible due to existing development of adjacent land. Therefore, project impacts to these seven roadway intersections are determined to be ***significant and unavoidable***.

Additionally, since the primary responsibility for approving and/or completing certain improvements outside of the Specific Plan area lies with agencies other than the County of Los Angeles (i.e., cities of Los Angeles, Inglewood, and Hawthorne), significant impacts may not be fully mitigated if the improvements are not completed for reasons beyond the County's control. (The County cannot undertake or require improvements

outside of its jurisdiction.) Therefore, project impacts to intersections in the cities of Los Angeles, Inglewood, and Hawthorne are determined to be ***significant and unavoidable***.

Impact 5.12-3

The proposed project is anticipated to create significant impacts at five freeway main-line locations for Future Year (2035) With Project conditions, but State highway facilities are not in the County's jurisdiction. Improvements to State highways are planned, funded, and constructed through a legislative and political process involving the state legislature; the California Transportation Commission; the California Business, Transportation, and Housing Agency; and Caltrans.

Although potential impacts to the freeway main-line segments and ramps have been evaluated, implementation of improvements to Caltrans facilities is the primary responsibility of Caltrans. Caltrans recognizes that private development may fund fair-share improvements to impacts on the I-105 and I-110, but neither Caltrans nor the state has adopted a program that can ensure that locally contributed impact fees will be tied to improvements to freeway main lines, and only Caltrans has jurisdiction over main-line improvements. However, a number of programs are in place in Los Angeles County to improve and upgrade the regional transportation system—State Transportation Improvement Program, Caltrans Traffic Operations Strategies, State Highway Operation and Protection Program, and Metro's Measure M program. State and federal fuel taxes generate most of the funds used to pay for these programs. Funds expected to be available for transportation improvements are identified through a fund estimate prepared by Caltrans and adopted by the California Transportation Commission. These and other funds are deposited in the State Highway Account and allocated by the California Transportation Commission to specific project improvements in both the State Transportation Improvement Program and State Highway Operation and Protection Program. However, if these programs are not implemented by the agencies responsible for them, the project's freeway ramp and main-line impacts would remain ***significant and unavoidable***.

5.12.10 References

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5.13 TRIBAL CULTURAL RESOURCES

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Connect Southwest LA project to impact tribal cultural resources in the County of Los Angeles. Tribal cultural resources include landscapes, sacred places, or objects with cultural value to a California Native American tribe. Other potential impacts to cultural resources (i.e., historic, archaeological, and paleontological) are evaluated in Section 5.3, *Cultural Resources*. The analysis in this section is based in part on the following information:

- *Cultural Resources Overview and Assessment: The City of Los Angeles, West Athens-Westmont TOD Specific Plan Project Area, Los Angeles County, California,* McKenna et al., July 20, 2016.
- Native American Consultation Documentation per Senate Bill 18 and Assembly Bill 52

A complete copy of this study and the Native American consultation documentation are included in the Technical Appendices of this Draft EIR (Volume II, Appendices D1 and D2).

5.13.1 Environmental Setting

5.13.1.1 RELEVANT PROGRAMS AND REGULATIONS

Federal

Archaeological Resources Protection Act

The Archaeological Resources Protection Act of 1979 regulates the protection of archaeological resources and sites that are on federal lands and Indian lands.

Native American Graves Protection and Repatriation Act

The Native American Graves Protection and Repatriation Act is a federal law passed in 1990 that provides a process for museums and federal agencies to return certain Native American cultural items, such as human remains, funerary objects, sacred objects, or objects of cultural patrimony to lineal descendants and culturally affiliated Indian tribes.

State

Public Resources Code

Archaeological resources are protected pursuant to a wide variety of state policies and regulations enumerated under the California Public Resources Code. In addition, cultural resources are recognized as a nonrenewable resource and therefore receive protection under the California Public Resources Code and CEQA.

- **California Public Resources Code 5097.9–5097.991** provides protection to Native American historical and cultural resources, and sacred sites and identifies the powers and

> duties of the Native American Heritage Commission (NAHC). It also requires notification to descendants of discoveries of Native American human remains and provides for treatment and disposition of human remains and associated grave goods.

Health and Safety Code

The discovery of human remains is regulated per California Health and Safety Code Section 7050.5, which states that:

> In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation…until the coroner…has determined…that the remains are not subject to…provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible…. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains. If the coroner determines that the remains are not subject to his or her authority and…has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission.

Senate Bill 18

Existing law provides limited protection for Native American prehistoric, archaeological, cultural, spiritual, and ceremonial places. These places may include sanctified cemeteries, religious, ceremonial sites, shrines, burial grounds, prehistoric ruins, archaeological or historic sites, Native American rock art inscriptions, or features of Native American historic, cultural, and sacred sites.

Senate Bill 18 on Traditional Tribal Cultural Places was signed into law in September 2004 and went into effect on March 1, 2005. It places new requirements upon local governments for developments within or near traditional tribal cultural places (TTCP). SB 18 requires local jurisdictions to provide opportunities for involvement of California Native Americans tribes in the land planning process for the purpose of preserving traditional tribal cultural places. The Final Tribal Guidelines recommend that the NAHC provide written information as soon as possible but no later than 30 days after receiving notice of the project to inform the lead agency if the proposed project is determined to be in proximity to a TTCP and another 90 days for tribes to respond if they want to consult with the local government to determine whether the project would have an adverse impact on the TTCP. There is no statutory limit on the consultation duration. Forty-five days before the action is publicly considered by the local government council, the local government refers action to agencies, following the CEQA public review time frame. The CEQA public distribution list may include tribes listed by the NAHC who have requested consultation or it may not. If the NAHC, the tribe, and interested parties agree upon the mitigation measures necessary for the proposed project, it would be included in the project's EIR. If both the County of Los Angeles and the tribe agree that adequate mitigation or preservation measures cannot be taken, then neither party is obligated to take action.

In addition, SB 18 provides a new definition of TTCP, requiring a traditional association of the site with Native American traditional beliefs, cultural practices, or ceremonies or the site must be shown to actually have been used for activities related to traditional beliefs, cultural practices, or ceremonies. Previously, the site was defined to require only an association with traditional beliefs, practices, lifeways, and ceremonial activities. In addition, SB 18 law also amended Civil Code § 815.3 and adds California Native American tribes to the list of entities that can acquire and hold conservation easements for the purpose of protecting their cultural places.

SB 18 requires a city or county to consult with the NAHC and any appropriate Native American tribe prior to the adoption, revision, amendment, or update of a city's or county's general plan. Although SB 18 does not specifically mention requirements for adoption or amendment of specific plans, the Final Tribal Guidelines advise extending SB 18 requirements to specific plans as well, since state planning law requires the same process for amendment or adoption of specific plans as general plans (defined in Government Code § 65453).

Assembly Bill 52

The Native American Historic Resource Protection Act (AB 52) took effect July 1, 2015, and incorporates tribal consultation and analysis of impacts to tribal cultural resources (TCR) into the CEQA process. It requires TCRs to be analyzed like any other CEQA topic and establishes a consultation process for lead agencies and California tribes. Projects that require a Notice of Preparation of an EIR or Notice of Intent to adopt a ND or MND on or after July 1st are subject to AB 52. A significant impact on a TCR is considered a significant environmental impact, requiring feasible mitigation measures.

TCRs must have certain characteristics:

1) Sites, features, places, cultural landscapes (must be geographically defined), sacred places, and objects with cultural value to a California Native American tribe that are either included or determined to be eligible for inclusion in the California Register of Historic Resources or included in a local register of historical resources. (PRC § 21074(a)(1))

2) The lead agency, supported by substantial evidence, chooses to treat the resource as a TCR. (PRC § 21074(a)(2))

The first category requires that the TCR qualify as a historical resource according to PRC Section 5024.1. The second category gives the lead agency discretion to qualify that resource—under the conditions that it supports its determination with substantial evidence and considers the resource's significance to a California tribe. The following is a brief outline of the process (PRC §§ 21080.3.1–3.3).

1) A California Native American tribe asks agencies in the geographic area with which it is traditionally and culturally affiliated to be notified about projects. Tribes must ask in writing.

2) Within 14 days of deciding to undertake a project or determining that a project application is complete, the lead agency must provide formal written notification to all tribes who have requested it.

3) A tribe must respond within 30 days of receiving the notification if it wishes to engage in consultation.

4) The lead agency must initiate consultation within 30 days of receiving the request from the tribe.

5) Consultation concludes when both parties have agreed on measures to mitigate or avoid a significant effect to a TCR, OR a party, after a reasonable effort in good faith, decides that mutual agreement cannot be reached.

6) Regardless of the outcome of consultation, the CEQA document must disclose significant impacts on TCRs and discuss feasible alternatives or mitigation that avoid or lessen the impact.

5.13.1.2 EXISTING CONDITIONS

Natural Setting

The project site is located within the western extent of the Los Angeles Basin (Basin), which is part of the Peninsular Range Geomorphic Province of California. The Los Angeles Basin is a coastal plain extending from the Pacific Ocean on the south to the Santa Monica Mountains and Puente Hills on the north. The Basin is also described as consisting of thousands of meters of post-Jurassic sediment overlying crystalline basement rocks.

The project area is within the southwestern block of the Basin, of which the basement is the distinguishing feature. Although the basement of the block is exposed only in the Palos Verdes Hills, it has been encountered in numerous oil wells at depths of 5,000 to 14,000 feet below sea level. The basement rocks belong to the Catalina schist facies of the Franciscan Formation and are chiefly green chlorite and blue glaucophane schists.

Important streams include the San Gabriel River, which drains the central San Gabriel Mountains. The San Gabriel River forks downstream near Duarte into the San Gabriel River proper and the Rio Hondo River, which joins the Los Angeles River near Downey, so that the two drainages intermingle. The Los Angeles River reaches the Pacific Ocean near Long Beach and the San Gabriel River discharges near Seal Beach.

The project area is west of the Los Angeles River channel and associated with the Newport-Inglewood Fault. The nature of the loose, sandy deposits of the older and younger Quaternary Alluvium are subject to liquefaction and ground failures (sinking/rising/expanding, etc.), but less likely to result in landslides, given the current flat terrain. Although the project area is considered to be within an urban setting, there are still some areas of open space.

Tribal Cultural Setting

The project area is associated with the traditional territory of the prehistoric and protohistoric Native American populations generally referred to as the Gabrieliño/Tongva. The Gabrieliño/Tongva are identified by Late Prehistoric/Protohistoric ethnographic records and archaeological data as occupying southern California in the Late Prehistoric.

The term Gabrieliño is a reference to Native American populations under the jurisdiction of the historic Mission San Gabriel de Archangel (in the City of San Gabriel). The Mission San Gabriel serviced the entire Los Angeles Basin and into the San Bernardino area. Present-day City of Los Angeles is somewhat centrally located in the Gabrieliño's ethnographic boundaries.

The core of the area of the Los Angeles Basin was the site of the historic city of Los Angeles and the ethnographic village of Yangna. Following the founding of the Pueblo de Los Angeles, a large Catholic church (The Church of Our Lady the Queen of the Angels) was constructed to service the small but sedentary population of the pueblo, including Native Americans and early European settlers (primarily Spanish/Mexican, but also many others). Evidence of the prehistoric occupation of the area, including the village of Yangna, has been sporadically identified, and the native populations became known as Gabrieliños. The project area is within the inland areas of Gabrieliño territory.

Consultation Process

Three separate consultation processes were conducted: the Sacred Land Files search, SB 18 consultation, and AB 52 consultation. Summaries of the consultations are provided below.

Sacred Land Files Search

As part of the cultural resources assessment prepared by McKenna et al., a Sacred Land Files (SLF) request was submitted to the Native American Heritage Commission (NAHC) in 2015 to inquire about the presence/absence of sacred or religious sites in the vicinity of the project area. On November 18, 2015, the NAHC responded that there are no sacred lands within the project area or a half-mile radius, and provided a list of Native American tribes with traditional lands or cultural places within the boundaries of the proposed project. These tribes include the Soboba Band of Mission Indians, Gabrieleno/Tongva San Gabriel Band of Mission Indians, Gabrielino/Tongva Nation, Gabrielino Tongva Indians of California Tribal Council, Gabrielino-Tongva Tribe, and Gabrieleno Band of Mission Indians–Kizh Nation. On November 30, 2015, McKenna et al.., on behalf of the County of Los Angeles, sent letters to the six Native American contacts notifying them of the proposed project and requesting comments or concerns for the project area.

McKenna et al. received only one response from Anthony Morales, Chair of the San Gabriel Band of Gabrielino/Tongva Mission Indians, requesting to be kept informed and permitted to comment on any resources that may be identified at a later date. No other responses were received.

SB 18

In accordance with SB 18 requirements, the County submitted a Local Government Tribal Consultation List Request to the NAHC in May 2017 to obtain a list of SB 18-specific Native American tribes. The NAHC

provided a list of tribal representatives who may have knowledge of Native American cultural resources in the project area. The County sent invitation letters to the Native American representatives provided by the NAHC on May 24, 2017, formally inviting tribes to consult with the County on the Connect Southwest LA project. Letters were sent to the following five tribes: Gabrieleno Band of Mission Indians–Kizh Nation, Gabrieleno/Tongva San Gabriel Band of Mission Indians, Gabrielino/Tongva Nation, Gabrielino Tongva Indians of California Tribal Council, and Gabrielino-Tongva Tribe.

Only one response letter was received from Andrew Salas of the Gabrieleño Band of Mission Indians - Kizh Nation on June 9, 2017. The letter stated that the project site lies within the Tribe's ancestral tribal territory and may cause a substantial adverse change in the significant of their tribal cultural resources. Although records searches typically result in no identified resources, the Tribe states that their Elder Committee and tribal historians are able to provide more complete histories regarding the location of historic villages, trade routes, cemeteries, and sacred/religious sites in the project area. The Tribe requested consultation with County staff to discuss the potential project impacts on their tribal cultural resources. A summary of the consultation between the County and the Gabrieleño Band of Mission Indians - Kizh Nation is provided below under Impact 5.13-1.

AB 52

Per AB 52 requirements, the County is also required to initiate consultation with AB 52-specific Native American tribes. Native American tribes are required to request to be notified of projects within any jurisdiction. For the County of Los Angeles, only the Gabrieleño Band of Mission Indians - Kizh Nation is identified as an AB 52-specific tribe. Thus, the County sent an invitation letter to the tribal representative of the Gabrieleño Band of Mission Indians - Kizh Nation on May 24, 2017, formally inviting the Tribe to consult with the County on the Connect Southwest LA project.

Andrew Salas of the Gabrieleño Band of Mission Indians - Kizh Nation replied to the County's invitation letter on June 9, 2017 and stated similar concerns as their letter in response to the SB 18 consultation. A summary of the consultation between the County and the Gabrieleño Band of Mission Indians - Kizh Nation is provided below under Impact 5.13-1.

5.13.2 Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, a project would normally have a significant effect on the environment if the project would:

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

- Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

- A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

The County of Los Angeles Environmental Checklist also includes the following threshold as part of Section 5.3, *Cultural Resources*.

C-5 Cause a substantial adverse change in the significance of a tribal cultural resource as defined in the CEQA Public Resources Code Section 21074.

Per AB 52, tribal cultural resources must be analyzed in its own EIR section. Thus, analysis of this threshold is included in this section—Section 5.13, *Tribal Cultural Resources*.

5.13.3 Plans, Programs, and Policies

5.13.3.1 REGULATORY REQUIREMENTS

RR CUL-1 All construction activities will be conducted in accordance with Section 7050.5 of the California Health and Safety Code regarding the potential discovery of human remains. If applicable, the Native American Heritage Commission will be responsible for designating the most likely descendant, as required by Section 5097.98 of the California Public Resources Code. If the landowner rejects the recommendations of the most likely descendant, the burial location would be determined in compliance with California Public Resources Code, Section 5097.98.

5.13.4 Environmental Impacts

5.13.4.1 IMPACT ANALYSIS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.13-1: The proposed project may cause a substantial adverse change in the significance of a tribal cultural resource. [Threshold TCR-1 and C-5]

Impact Analysis: Public Resources Code Section 21074 defines "tribal cultural resources" as 1) listed or determined to be eligible for listing on the national, state, or local register of historic resources; or 2) a resource that the lead agency chooses, in its discretion, to treat as a tribal cultural resource. In the second instance, the lead agency must determine that the resource meets the criteria for listing in the state register of historic resources pursuant to PRC Section 5024.1. The cultural resources assessment prepared by McKenna et al. did not identify any resources listed or eligible for listing on the national, state, or local register of

historic places, and the County has not identified any tribal cultural resource that meets the criteria for listing in the state register of historic resources.

However, the project area is within the territory inhabited by Native Americans (Gabrielino/Tongva) and may have sensitive undiscovered tribal cultural resources. Conducting consultation early in the CEQA process allows tribal governments, public lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process.

Thus, as summarized above in Section 5.13.1.2 "Consultation Process," the County consulted the NAHC and applicable Native American tribes under three separate consultation processes—the SLF search, SB 18, and AB 52. The intent of the consultations are to provide an opportunity for interested Native American contacts to work together with the County during the project planning process to identify and protect tribal cultural resources.

- **SLF Search:** Under the SLF search consultation process which occurred in 2015, Anthony Morales, Chair of the San Gabriel Band of Gabrielino/Tongva Mission Indians responded by telephone to discuss the project details. Mr. Morales had no specific information pertaining to the project area, but requested to be kept informed and permitted to comment on any resources that may be identified at a later date.

- **AB 52:** Per AB 52 consultation requirements, the County sent invitation letters on May 24, 2017 to the Gabrieleño Band of Mission Indians - Kizh Nation and Chairman Andrew Salas responded by e-mail on June 9, 2017 requesting consultation to discuss the project's potential impacts on tribal cultural resources. The County contacted Andrew Salas via email on June 15 and June 20, 2017 to schedule consultation but did not receive a response. The County sent a certified letter to Andrew Salas on August 10, 2017 (received on August 14th), stating that consultation would conclude if no response was received within seven days of receipt of the letter. No response was received within the seven days and thus, consultation was concluded on August 23, 2017.

- **SB 18:** Per SB 18, the County sent invitation letters on May 24, 2017 to applicable tribal representatives. Chairman Andrew Salas of the Gabrieleño Band of Mission Indians - Kizh Nation responded by e-mail on June 9, 2017 requesting consultation, which started the 90-day response window to close on September 7, 2017. No response was received before the response window, thus, consultation was concluded on September 7, 2017.

Development in accordance with the proposed project may require additional grading below current ground surfaces and could uncover or adversely impact previously undiscovered tribal cultural resources. The archaeological records searches conducted by McKenna et al. did not find any cultural resources of significance in the project area. Nevertheless, there is always potential to uncover previously undiscovered resources, including tribal cultural resources, particularly in areas of deeper excavation. Regulatory requirement RR CUL-1 requires that all construction activities be conducted in accordance with Section 7050.5 of the California Health and Safety Code regarding the potential discovery of human remains. If

applicable, the Native American Heritage Commission will be responsible for designating the most likely descendant (MLD), as required by Section 5097.98 of the California Public Resources Code.

Level of Significance before Mitigation: With implementation of regulatory requirement RR CUL-1, Impact 5.13-1 would still be potentially significant.

5.13.5 Cumulative Impacts

Cumulative impacts to tribal cultural resources occur when the impacts of the proposed project, in conjunction with other projects and development in the region, result in multiple and/or cumulative impacts to tribal cultural resources in the area. There are no known tribal cultural resources in the project area. Each future project in accordance with the County of Los Angeles 2035 General Plan would be required to evaluate that project's impacts to site-specific tribal cultural resources as part of CEQA review, including tribal consultation with AB 52–specific Native American tribes (e.g., Gabrielino/Tongva). Where significant impacts to tribal cultural resources are identified, projects would be required to either avoid impacts or implement feasible mitigation measures to reduce impacts. Consequently, impacts to tribal cultural resources would not be cumulatively considerable.

5.13.6 Level of Significance Before Mitigation

Without mitigation, the following impacts would be **potentially significant:**

- **Impact 5.13-1** Tribal cultural resources may be adversely impacts by development in accordance with the proposed Specific Plan.

5.13.7 Mitigation Measures

Impact 5.13-1

Mitigation Measures CUL-2 and CUL-3 from Section 5.3, *Cultural Resources*, would also be applicable to Impact 5.13-1.

TCR-1 During project-level construction, should prehistoric or historic subsurface cultural resources be discovered and be determined to be significant, the archaeologist shall determine, in consultation with the County, and local Native American groups expressing interest (e.g., Gabrieleño Band of Mission Indians - Kizh Nation), appropriate avoidance measures or other appropriate mitigation. Per CEQA Guidelines Section 15126.4(b)(3), project redesign and preservation in place shall be the preferred means to avoid impacts to significant cultural resources. Methods of avoidance may include, but shall not be limited to, project re-route or redesign, project cancellation, or identification of protection measures such as capping or fencing. Consistent with CEQA Guidelines Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the qualified archaeologist shall develop additional treatment measures in consultation with the County, which may include data recovery or other appropriate measures. All significant cultural materials recovered will be, as

necessary and at the discretion of the consulting archaeologist and in consultation with local Native American groups expressing interest, subject to scientific analysis, professional museum curation, and documentation according to current professional standards.

TCR-2 If human remains are encountered, the County or its contractor shall halt work in the vicinity (within 100 feet) of the find and contact the Los Angeles County Coroner in accordance with PRC Section 5097.98 and Health and Safety Code Section 7050.5. If the County Coroner determines that the remains are Native American, the Native American Heritage Commission (NAHC) will be notified in accordance with Health and Safety Code Section 7050.5, subdivision (c), and PRC Section 5097.98. The NAHC will designate a most likely descendant (MLD) for the remains per PRC Section 5097.98. Until the landowner has conferred with the MLD, County shall 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.

5.13.8 Level of Significance After Mitigation

The mitigation measures identified above would reduce potential impacts associated with tribal cultural resources to a level that is less than significant. Therefore, no significant unavoidable adverse impacts relating to tribal cultural resources remain.

5.13.9 References

McKenna et al. (McKenna). 2016, July 20. Cultural Resources Overview and Assessment: The City of Los Angeles, West Athens-Westmont TOD Specific Plan Project Area, Los Angeles County, California.

5.14 UTILITIES AND SERVICE SYSTEMS

This section of the Draft Environmental Impact Report (DEIR) evaluates the potential for implementation of the Connect Southwest LA project to impact wastewater conveyance and treatment; water supplies, treatment, and conveyance; storm drainage systems; and solid waste disposal in the County of Los Angeles. The analysis in this section is based, in part, upon questionnaire responses from service providers in the project area and the following technical reports:

- *West Athens Sewer Area Study*, IBI Group, February 2, 2018
- *West Athens Water Area Study,* IBI Group, October 18, 2017
- *West Athens-Westmont Storm Water Area Study,* IBI Group, April 13, 2018

Complete copies of these studies and the service provider questionnaire responses are included in the Technical Appendices of this Draft EIR (Appendices I, J, and K).

5.14.1 Wastewater Treatment and Collection

5.14.1.1 ENVIRONMENTAL SETTING

Relevant Programs and Regulations

Federal

Clean Water Act

The federal Clean Water Act (CWA), United States Code, Title 33, Sections 1251 et seq. establishes regulations to control the discharge of pollutants into the waters of the United States and regulates water quality standards for surface waters. Under the CWA, the US Environment Protection Agency (EPA) is authorized to set wastewater standards for industry and runs the National Pollutant Discharge Elimination System (NPDES) permit program. Under the NPDES program, permits are required for all new developments that generate discharges that go directly into Waters of the United States. Additionally, Sections 1251 et seq. of the CWA requires wastewater treatment of all effluent before it is discharged into surface waters.

Local

Los Angeles Regional Water Resources Control Board

Waste discharge requirements pursuant to NPDES regulations for the Sanitation Districts of Los Angeles County (LACSD) water reclamation plant treating wastewater from the Specific Plan Area—the Joint Water Pollution Control Plant (JWPCP) in the City of Carson—are set forth in Los Angeles Regional Water Resources Control Board Order No. R4-2011-0151, issued in 2011. This order sets discharge prohibitions—for instance, high-level radiological wastes or discharges degrading water supplies—effluent limitations, and discharge specifications.

Sanitation Districts of Los Angeles County

Capital improvements to LACSD water reclamation plants are funded from connection fees charged to new developments, redevelopments, and expansions of existing land uses. The connection fee is a capital facilities fee used to provide additional conveyance, treatment, and disposal facilities (capital facilities) required by new users connecting to LACSD's sewerage system or by existing users who significantly increase the quantity or strength of their wastewater discharge. The Connection Fee Program ensures that all users pay their fair share for any necessary expansion of the system. Estimated wastewater generation factors used in determining connection fees in LACSD's 22 member districts are set forth in the Connection Fee Ordinance for each respective district available on LACSD's website. The project site is in District 5 of the LACSD (SDLAC 2014a).

The LACSD establishes discharge limits for wastewater discharges within its service areas to prevent discharge of substances to LACSD sewers that would exceed the treatment capacities or otherwise damage water reclamation facilities. The discharge limits thus enable water reclamation facilities to maintain their effluents within Los Angeles Regional Water Quality Control Board (RWQCB) wastewater discharge requirements. The LACSD has an industrial pretreatment program where industries generating wastes exceeding discharge limits pretreat liquid wastes before discharging them to sewers.

Existing Conditions

Wastewater Treatment Facilities

LACSD provides wastewater treatment services to the Golden State Water Company (GSWC), Southwest System, which includes the West Athens-Westmont community. The wastewater is transported through trunk sewers to the JWPCP in Carson, which provides both primary and secondary wastewater treatment with a design capacity of 400 million gallons per day (mgd). In 2015, JWPCP had an average wastewater flow of 258.4 mgd (Raza 2017). The plant serves a population of approximately 3.5 million people throughout Los Angeles County. The treated wastewater is disinfected with hypochlorite and discharged to the Pacific Ocean through a network of outfalls that extend 1.5 miles off the coast near the Palos Verdes Peninsula and to a depth of 200 feet (GSWC 2016).

Because the JWPCP treats wastewater for a larger population than exists in the GSWC Southwest System, an estimated per capita wastewater generation factor was used to calculate the volume of wastewater generated by the customers in the GSWC Southwest System. In 2015, the total wastewater collected from the GSWC Southwest System service area and treated by the JWPCP was approximately 24,676 acre-feet (GSWC 2016).

JWPCP only provides primary and secondary treatment and does not meet recycled water quality standards. Therefore, 100 percent of the wastewater flow generated in the GSWC Southwest System is discharged into the Pacific Ocean.

Sewers

Two wastewater systems exist within the Specific Plan area: local collection lines and trunk sewers. The local collection lines are a series of 8-inch gravity mains with laterals connecting to existing houses and buildings.

All of these sewers are composed of vitrified clay pipe (VCP) or lined clay pipe. All local sewer lines are owned and operated by the Los Angeles County Department of Public Works. These local collection lines are routinely assessed through inspection, and repaired and replaced as part of a continuous improvement plan of the Department of Public Works. The 8-inch sanitary collection lines are currently sufficient size to collect sanitary waste from residential and commercial uses in the area and transport them to the main collection trunks.

Trunk sewer lines are owned and operated by the Fifth District of the LACSD. One trunk sewer services the Specific Plan area. The trunk line starts on Budlong Avenue, south of Imperial Highway, and follows 115th Place before cutting across the I-105 freeway and following the Southern Pacific Railroad line out of the Specific Plan area. The trunk is a 12-inch VCP sewer. The LACSD rating system rates conditions of trunk sewers on a scale from 1 (poor) to 4 (excellent). All segments of this sewer in the Specific Plan area have a condition rating of 4. The trunk sewer is adequately sized for current flows.

5.14.1.2 THRESHOLDS OF SIGNIFICANCE

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, a project would normally have a significant effect on the environment if the project:

U-1 Would exceed wastewater treatment requirements of either the Los Angeles or Lahontan Regional Water Quality Control Boards.

U-2 Create water or wastewater system capacity problems, or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

5.14.1.3 PLANS, PROGRAMS, AND POLICIES

Regulatory Requirements

RR USS-1 The proposed project will be designed, constructed, and operated in accordance with the Sanitation District of Los Angeles County's (LACSD) Wastewater Ordinance. All wastewater discharges into LACSD facilities shall be required to comply with the discharge standards set forth to protect the public sewage system.

RR USS-2 The project's sewer, storm drain, and other utility infrastructure improvements will be designed, constructed, and operated in accordance with the applicable regulations in the Los Angeles County Code, which incorporates by reference the California Building Code, the California Electrical Code, the California Mechanical Code, the California Plumbing Code, the California Fire Code, and the Green Building Standards Code.

RR USS-3 Development and redevelopment within the Specific Plan area required to Pay LACSD's connection fees consistent with its Connection Fee Program and Connection Fee Ordinance.

RR HAZ-1 Any project-related hazardous materials and hazardous wastes will be transported to and/or from the project in compliance with any applicable state and federal requirements, including the US Department of Transportation regulations in the Code of Federal Regulations (Title 49, Hazardous Materials Transportation Act); California Department of Transportation (Caltrans) standards; and the California Occupational Safety and Health Administration (Cal/OSHA) standards.

RR HAZ-2 Any project-related hazardous waste generation, transportation, treatment, storage, and disposal will be conducted in compliance with the Subtitle C of the Resource Conservation and Recovery Act (Code of Federal Regulations, Title 40, Part 263), including the management of nonhazardous solid wastes and underground tanks storing petroleum and other hazardous substances. The project will be designed and constructed in accordance with the regulations of the Los Angeles County Fire Department, which serves as the designated CUPA and implements state and federal regulations for the following programs: (1) Hazardous Waste Generator Program, (2) Hazardous Materials Release Response Plans and Inventory Program, (3) CalARP, (4) AST Program, and (5) UST Program.

5.14.1.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.14-1: Buildout of the proposed project would generate up to 825,317 additional gallons of wastewater per day and would be adequately treated by the Sanitation Districts of Los Angeles County. [Thresholds U-1 and U-2 (part)]

Impact Analysis:

Wastewater Generation and Treatment

Using the following wastewater generation rates for dwelling units and commercial use in Table 5.14-1, the proposed project is estimated to generate 720,807 additional gallons per day (gpd) of wastewater.

Table 5.14-1 Projected Wastewater Generation

Land Use	Buildout	Wastewater Generation Rates (gpd)	Generated Wastewater (gpd)	Generated Peak Flow (cfs)[1]
Existing Conditions				
Dwelling Units	3,457 DU	300	1,037,100	—
Nonresidential Use	1,784,409 SF	200 per 1,000 square feet	356,882	—
LASC Faculty/Students	14,281	20 per faculty/student	285,620	—
		Total – Existing Conditions	1,679,602	6.50
Proposed Project				
Dwelling Units	4,518 DU	300	1,355,400	—

Nonresidential Use	3,475,047 SF	200 per 1,000 square feet	695,009	—
LASC Faculty/Students	17,500	20 per faculty/student	350,000	—
		Total – Proposed Project	2,400,409	9.29
		Net Total	720,807	2.79

Source: IBI 2018.
DU= dwelling units; SF = square feet; gpd = gallons per day; cfs = cubic feet per second; LASC = Los Angeles Southwest College
[1] Peak flow = Generated wastewater * 2.5

According to the LACSD, the expected increase in average wastewater flow from the proposed project would be approximately 825,317 gallons per day (Raza 2017). To ensure a conservative analysis, the greater wastewater generation amount is utilized in this analysis.

As stated above, wastewater generated onsite is transported through trunk sewers to the JWPCP in Carson. In 2015, the JWPCP treated an average flow of 258.4 mgd and has a design capacity of 400 mgd. Therefore, the additional 825,317 gpd of wastewater generated by buildout of the proposed project would be adequately accommodated by the JWPCP and would not require LACSD to build new or expanded wastewater treatment facilities. Impacts would be less than significant.

Wastewater Collection

The sewer area study prepared by IBI Group (see Appendix K) analyzed project impacts on the existing wastewater system at full buildout of the proposed Specific Plan. Collection areas were delineated from collection line locations, and sewage effluent in each collection area was calculated. Overall, buildout of the proposed project would increase wastewater flow by 720,807 gpd and 2.79 cfs at peak flow (see Table 5.14-1). Based on the calculations, seven of the existing 12 sewer main tributary areas have the potential to exceed the existing sewage capacity as defined by the Department of Public Works (see Table 5.14-2 and Figure 5.14-1, *Sewer Tributary Areas*). Of those seven, four would exceed 50 percent pipe capacity (during a peak event), but not exceed full flow, while three would exceed the full pipe carrying capacity. It is important to note that these are based on minimum slope requirements (i.e., if the pipes are angled at a higher slope, they would be able to accommodate a greater flow capacity). The County indicated that no collections areas currently show signs of excess flow. This would imply that the slopes of the pipes are greater than minimum required slope, and thus, are not operating at full carrying capacity.

The analysis was conducted for full buildout condition; therefore, there is no immediate need for upgrades to the existing sewer mains. Future development projects in accordance with the Specific Plan would require more detailed analysis (i.e., estimated flow from proposed uses and actual slope of existing pipes) around the affected tributary areas to identify required upgrades.

Development of additional wastewater collection infrastructure (i.e., excavating and replacing sewer lines) could result in impacts on the environment. However, until the time when the precise location and type of required infrastructure is identified, the potential significant impacts cannot be meaningfully identified and evaluated. Addressing potential significant impacts associated with any future sewer line upgrades of unknown size and location would be too speculative at this time. Therefore, no significant impacts associated

with the construction of new wastewater collection lines to address the future shortfall in sewer line carrying capacity can conclusively be identified at this time.

Nevertheless, buildout of the proposed project would have potentially significant impacts to existing wastewater collection lines and may require line upgrades in the future to accommodate the increase in wastewater flow.

Table 5.14-2 Wastewater Generation by Tributary Area at Project Completion
All existing sewer mains are 8 inches diameter with capacity of 0.27 cfs at 50 percent pipe capacity

Tributary Area	Estimated Wastewater Generation at Project Completion, cubic feet per second
Proposed Wastewater Generation Exceeding Existing Sewer Main Capacity	
2	0.466
4	0.894
5	0.406
6	0.437
8	0.348
10	0.461
11	0.415
Proposed Wastewater Generation Not Exceeding Existing Sewer Main Capacity	
1	0.251
3	0.082
7	0.107
9	0.126
12	0.087

Source: IBI 2018

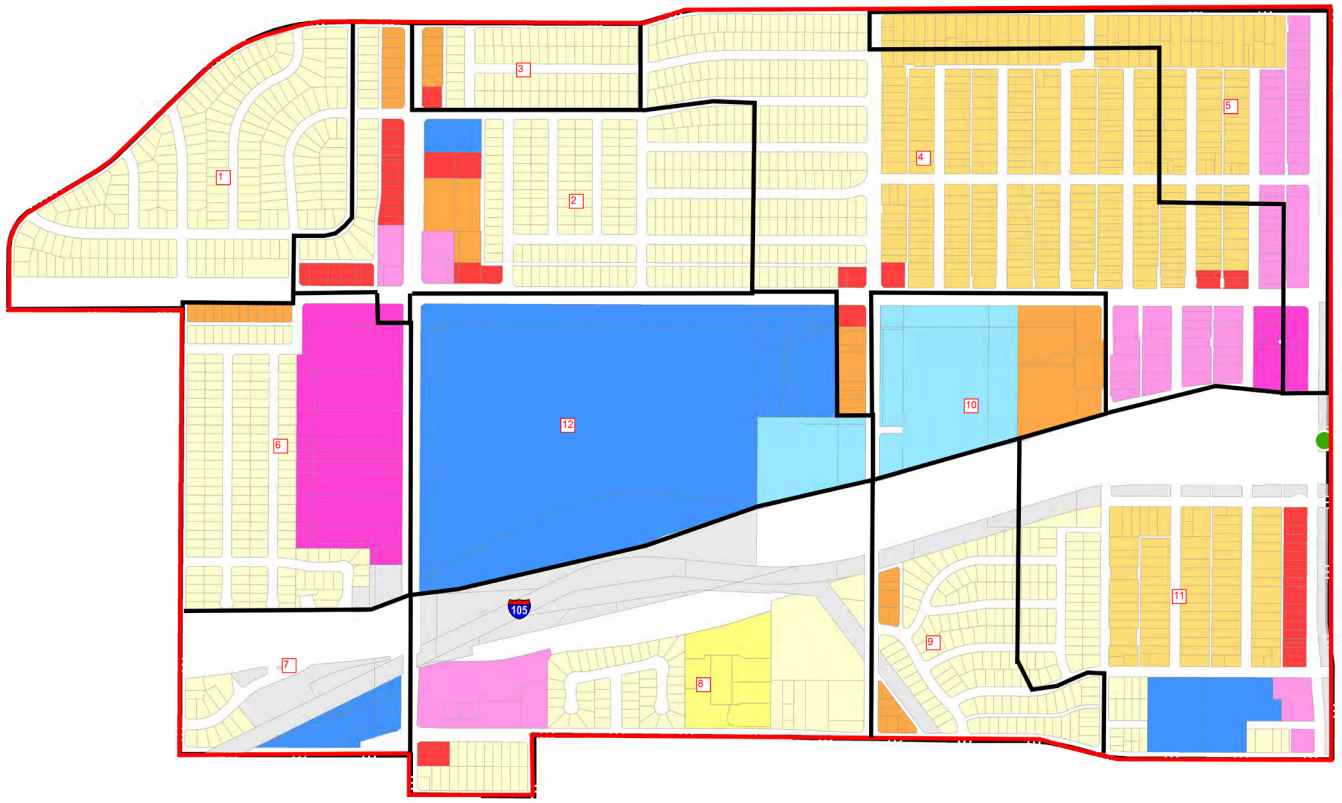
Regional Water Quality Control Board Wastewater Discharge Requirements

As required under RR USS-1, projects developed under the Specific Plan would comply with LACSD discharge requirements—using industrial pretreatment where needed—and JWPCP operations would comply with Los Angeles RWQCB Order No. R4-2011-0151. RRs HAZ-1 and HAZ-2 require compliance with state and federal regulations governing transport and disposal of hazardous materials, and thus are also pertinent to discharge limits for discharges to sewers. Compliance with these regulatory requirements would ensure wastewater generated by project buildout would comply with existing wastewater discharge requirements of the Los Angeles RWQCB, and no impact would occur.

Level of Significance before Mitigation: Upon implementation of regulatory requirements RR USS-1, RR HAZ-1, and RR HAZ-2, Impact 5.14-1 with respect to wastewater collection would still be potentially significant.

Figure 5.14-1 - Sewer Tributary Areas

5. Environmental Analysis



West Athens - Westmont TOD Boundary

Vermont/Athens Station

R-1, Single Family Residence

RPD-5000-10U,
Residential Planned Development

R-1, Two Family Residence

R-3, Limited Multiple Residence

MXD-1, Mixed Use 1

MXD-2, Mixed Use 2

C-2, Neighborhood Commercial

CC, Civic Center

IT, Public/Institutional

B-1, Buffer Strip

0 1,000
Scale (Feet)

Source: IBI, 2018

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5.14.1.5 CUMULATIVE IMPACTS

Wastewater Treatment Capacity

The area considered for cumulative impacts is the service area of the JWPCP, which is owned and operated by the LACSD. The JWPCP serves approximately 3.5 million people from throughout Los Angeles County (SDLAC 2015a). Wastewater flows through the JWPCP are projected to increase to 295 mgd in 2035 in proportion to estimated population growth in Los Angeles County over the 2015-2035 period (SDLAC 2015b). The JWPCP has a 400 mgd capacity. Therefore, there is adequate wastewater treatment capacity in the region to accommodate projected future growth, and cumulative impacts to wastewater treatment capacity would be less than significant.

Wastewater Treatment Requirements

Future cumulative projects developed in accordance with the County's General Plan would also be required to comply with LACSD discharge limits and LARWQCB waste discharge requirements. Adherence to these regulatory requirements would reduce cumulative impacts to less than significant levels.

Wastewater Collection

Impacts of buildout under the proposed project to sewers would be limited to sewers in and near the Specific Plan area. LACSD would require future projects to prepare sewer capacity studies to determine whether sewer upgrades are needed to ensure that the project does not impact downstream facilities which would result in a cumulative impact. These projects would also be required pay connection fees to the LACSD. Therefore, impacts of the proposed project would not combine with impacts of other cumulative development projects in the County of Los Angeles, or other development projects in other areas of the LACSD service area but outside the County, to result in significant cumulative impacts.

5.14.1.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Without mitigation, the following impact would be **potentially significant**:

- Impact 5.14-1 Project-generated wastewater would not be adequately accommodated by the existing sewer system.

5.14.1.7 MITIGATION MEASURES

Impact 5.14-1

USS-1 Prior to the issuance of grading permits for individual development projects in accordance with Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont, the Los Angeles County Department of Public Works shall determine whether sewer improvements would be required as part of the individual proposed project.

To assist in the determination, the Department of Public Works may require the project applicant/developer to submit a site-specific sewer flow monitoring study that includes a

detailed analysis of the projected flow rates to determine if the potential for surcharge conditions would occur due to project development. The sewer flow monitoring study may find that there is sufficient capacity for the areas of concern and that replacing and/or upsizing improvements are not necessary. The sewer flow monitoring study shall be submitted to the Department of Public Works for review and approval.

5.14.1.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Upon implementation of regulatory requirements RR USS-1, HAZ-1, and HAZ-2 and mitigation measure MM USS-1, impacts would be reduced to less than significant levels.

5.14.2 Water Supply and Distribution Systems

5.14.2.1 ENVIRONMENTAL SETTING

Relevant Programs and Regulations

Federal

Clean Water Act

The CWA establishes regulatory requirements for potable water supplies, including raw and treated water quality criteria. The GSWC Southwest District is required to monitor water quality and conform to the regulatory requirements of the CWA.

Safe Drinking Water Act

The federal Safe Drinking Water Act (SDWA) is enforced by the EPA and sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. SDWA requires many actions to protect drinking water and its sources, which include rivers, lakes, and groundwater.

State

Urban Water Management Planning Act

The Urban Water Management Planning Act of 1983 requires water management planning for large suppliers of water. The criteria for water management plans is 3,000 acre-feet (2.6 million mgd) annually OR supplying more than 3,000 customers. Under this rule, water providers are required to:

- Prepare a plan which assesses source water sustainability and reliability over expected water demand growth in 5 year increments to a minimum of 20 years future planning.
- Prepare a plan for water supply in future years under the following conditions: normal, one-year drought, and multiple-year drought. Water source must be able to supply the water demand in all conditions.
- Provide a plan to implement conservation measures for customers.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act—collectively, Assembly Bill 1739, Senate Bill 1168, and Senate Bill 1319—was passed in 2014 and defines sustainable groundwater measures. The legislation provides guidance for groundwater management and identifies undesirable results of groundwater withdrawal. The plan is intended to ensure sustainability measures are used in all groundwater activities.

Water Conservation Plan

The 20x2020 Water Conservation Plan of 2010 was a byproduct of the Water Conservation Act of 2009. The plan had a threefold effect: 1) established a benchmark of current usage per capita off 2005 baseline data; 2) establish intermediate goal for all water providers to meet by 2015; 3) establish a 20 percent reduction by 2020 of water usage.

Senate Bill 407

California Senate Bill 407 of 2009 was enacted to decrease wasteful water usage from owners. It requires all noncompliant plumbing fixtures installed before 1994 to be updated with plumbing fixtures that meet current usage standards.

Senate Bills 610 and 221

To assist water suppliers, cities, and counties in integrating water and land use planning, the state passed Senate Bill (SB) 610 (Chapter 643, Statutes of 2001) and SB 221 (Chapter 642, Statutes of 2001), effective January 1, 2002. SB 610 and SB 221 improve the link between information of water supply availability and certain land use decisions made by cities and counties. They are companion measures that promote more collaborative planning between local water suppliers and cities and counties. Both statutes require detailed information regarding water availability to be provided to city and county decision makers prior to approval of specified large development projects. This detailed information must be included in the administrative record as the evidentiary basis for an approval action by the city or county on such projects. The statutes recognize local control and decision making regarding the availability of water for projects and the approval of projects. Under SB 610, water supply assessments (WSA) must be furnished to local governments for inclusion in any environmental documentation for certain projects subject to CEQA, as defined in Water Code Section 10912(a). Under SB 221, approval by a city or county of certain residential subdivisions requires an affirmative verification of sufficient water supply. SB 221 is intended as a fail-safe to ensure collaboration on finding the needed water supplies to serve a new large subdivision before construction begins.

The Urban Water Management Planning Act states that every urban water supplier that provides water to 3,000 or more customers or provides over 3,000 acre-feet (af) of water annually should make every effort to ensure the appropriate level of reliability in its water service to meet the needs of its various categories of customers during normal, dry, and multiple dry years. Both SB 610 and SB 221 identify the Urban Water Management Plan (UWMP) as a planning document that can be used by a water supplier to meet the standards in both statutes. Thorough and complete UWMPs are foundations for water suppliers to fulfill the specific requirements of these two statutes, and they are important source documents for cities and counties as they update their general plans. Conversely, general plans are source documents as water suppliers update the UWMPs. These planning documents are linked, and their accuracy and usefulness are interdependent.

AB 3030, California Groundwater Management Act

The Groundwater Management Act of the California Water Code (Sections 10750 et seq.; AB 3030) provides guidance for applicable local agencies to develop a voluntary Groundwater Management Plan in state-designated groundwater basins.

Governor Brown's Executive Order B-29-15

Adopted in May 2015 and extended through 2016, the State Water Resources Control Board mandated that urban water suppliers reduce potable water use from a 2013 benchmark by a percentage dictated by the Board. In 2016, the GSWC Southwest District was required by state mandate to reduce potable water use by 9 percent (SWRCB 2017).

Existing Conditions

The GSWC Southwest System serves the cities of Gardena and Lawndale; parts of the cities of Carson, Compton, El Segundo, Redondo Beach, Hawthorne, and Inglewood; and portions of unincorporated Los Angeles County, including the West Athens-Westmont community.

Water Supply

Water supply sources for GSWC Southwest System include imported water, groundwater drawn from 12 locally owned wells, and recycled water. In 2015, imported water made up approximately 77 percent of the available supply, GSWC groundwater pumping provided 22 percent of the supply, and 1 percent was from recycled water sources. The 2015 water usage for the GSWC Southwest System was roughly 24 mgd (IBI 2017).

In future years, imported water supply could be as great as 80 percent or higher depending on groundwater allocations, the availability to lease additional groundwater rights, and groundwater quality considerations (GSWC 2016). Therefore, GSWC is actively pursuing the availability of a reliable, cost-effective supply of imported water through the implementation of conjunctive use storage programs in the Central and West Coast basins.

Imported Water

Purchased water made up 77 percent of all water distributed in the GSWC Southwest District in 2015. Imported water is provided through 13 feeders of the Central Basin Municipal Water District and the West Basin Municipal Water District, which are both large purveyors of water in southern California that obtain their imported water supplies from the Metropolitan Water District of Southern California (MWD). The Central and West Basin districts provide water to several agencies, including GSWC. The rated capacity of the purchased water feeders totals 58,000 gallons per minute (gpm) or 83.5 mgd.

Groundwater

Groundwater represented 22 percent of all water distributed in the GSWC Southwest District in 2015. This water supply is provided through 12 active wells, 2 in the Central Subbasin of the Coastal Plain of Los Angeles Groundwater Basin (or "Central Basin") and 10 in the West Coast Subbasin of the Coastal Plain of

Los Angeles Groundwater Basin (or "West Coast Basin"). GSWC has a design capacity to pump 10,865 gpm—15 mgd or 17,525 acre-feet per year (afy). Reliance on groundwater has decreased in the most recent years, presumably due to drought conditions. Each basin that provides groundwater to the district has limits on the amount of groundwater that can be extracted annually. Currently, GSWC is well below its annual maximum.

Table 5.14-3 shows the groundwater pumping history for the Southwest System from calendar years 2011 through 2015. The total groundwater pumping for the Southwest System has ranged from 5,915 afy to 16,377 afy (GSWC 2016).

Table 5.14-3 Historical Groundwater Pumping Volume

Groundwater Type	Location	2011	2012	2013	2014	2015
Alluvial Basin	Central Subbasin	3,260	3,250	2,920	2,861	430
Alluvial Basin	West Coast Subbasin	13,116	12,732	12,738	13,333	5,484
TOTAL		16,377	15,981	15,658	16,194	5,915

Source: Golden State Water Company Southwest System 2015 Urban Water Management Plan, July 2016.
Notes: Volume is in afy.

Recycled Water

The wastewater generated in the GSWC Southwest System is treated by the LACSD, and 100 percent is discharged to the Pacific Ocean. However, the GSWC Southwest System receives recycled water that originates from the City of Los Angeles' Hyperion Wastewater Treatment Plant, which is provided by the West Basin District.

The West Basin District acquires, controls, distributes, and sells recycled water to several cities, agencies, and customers in the greater Los Angeles area. The Southwest System currently receives recycled water as part of the West Basin Recycled Water Project. The Recycled Water Project collects secondary effluent from the Hyperion plant and treats it to meet Title 22 recycled water standards at the West Basin Water Recycling Facility in El Segundo. The recycled water produced by the West Basin District is used throughout the region for beneficial uses, such as landscape irrigation, industrial applications, and other purposes such as groundwater injections to control seawater intrusion.

Records show that the average recycled water used in the GSWC Southwest System from 2011 through 2015 was 438 afy, and the maximum (in year 2014) was 557 afy. Given that this maximum demand was met by the West Basin District supply, the value of 557 afy is assigned as the current potential recycled water use for the GSWC Southwest System. The total potential recycled water use for the GSWC Southwest System is calculated as the sum of the existing potential recycled water use (557 afy) and the future potential use (426 afy) resulting from projects identified in the GSWC Southwest System UWMP.

SBX7-7 Baselines and Targets

The Water Conservation Bill of 2009 provides the regulatory framework to support the statewide reduction in urban per capita water use described in the 20x2020 Water Conservation Plan. In connection with the

20x2020 Water Conservation Plan, Senate Bill X7-7 (SBX7-7) was enacted in 2009 as well and requires all water suppliers to increase water use efficiency. Each retail water supplier must determine and report its existing baseline water consumption and establish water use targets in gallons per capita per day (gpcd), and compare actual water use against the target; reporting began with the 2010 UWMP.

For the GSWC Southwest System 2015 UWMP, the calculated baseline gpcds are:

- 10-year average (1997–2006): 128 gpcd
- 5-year average (2003–2007): 127 gpcd

The GSWC chose to meet the 2020 water use targets and 2015 interim targets by adhering to Compliance Method 3, which requires meeting a gpcd target of 95 percent of the South Coast Region target (149 gpcd)—142 gpcd.

The minimum retail water use reduction compliance target is calculated as 95 percent of the 5-year baseline gpcd or 121 gpcd, which is less than the selected compliance target of 142 gpcd. Therefore, the Compliance Water Use 2020 Target for the GSWC Southwest System is 121 gpcd.

The GSWC Southwest System's water use in 2015 was 87 gpcd, well below the SBX7-7 2020 target of 121 gpcd. GSWC anticipates continuing to meet its 2020 target through current and future demand management measures (GSWC 2016).

Water Supply Reliability

According to GSWC Southwest System's 2015 UWMP, GSWC, Central Basin District, and West Basin District have determined that they can meet their projected water demands during normal water years, single dry years, and multiple dry years through 2040. The water supply and demand presented in Tables 5.14-4 through 5.14-6 are not adjusted for conservation. Therefore, conservation measures implemented within the GSWC Southwest System, including requirements to comply with SBX7-7, are expected to further reduce demands.

Table 5.14-4 Normal Year Supply and Demand

	2020	2025	2030	2035	2040
Supply Totals	33,072	33,492	33,915	34,345	34,779
Demand Totals	33,072	33,492	33,915	34,345	34,779
Difference	0	0	0	0	0

Source: Golden State Water Company Southwest System 2015 Urban Water Management Plan, July 2016.
Notes: Volume in afy.

Table 5.14-5 Single Dry Year Supply and Demand

	2020	2025	2030	2035	2040
Supply Totals	33,072	33,492	33,915	34,345	34,779
Demand Totals	33,072	33,492	33,915	34,345	34,779
Difference	0	0	0	0	0

Source: Golden State Water Company Southwest System 2015 Urban Water Management Plan, July 2016.
Notes: Volume in afy.

Table 5.14-6 Multiple Dry Year Supply and Demand

		2020	2025	2030	2035	2040
First Year	Supply Totals	33,072	33,492	33,915	34,345	34,779
	Demand Totals	33,072	33,492	33,915	34,345	34,779
	Difference	0	0	0	0	0
Second Year	Supply Totals	33,072	33,492	33,915	34,345	34,779
	Demand Totals	33,072	33,492	33,915	34,345	34,779
	Difference	0	0	0	0	0
Third Year	Supply Totals	33,072	33,492	33,915	34,345	34,779
	Demand Totals	33,072	33,492	33,915	34,345	34,779
	Difference	0	0	0	0	0

Source: Golden State Water Company Southwest System 2015 Urban Water Management Plan, July 2016.
Notes: Volume in afy.

Water Shortage Contingency Plan

GSWC Southwest System has a water shortage contingency plan consisting of five stages, in which Stage 1 responds to a supply reduction of up to 10 percent and Stage 5 responds to a supply reduction of over 40 percent. The contingency plan includes a set of restrictions and prohibitions on indoor and outdoor water use for each of the five stages. The GSWC Southwest System is not in any of the five stages of the water shortage contingency plan.

Water Treatment Facilities

Water treatment facilities filter and/or disinfect water before it is delivered to customers. Water imported by the MWD, which includes imported waters to GSWC's Southwest System, is treated at five treatment plants with total capacity of 2.64 billion gpd. The two treatment plants in the Los Angeles Basin are the Weymouth Treatment Plant in the City of La Verne with 520 mgd capacity, and the Diemer Treatment Plant in the City of Yorba Linda in Orange County with 520 mgd capacity (MWD 2017). Actual treated water production at the Weymouth Treatment Plant in 2015 was about 301 mgd, for residual capacity of approximately 219 mgd; and production at the Diemer Plant in 2015 was about 223 mgd, for residual capacity of about 297 mgd (MWD 2016).

The Water Replenishment District of Southern California's Advanced Water Treatment Facility, which will provide an additional 10,000 afy of highly treated recycled water for groundwater recharge, is scheduled to begin operation in 2018 (WRD 2016).

Water Conveyance

The Specific Plan area is supplied with potable water from the GSWC Southwest District and is serviced by a 3.0-million-gallon reservoir at the Budlong Plant, which is less than 1,000 feet from the southern boundary of the Specific Plan area on Budlong Avenue.

The Specific Plan area is serviced by pipe sizes varying from 2-inch connectors to 18-inch main lines. The vast majority of pipe is composed of one of two materials—cast iron and ductile iron. The largest pipe connects the Specific Plan area to the area south of I-105 via three pipes—an 18-inch water main, a 16-inch water main, and a 14-inch water main, which also connects the system to the Budlong plant. These branch off and distribute water to the majority of the Specific Plan area. Reservoir capacity can be expanded by increasing the size of the tanks, and flow rate can be increased by increasing the pump sizes. The ability to increase capacity and flow rate allows flexibility in accommodating changes in potable water demand as a result of any changes to the project area. Figure 5.14-2, *Water System Map and Areas of Impact*, illustrates the water system servicing the Specific Plan area by pipe size.

5.14.2.2 THRESHOLDS OF SIGNIFICANCE

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, a project would normally have a significant effect on the environment if the project would:

U-2 Create water or wastewater system capacity problems, or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

U-4 Have insufficient reliable water supplies available to serve the project demands from existing entitlements and resources, considering existing and projected water demands from other land uses.

5.14.2.3 PLANS, PROGRAMS, AND POLICIES

Regulatory Requirements

See RR USS-2 above in Section 5.14.1.3.

RR GHG-3 New buildings are required to adhere to the California Green Building Standards Code (CALGreen) and Water Efficient Landscape Ordinance requirements integrated into the County Code to increase water efficiency and reduce urban per capita water demand. The County's green building standards are identified County Code, Title 31. Non-residential structures and residential structures seven stories and higher are also required to comply with Section 301.3.1, *Nonresidential Buildings greater than or equal to 25,000 square feet*, which

requires implementation of the Tier 1 voluntary standards (30 percent reduction) for indoor potable water use and 60 percent of Reference evapotranspiration (ETo) for outdoor potable water use; Section 5.106.4, *Low Impact Development*; and Section 4.106.5, *Landscape Design*, which requires use of non-invasive, drought-tolerant plants. Title 31 requires project designs and practices that will result in the conservation of water and energy resources, such as measures for building commissioning, clean vehicle parking, and solid waste recycling.

Project Design Features

- Design sustainable and energy-efficient streetscapes with low-impact development strategies including sustainable stormwater practices, permeable paved surfaces, drought-tolerant plant species, and solar lighting fixtures.

- Irrigation systems shall incorporate water conserving methods and water efficient technologies such as drip emitters, evapotranspiration controllers, and moisture sensors. Explore opportunities to reuse rain water and/or gray water for irrigation.

- Irrigation systems shall be designed to apply water slowly, allowing plants to be deep watered and reducing runoff. Low-volume irrigation drip systems should be used in all areas except turf irrigation and small ornamental planting. Each street tree should be watered by at least two deep watering bubblers separate from all other irrigation.

- Drainage should be directed to permeable areas to minimize discharge to the storm drain system. Use pervious or open grid paving for parking areas whenever possible to reduce the negative effects of storm water runoff and to facilitate groundwater recharge.

- Permeable surfaces should be incorporated whenever feasible to allow infiltration of rainfall and to reduce the total volume of runoff, replenish groundwater, and improve water quality

5.14.2.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.14-2: Buildout of the proposed project would increase water demand and may require upsizing of water conveyance systems. [Thresholds U-2 (part) and U-4]

Impact Analysis: The proposed Specific Plan would allow development of approximately 1,061 additional residences and 1,690,638 additional square feet of nonresidential use. The proposed zoning districts would include a heavy influx of households and water flow in the Specific Plan area.

Water Demand

Population within the Specific Plan area is anticipated to increase from 11,158 to 14,362 residents at full buildout. The growth in population would increase water demand from 1,555 to 2,297 afy (IBI 2017).

The net increase of 742 afy (or 662,415 gallons per day) would be accommodated within GSWC's expected water supply under normal, single-dry, and multiple-dry years (see Tables 5.14-3 through 5.14-5), which assumes an increase in demand of 1,707 afy between 2020 and 2040. The 2015 UWMP was adopted in 2016, and its service population was based on the Southern California Association of Governments (SCAG) forecasts.

Impacts related to water supply would be less than significant because the projected water demand from the Specific Plan buildout is within the demands forecast in the 2015 UWMP, which demonstrates that current supply meets the demand of GSWC Southwest District's service area. Additionally, as demonstrated in Section 5.9, *Population and Housing*, buildout of the Specific Plan is within the growth projections of the area, which is accounted for in the 2016 UWMP. Note that, as growth is evaluated and accounted for in the County of Los Angeles General Plan, SCAG forecasts are updated and these numbers will be reflected in the 2020 UWMP that will be prepared in later years.

Additionally, redevelopment of older residences and nonresidential buildings in accordance with the Specific Plan would require the new buildings be constructed in compliance with current building code requirements, which have more stringent water conservation regulations. Thus, impacts to GSWC's water supply sources would be less than significant.

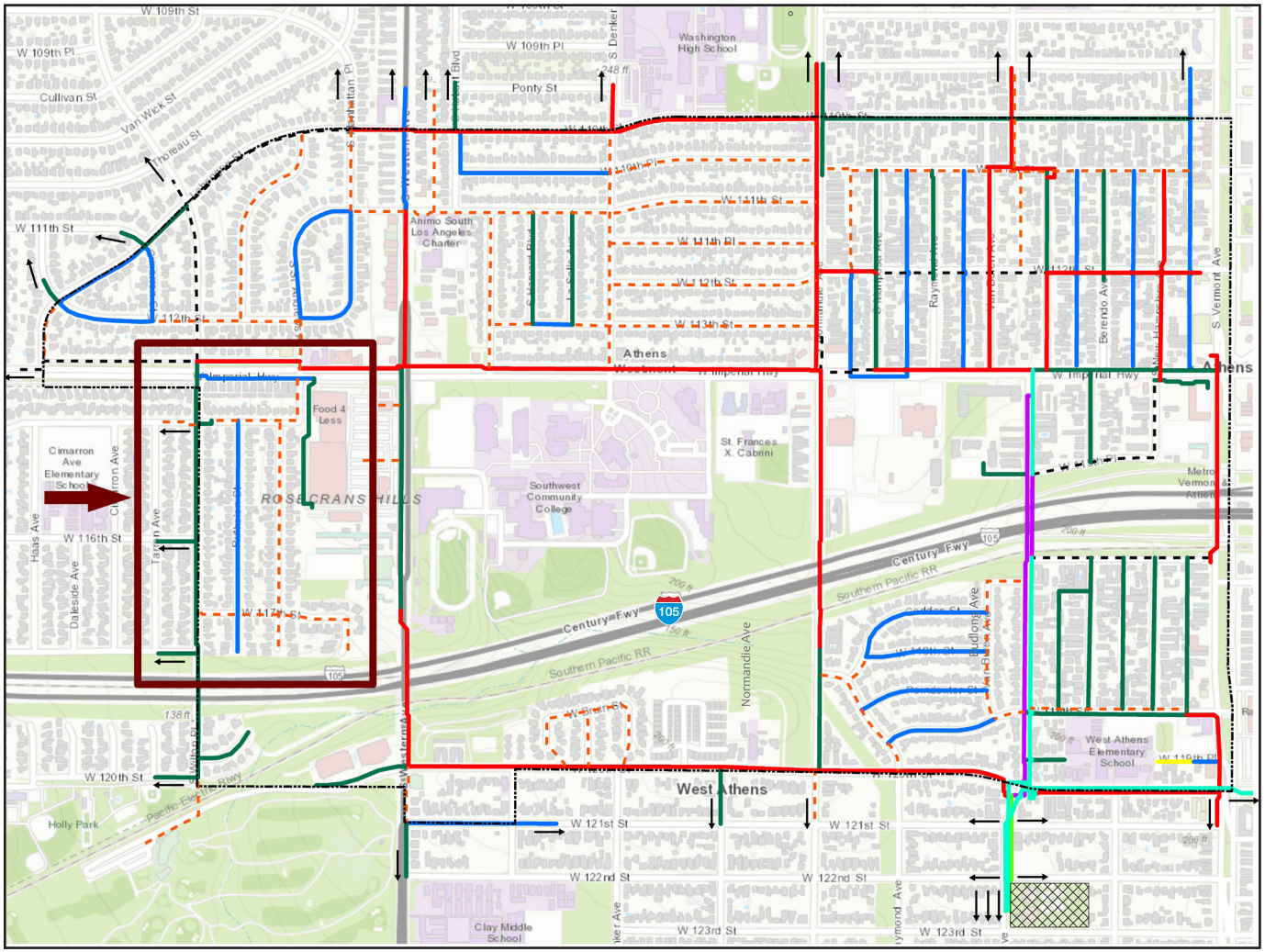
Additionally, development in accordance with the Specific Plan would be required to adhere to the most current California Plumbing Code standards (Chapter 4) and implement EPA WaterSense devices and appliances to help reduce water and energy usage. In line with current California Plumbing Code Section 1601.1.1, "Alternate Water Sources for Non-potable Applications, Allowable Use of Alternate Water," the use of gray water systems can also be considered and would contribute toward reducing overall water usage. Outdoor water conservation measures such as water-efficient irrigation devices, low-water and drought-resistant plants, and rain catchment systems would also help reduce water usage (Zhao 2017).Overall, project impacts to water demand would be less than significant.

Water Treatment

As stated above, water imported by the MWD, which includes imported water to GSWC's Southwest System, is treated at five treatment plants with total capacity of 2.64 billion gpd. The Weymouth Treatment Plant and Diemer Treatment Plant are in the Los Angeles Basin and have a combined capacity of 1,040 mgd (520 mgd each). Actual treated water production at the Weymouth and Diemer Treatment Plants in 2015 was about 301 mgd and 223 mgd, respectively. Thus, the two treatment plants have a combined residual capacity of about 297 mgd. As stated above, full buildout of the proposed project would increase water demand by 742 afy (or 662,415 gallons per day). Thus, the two treatment plants have substantial capacity to accommodate the project's water demand, and impacts would be less than significant.

Figure 5.14-2 - Water System Map and Areas of Impact

5. Environmental Analysis



Water System Map

Pipe Size

- West Athens - Westmont TOD Boundary
- Water Plant
- 2” Pipe
- 4” Pipe
- 6” Pipe
- 8” Pipe
- 10” Pipe
- 12” Pipe
- 14” Pipe
- 16” Pipe
- 18” Pipe
- Continuation/Direction of Water Pipes Outside West Athens - Westmont TOD Boundary

0 1,000

Scale (Feet)

Source: IBI Group, 2017

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Water Storage and Conveyance

IBI Group prepared a water area study to analyze the proposed project's impacts to the water distribution system. Water generation factors used to evaluate infrastructure-related impacts are based on the following rates—as opposed to a per capita rate used in the UWMP—in order to determine adequate pipe sizing.

- 300 gpd per housing unit
- Demand for commercial space: 200 gallons per 1,000 square feet
- Peak flow of 2.5 times average daily flow
- Maximum head loss in the pipe not to exceed 3.5 feet per 1,000 feet of water pipeline

Using the estimated water demand rates bulleted above, the proposed land use changes would increase water flow into the Specific Plan area from approximately 1.68 mgd to 2.4 mgd, a net increase of 0.72 mgd. Additionally, the proposed land use changes would generate a peak flow increase from 4.20 mgd to 6.00 mgd, which translates to a peak of 2,916 gpm and 4,167 gpm in the instantaneous flow to the area.

The Budlong water storage plant currently has a maximum capacity of 3.0 million gallons. With the assumption that the plant is the primary provider to the Specific Plan area, this increase in flow may require increasing storage capacity at the plant. Future developers and residents would have to pay water rates set by GSWC and the California Public Utilities Commission. The water rates reflect the full cost to provide water service, maintain existing infrastructure, and make system improvements as needed. Therefore, as development occurs in accordance with the Specific Plan, GSWC would evaluate whether additional water storage capacity would be required and would increase capacity as needed.

The water area study also analyzed impacts to pipeline capacities with the primary metric being friction head loss through the pipe. With a 1,000-foot-long pipe run, the head loss due to flow should not exceed 3.5 feet. The two-line flow to the majority of the plan area—16- and 14-inch—provides adequate capacity to serve the project-generated 4,167 gpm instantaneous peak flow through parallel flow without losing 3.5 feet of hydraulic head. Holistically, the Specific Plan area has distribution piping adequate for the total flow into the area. Each zone was analyzed in accordance to flow in that zone with the largest pipe in the area. The Specific Plan's network of piping allows for multiple pipe connections to transport water flow to the area. Therefore, the Specific Plan area would be adequately served with minimal head loss through multiple parallel pipes.

However, an area of concern is the southwest corner of the Specific Plan area, which is bounded by Imperial Highway to the north and Western Avenue to the east (see Figure 5.14-2, *Water System Map and Areas of Impact*). This area may be connected to another location capable of providing additional flow, but only has one 8-inch pipe connecting it to the Specific Plan area. The total flow to the area during peak withdrawal is 880 gpm, which creates a head loss of 13.3 feet per 1,000 feet of pipe. There are existing connections west of the project site that can help mitigate head loss from current connections, but existing flow capacity of the pipe would have to be expanded. Improving the 8-inch pipe to a 12-inch pipe would mitigate the project's water conveyance impacts to less than significant levels. Mitigation detailed below would require individual

development projects connected to the water system area of concern (see Figure 5.14-2) to identify whether development of the proposed project would be adequately accommodated by the existing 8-inch pipe.

Development of additional water collection infrastructure (i.e., excavating and replacing water lines) could result in impacts on the environment. However, until the time when the precise location and type of required infrastructure is identified, the potential significant impacts cannot be meaningfully identified and evaluated. Addressing potential significant impacts associated with any future water pipe upgrades of unknown size and location would be too speculative at this time. Therefore, no significant impacts associated with the construction of new wastewater collection lines to address the future shortfall in water line carrying capacity can conclusively be identified at this time.

GSWC also periodically monitors its water system network to identify leaks and pipe issues that may need replacement or upgrades; thus, as development occurs in the Specific Plan area, GSWC will evaluate its water system network to determine whether improvements are required. Water rates paid by existing and future residents, developers, and business owners fund the full cost to provide water service, maintain existing infrastructure, and make system improvements as needed.

Overall, project impacts to water conveyance systems would be potentially significant.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.14-2 would be potentially significant.

5.14.2.5 CUMULATIVE IMPACTS

Water Supplies

The analysis of water supplies and demands above addresses GSWC Southwest System's service area and thus addresses cumulative impacts. As concluded in the 2015 UWMP, GSWC Southwest System would be able to meet water supply demands within its service area during normal, single-dry, and multiple-dry years through 2040. Thus, cumulative impacts to water supplies would be less than significant.

Water Treatment

At full buildout of the proposed project, the Diemer and Weymouth treatment plants would have a combined residual capacity of about 296 mgd. Water demands in GSWC Southwest System's service area are forecast to increase by about 1,707 afy, or 1.3 mgd, between 2020 and 2040 (see Table 5.14-3, above). There is sufficient water treatment capacity in the region for the estimated net increase in water demands in GSWC Southwest System's service area and from the proposed project. Thus, cumulative impacts to water treatment facilities would be less than significant.

Water Conveyance

Impacts to water mains due to buildout of the proposed project would be limited to mains in and near the Specific Plan area managed by GSWC. Future projects in GSWC Southwest System's water conveyance system may combine with the proposed project to adversely impact the delivery system. However, as stated

above, GSWC continually monitors its water system network for leaks or pipe issues and would use funds obtained from water rate fees to make needed upgrades and improvements. Overall, cumulative impacts to water conveyance systems would be less than significant.

5.14.2.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Without mitigation, the following impact would be **potentially significant**:

- Impact 5.14-2 Existing water conveyance facilities would not be able to accommodate increases in water flow at full buildout of the Specific Plan.

5.14.2.7 MITIGATION MEASURES

Impact 5.14-2

USS-2 Prior to the issuance of grading permits for individual development projects in accordance with the Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont, the Los Angeles County Department of Public Works shall review the areas of concern illustrated in Figure 5.14-2, *Water System Map and Areas of Impact*, in particular the southwest corner of the Specific Plan area, bounded by Imperial Highway to the north and Western Avenue to the east, to determine whether water conveyance facility improvements would be required as part of the individual proposed project. The area of concern may require replacing the existing 8-inch pipe with a 12-inch pipe to reduce head loss in the pipe to less than 3.5 inches per 1,000-foot foot-long pipe run.

To assist in the determination, the Department of Public Works may require the project applicant/developer to submit a site-specific water flow monitoring study to provide a more detailed analysis of the projected flow rates to determine if the potential for a head loss in exceedance of 3.5 feet per 1,000-foot foot-long pipe run would occur due to project development. The water flow monitoring study may indicate that there is sufficient capacity for the areas of concern and thereby, be able to conclude that replacement and/or upsizing improvements are not necessary. The water flow monitoring study shall be submitted to the Department of Public Works for review and approval.

5.14.2.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Upon implementation of regulatory requirement RR USS-2 and RR GHG-3 and mitigation measure MM USS-2, impacts would be reduced to less than significant levels.

5.14.3 Storm Drainage Systems

5.14.3.1 ENVIRONMENTAL SETTING

Relevant Programs and Regulations

Federal

Clean Water Act

The CWA is the principal statute governing water quality. It establishes the basic structure for regulating discharges of pollutants into the waters of the United States and gives the EPA authority to implement pollution control programs, such as setting wastewater standards for industry. The statute's goal is to completely end all discharges and to restore, maintain, and preserve the integrity of the nation's waters. The CWA regulates direct and indirect discharge of pollutants; sets water quality standards for all contaminants in surface waters; and makes it unlawful for any person to discharge any pollutant from a point source into navigable waters unless a permit is obtained under its provisions. The CWA mandates permits for wastewater and stormwater discharges; requires states to establish site-specific water quality standards for navigable bodies of water; and regulates other activities that affect water quality, such as dredging and the filling of wetlands. The CWA funds the construction of sewage treatment plants and recognizes the need for planning to address nonpoint sources of pollution. Section 402 of the CWA requires a permit for all point source discharges (from a discernible, confined, and discrete conveyance, such as a pipe, ditch, or channel) of any pollutant (except dredge or fill material) into waters of the United States.

National Pollutant Discharge Elimination System

Under the NPDES program (under Section 402 of the CWA), all facilities that discharge pollutants from any point source into waters of the United States must have a NPDES permit. The term "pollutant" broadly applies to any type of industrial, municipal, and agricultural waste discharged into water. Point sources can be publicly owned treatment works (POTWs), industrial facilities, and urban runoff. (The NPDES program addresses certain agricultural activities, but the majority are considered nonpoint sources and are exempt from NPDES regulation.) Direct sources discharge directly to receiving waters, and indirect sources discharge to POTWs, which in turn discharge to receiving waters. Under the national program, NPDES permits are issued only for direct, point-source discharges. The National Pretreatment Program addresses industrial and commercial indirect dischargers. Municipal sources are POTWs that receive primarily domestic sewage from residential and commercial customers. Specific NPDES program areas applicable to municipal sources are the National Pretreatment Program, the Municipal Sewage Sludge Program, Combined Sewer Overflows, and the Municipal Storm Water Program. Nonmunicipal sources include industrial and commercial facilities. Specific NPDES program areas applicable to these industrial/commercial sources are: Process Wastewater Discharges, Non-process Wastewater Discharges, and the Industrial Storm Water Program. NPDES issues two basic permit types: individual and general. Also, the EPA has recently focused on integrating the NPDES program further into watershed planning and permitting.

The NPDES has a variety of measures designed to minimize and reduce pollutant discharges. All counties with storm drain systems that serve a population of 100,000 or more and construction sites of one acre or

more must file for and obtain an NPDES permit. Another measure for minimizing and reducing pollutant discharges to a publicly owned conveyance or system of conveyances (including roadways, catch basins, curbs, gutters, ditches, man-made channels and storm drains, designed or used for collecting and conveying stormwater) is the EPA's Storm Water Phase I Final Rule. The Phase I Final Rule requires an operator (such as a city) of a regulated municipal separate storm sewer system (MS4) to develop, implement, and enforce a program (e.g., best management practices [BMPs], ordinances, or other regulatory mechanisms) to reduce pollutants in postconstruction runoff to the County's storm drain system from new development and redevelopment projects that disturb equal or more than one acre. The MS4 Permit in effect for the project site is Order No. R4-2012-0175, "Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges within the Coastal Watersheds of Los Angeles County, Except those Discharges Originating from the City of Long Beach MS4," issued by the Los Angeles RWQCB in 2012 and subsequently amended in 2015. The County of Los Angeles Public Works Department enforces conditions of the MS4 NPDES permit on development and redevelopment projects in the County's jurisdiction.

Los Angeles County

Los Angeles County Low Impact Development Standards Manual

The County has prepared the 2014 Low Impact Development Standards Manual to comply with the requirements of the above-mentioned MS4 permit. The LID manual is an update and compilation of the following documents:

- Development Planning for Storm Water Management: A Manual for the Standard Urban Storm Water Mitigation Plan (SUSMP Manual, September 2002)
- Technical Manual for Stormwater Best Management Practices in the County of Los Angeles (2004 Design Manual, February 2004)
- Stormwater Best Management Practice Design and Maintenance Manual (2010 Design Manual, August 2010)
- Low Impact Development Standards Manual (2009 LID Manual, January 2009)

The LID manual addresses the following objectives and goals:

- 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.
- Minimize erosion and other hydrologic impacts on all projects within natural drainage systems that have not been improved by requiring projects to incorporate properly designed, technically appropriate hydromodification control development principles and technologies.

Existing Conditions

The Los Angeles County Department of Public Works (DPW) and Caltrans own and operate the storm drain system within the Specific Plan area. The Specific Plan area is sloped toward I-105, with the majority of the catch basins placed to capture runoff that drains into the freeway cutout. The catch basins and gravity mains along the freeway are maintained by Caltrans and in good condition. The catch basins and gravity mains that are not within the right-of-way of the railroad and freeway are maintained by DPW and in good condition.

The storm drainage in the area primarily follows I-105 southwest before flowing out of the Specific Plan area. This gravity main and the mains in the northwest of the Specific Plan area drain to the Dominguez Channel, a 60- by 14-foot channel that transports the water south to the Port of Los Angeles. The northwest storm sewer drains to Compton Creek. The gravity mains are all reinforced pipe ranging from 18 to 48 inches in diameter (see Figure 5.14-3, *Storm Drain System Map and Areas of Impact*).

5.14.3.2 THRESHOLDS OF SIGNIFICANCE

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, a project would normally have a significant effect on the environment if the project:

U-3 Creates drainage system capacity problems, or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

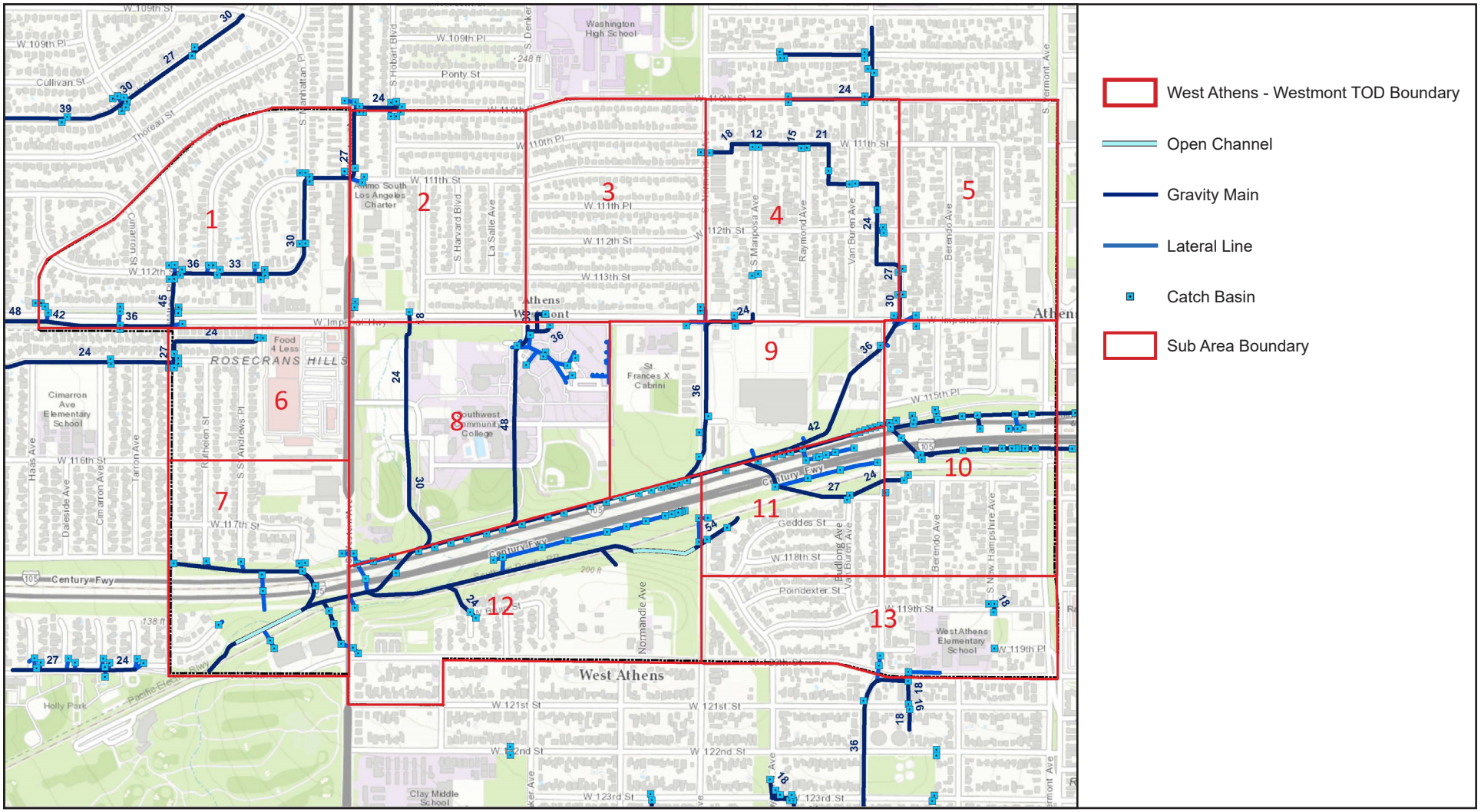
5.14.3.3 PLANS, PROGRAMS, AND POLICIES

Regulatory Requirements

See RR USS-2 and RR HYD-2 above in Section 5.14.1.3.

Figure 5.14-3 - Storm Drains Onsite

5. Environmental Analysis



Source: IBI, 2018

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5.14.3.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.14-3: Existing and future storm drainage systems would adequately serve the drainage requirements of the proposed project. [Threshold U-3]

Impact Analysis:

Specific Plan buildout would increase impervious areas by 8.74 acres in some portions of the project site and decrease such areas by 8.68 acres in other portions, for a net increase of 0.06 acre, that is, about 0.01 percent of the site (see Table 5.14-7 below). The project site is divided into 13 drainage sub-areas (see Figure 5.6-3, *Storm Drains Onsite*). The increase in impervious areas would mainly be in sub-areas 9 and 12 in the central and southern parts of the project site, respectively. The proposed zoning designations in portions of those areas where zoning designations would change are Civic Center (CC) and Limited Density Multiple Residence (R-3) in sub-area 9; and Residential Planned Development (RPD) and Mixed Use 1 (MXD-1) in sub-area 12 (see Figure 3.6, *Proposed Zoning Areas of Change*). Those areas are relatively close to existing storm drains that would have adequate capacity to convey stormwater from those areas.

The decrease in impervious areas would be mostly in sub-areas 7 and 10 in the southwest and east parts of the project site, respectively. Proposed zoning designations in portions of those sub-areas where zoning would change are Mixed Use 2 (MXD-2) and Public-Institutional (IT) in sub-area 7; and mixed use (MXD-1 and MXD-2) in sub-area 10 (see Figure 3.6).

No specific development plans have been proposed; thus, impervious area in buildout condition is estimated based on development in accordance with the proposed zoning and use of common measures for minimizing runoff.

Overall, Specific Plan buildout would not require the construction of new or expanded storm drains and would not substantially change the drainage pattern onsite.

Each development or redevelopment project under the Specific Plan would be required to have site-specific hydrology and hydraulic studies to determine capacity of the existing storm drain systems and project impacts on such systems prior to approval by the Los Angeles County Department of Public Works. Each project would be required to comply with site-specific "allowable discharge rates," as identified by the Department of Public Works, that limit peak flow discharges compared to existing conditions, thus minimizing potential for flooding on- or off-site.

As required by regulatory requirement RR HYD-2, future projects in accordance with the Specific Plan must be constructed and operated in accordance with the Los Angeles County MS4 Permit (Order No. R4-2012-0175), as amended by Order WQ 2015-0075. The MS4 Permit requires new development and redevelopment projects to retain on-site a specified volume of stormwater runoff from a design storm event. The LID

Standards Manual provides guidance on how new development and redevelopment projects can meet these on-site retention requirements through the use of stormwater quality control measures. The MS4 Permit and LID Standards Manual are discussed further in Section 5.6, Hydrology and Water Quality, of this DEIR.

Table 5.14-7 Impervious Areas Onsite: Existing, Proposed, and Net Change

Drainage Subarea	Acres	Existing Conditions		Specific Plan Buildout		Net Change, Impervious Acres
		Percent Impervious	Impervious Acres	Percent Impervious	Impervious Acres	
1	61.0	81.55%	49.75	81.55%	49.75	0.00
2	46.4	82.70%	38.38	82.51%	37.10	-.09
3	50.4	80.12%	40.38	80.12%	40.47	0.00
4	56.4	85.11%	48.00	85.11%	45.27	0.00
5	41.6	86.61%	36.03	88.17%	35.25	0.65
6	32.4	87.73%	28.43	87.61%	29.12	-.04
7	45.3	87.03%	39.43	77.80%	33.74	-4.18
8	71.5	80.04%	57.23	78.00%	55.77	-1.46
9	52.5	77.94%	40.92	84.33%	45.16	3.36
10	63.2	84.80%	53.60	80.26%	49.61	-2.87
11	33.5	91.37%	30.61	91.27%	25.32	-0.04
12	64.2	74.74%	47.99	81.97%	55.84	4.64
13	34.9	78.28%	27.32	78.54%	28.91	0.09
Total	653.3	82.36%	538.04	82.37%	538.10	0.06

Source: IBI 2018

Level of Significance before Mitigation: With implementation of regulatory requirements RR USS-2 and RR HYD-2, Impact 5.14-3 would be less than significant.

5.14.3.5 CUMULATIVE IMPACTS

The area considered for cumulative impacts to drainage and surface water quality is the Dominguez Watershed. Approximately 81 percent of the watershed or 93 percent of the land within the watershed is developed (DPW 2017a). Thus, cumulative projects in the watershed are more likely to be redevelopment projects than development projects. Nevertheless, most projects would create or replace impervious areas and thus could affect the amount of runoff within the watershed. Per regulatory requirement RR USS-2, all development projects are required to implement LID BMPs in accordance with the MS4 Permit and the Los Angeles County LID Standards Manual. Compliance with the MS4 permit would ensure projects retain a specified volume of stormwater runoff from a design storm event onsite, and the County's LID Standards Manual provides guidance on how projects can meet these on-site retention requirements through the use of stormwater quality control measures.[1] Overall, cumulative impacts would be less than significant, and project impacts would not be cumulatively considerable.

[1] All of the incorporated cities in the Dominguez Watershed are permittees on the MS4 Permit, and enforce conditions of the MS4 permit on development and redevelopment projects in each respective city's jurisdiction.

5.14.3.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements, Impact 5.14-3 would be less than significant.

5.14.3.7 MITIGATION MEASURES

No mitigation measures are required.

5.14.3.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.14.4 Solid Waste

5.14.4.1 ENVIRONMENTAL SETTING

Relevant Programs and Regulations

Federal

The Resource Conservation and Recovery Act of 1976 (Title 40 of the Code of Federal Regulations), Part 258, contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. The federal regulations address the location, operation, design (liners, leachate collection, run-off control, etc.), groundwater monitoring, and closure of landfills.

State

Assembly Bills 939, 341, and 1826

Assembly Bill 939 (Integrated Solid Waste Management Act of 1989; Public Resources Code 40050 et seq.) established an integrated waste-management system that focused on source reduction, recycling, composting, and land disposal of waste. AB 939 required every California city and county to divert 50 percent of its waste from landfills by the year 2000. Compliance with AB 939 is measured in part by comparing solid waste disposal rates for a jurisdiction with target disposal rates. Actual rates at or below target rates are consistent with AB 939. AB 939 also requires California counties to show 15 years of disposal capacity for all jurisdictions in the county or show a plan to transform or divert its waste.

Assembly Bill 341 (Chapter 476, Statutes of 2011) increased the statewide solid waste diversion goal to 75 percent by 2020. The law also mandates recycling for commercial and multifamily residential land uses as well as schools and school districts.

Assembly Bill 1826 (California Public Resources Code Sections 42649.8 et seq.), signed into law in 2014, requires recycling of organic matter by businesses and multifamily residences of five of more units, generating such wastes in amounts over certain thresholds. The law took effect in April 2016.

California Green Building Standards Code

Section 5.408 (Construction Waste Reduction, Disposal, and Recycling) of the California Green Building Standards Code (CALGreen; Title 24, California Code of Regulations, Part 11) requires that at least 50 percent of the nonhazardous construction and demolition waste from nonresidential construction operations be recycled and/or salvaged for reuse. CALGreen is updated on a three-year cycle; the 2016 CALGreen took effect on January 1, 2017.

Existing Conditions

Solid Waste Collection

DPW contracts with various private waste haulers for garbage collection and disposal services. The project site is in the Athens-Woodcrest-Olivita (Athens) garbage disposal district, which is served by Consolidated Disposal Service, Gardena. Consolidated Disposal Service provides commercial and residential waste collection as well as roll-off services, industrial waste, construction/demolition waste, recyclables, green waste, bulky items, electronic, manure, and food waste services.

Solid Waste Recycling and Disposal

The project site is in the County's unincorporated community waste area of Athens (DPW 2013). Solid waste collected from the Athens area is taken to the Chiquita Canyon Landfill in Castaic, Commerce Refuse-to-Energy Facility in Commerce, Southeast Resource Recovery Facility in Long Beach, and Sunshine Canyon City/County Landfill in Sylmar. In 2015, approximately 922 tons of solid waste were taken to these four landfills/recovery facilities—144.1 tons to Chiquita Canyon Landfill, 5.1 tons to Commerce Refuse-to-Energy Facility, 3.5 tons to the Southeast Resource Recovery Facility, and 769.2 tons to the Sunshine Canyon City/County Landfill (DPW 2017b).

Capacity and disposal data and estimated closure dates for these landfills/recovery facilities are detailed in Table 5.14-8. As shown, the four facilities have combined residual capacity of approximately 8,368 tons per day. Additionally, in June 2017, the Chiquita Canyon Landfill recently obtained approval of a conditional use permit to increase daily disposal limits from 6,000 tons per day to 12,000 tons per day (DRP 2017). Once the expansion project is complete, an additional 6,000 tons of residual landfill capacity would be provided at the Chiquita Canyon Landfill and its estimated closing date would be extended. Table 5.14-6 does not reflect this recent expansion approval.

Table 5.14-8 Solid Waste Disposal and Recovery Facilities Serving West Athens-Westmont

Facility Location	Remaining Permitted Capacity, cubic yards [tons][1]	Daily Disposal Capacity (tons)			Estimated Closing Date[1]
		Maximum Permitted[1]	Daily Average (2015)	Residual	
Chiquita Canyon Landfill 29201 Henry Mayo Drive Castaic, CA 91384	765,804 [758,146 tons]	6,000[2]	3,446	2,554	11/24/2019[2]
Commerce Refuse-to-Energy Facility 5926 Sheila Street Commerce, CA 90040	—	1,000	398	602	NA
Southeast Resource Recovery Facility (Recycling and incineration) 120 Pier S Avenue Long Beach, CA 90802	—	2,240	1,427	813	NA
Sunshine Canyon City/County Landfill 14747 San Fernando Road Sylmar, CA 91342	82,512,468 [72,610,972 tons]	12,100	7,701	4,399	12/31/2037
Total	83,278,272 [73,369,118 tons]	21,340	12,972	8,368	—

Source:
[1] Los Angeles County Countywide Integrated Waste Management Plan 2015 Annual Report, December 2016.
[2] The maximum permitted daily disposal would increase to 12,000 tons per day and the estimated closing date would be extended once the Chiquita Canyon Landfill expansion project is complete.

Solid Waste Diversion Programs

There are 51 solid waste diversion programs in unincorporated Los Angeles County (data are not available for specific unincorporated communities). Programs include composting, facility recovery (such as transfer stations described above); household hazardous waste collection and education programs; recycling; source reduction programs, including business waste reduction programs; special waste materials such as tires, concrete, asphalt, and rubble; and waste-to-energy (CalRecycle 2016).

Existing Solid Waste Generation

Existing solid waste generation onsite is estimated to be approximately 33,121 pounds per day (16.6 tons), as shown in Table 5.14-9.

Table 5.14-9 Existing Solid Waste Generation Onsite

Land Use	Unit/SF	Quantity	Solid Waste Generation, pounds per day	
			Per Unit/SF	Total
Residential	Unit	3,457	7[1]	24,199
Nonresidential	SF	1,784,409	0.005[2]	8,922
Total				33,121

Source: CalRecycle 2017.
[1] The solid waste generation rate for Residential use was calculated using an average of single-family residential (10 ppd per unit) and multifamily residential (4 ppd per unit).
[2] The solid waste generation rate for Nonresidential use was calculated using the rate for Commercial use (0.005 ppd per square foot).

5.14.4.2 THRESHOLDS OF SIGNIFICANCE

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, a project would normally have a significant effect on the environment if the project:

U-6 Would be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.

U-7 Would not comply with federal, state, and local statutes and regulations related to solid waste.

5.14.4.3 PLANS, PROGRAMS, AND POLICIES

Regulatory Requirements

RR USS-3 The project will be constructed in accordance with the County's Green Building Standards Code and Construction and Demolition Debris Recycling and Reuse Ordinance, which requires a minimum of 65 percent of the nonhazardous construction and demolition debris (by weight or volume) to be recycled or reused unless a lower percentage is approved by the Director of Public Works.

RR USS-4 The project will be designed, constructed, and operated in accordance with the County's Departmental Recycling Program Directives to implement waste reduction and recycling measures.

5.14.4.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.14-4: Existing landfills and resource recovery facilities would be able to accommodate project-generated solid waste and comply with related solid waste regulations. [Thresholds U-6 and U-7]

Impact Analysis: Buildout of the Specific Plan would allow development of up to 1,061 additional residences and 1,690,638 additional square feet of nonresidential uses. Similar to existing conditions, solid waste generated by development in accordance with the proposed project would be collected by Consolidated Disposal Service and be brought to the following landfills—Chiquita Canyon Landfill in Castaic, Commerce Refuse-to-Energy Facility in Commerce, Southeast Resource Recovery Facility in Long Beach, and Sunshine Canyon City/County Landfill in Sylmar. Overall, buildout of the Specific Plan would generate approximately 11,568 additional pounds of solid waste per day (or 5.8 tons per day), as detailed in Table 5.14-10.

Table 5.14-10 Project-Generated Solid Waste

Land Use	Project Buildout		Generation Rates (ppd)		Project Generated Waste (ppd)
	Units	Square Feet	Per Unit	Per Square Feet	
Single Family Residence	1,278	—	10	—	12,780
Two Family Residence	1,432	—	4	—	5,728
Residential Planned Development	67	—	4	—	268
Limited Multiple Residence	478	—	4	—	1,912
Mixed Use 1	536	574,580	4	0.005	5,017
Mixed Use 2	559	1,217,935	4	0.005	8,326
Neighborhood Commercial	—	164,363	—	0.005	822
Public/Institutional	—	786,925	—	0.007	5,508
Civic Center	168	731,244	4	0.005	4,328
Buffer Strip	—	—	—	—	0
Total Solid Waste Generation					44,689
Existing Solid Waste Generation Onsite					-33,121
Net Solid Waste Generation					11,568

Source: CalRecycle 2017.
ppd = pounds per day

As detailed in Table 5.14-6, the four landfills/recovery facilities serving the project site have a combined daily residual capacity of 8,368 tons per day and a total permitted remaining capacity of 73,369,118 tons. Thus, the project's additional 5.8 tons of solid waste per day would be adequately served by the four landfills/recovery facilities. In addition, if the Chiquita Canyon Landfill expansion project is approved by the County in 2017, the daily disposal limits of the landfill would increase from 6,000 tons per day to 12,000 tons per day; thus, providing more residual capacity to accommodate the project-generated solid waste.

Further, future projects developed in accordance with the Specific Plan would be required to comply with RR USS-3 and USS-4. RR USS-3 requires compliance with the County's Green Building Standards Code and Construction and Demolition Debris Recycling and Reuse Ordinance, which requires a minimum of 65 percent of nonhazardous construction and demolition debris to be recycled or reused. RR USS-4 requires projects to be designed, constructed, and operated in accordance with the County's Departmental Recycling Program Directives related to waste reduction and recycling.

Level of Significance before Mitigation: With implementation of regulatory requirement RR USS-3 and RR USS-4, Impact 5.14-4 would be less than significant.

5.14.4.5 CUMULATIVE IMPACTS

The area for which cumulative solid waste disposal impacts are considered is the County of Los Angeles. The estimated Countywide increase in solid waste disposal between 2015 and 2040 is shown in Table 5.14-11 and is based on the California Department of Finance 2015 households estimate; US Census Bureau 2011 employment estimate; SCAG projections for 2035 based on County general plan buildout projections; and solid waste generation rates from the California Department of Resource Recovery and Recycling.

Table 5.14-11 County of Los Angeles, Estimated Net Increase in Solid Waste Generation

	2016 [2014]	2040	Net Increase	Solid Waste Generation in Pounds per Day	
				Per unit	Total
Households	3,308,022	3,946,600	705,396	7.7 pound/unit/day[1]	5,431,549
Employment	[3,868,109]	5,226,000	1,357,891	6.1 pound/employee/day[2]	8,283,135
				Total	13,714,684

Sources: SCAG 2016; U.S. Census 2016; CalRecycle 2017.
[1] The waste generation factor used here is the average of the rates for single-family and multi-family units (10 pounds/unit/day and 5.3 pounds/unit/day, respectively).
[2] The generation factor is for general commercial use; and is the median of three generation factors for general commercial use listed on the California Department of Resource Recycling and Recovery's website.

As shown in the table, the estimated net increase in solid waste disposal from the County of Los Angeles is approximately 13.7 million pounds per day, or about 6,857 tons per day. As shown in Table 5.14-6, the two landfills and two recovery facilities accepting the vast majority of solid waste from just the West Athens-Westmont community have a combined residual capacity of approximately 8,368 tons per day. Other landfills serving the County would receive solid waste generated by cumulative projects depending on where those projects are located. According to the Countywide Integrated Waste Management Plan 2015 Annual Report, the County has an estimated remaining disposal capacity of 114 million tons across all 10 landfills, which does not include the remaining capacities of the two recovery facilities in Commerce and Long Beach (DPW 2017b).Therefore, the estimated net increase in solid waste generation would not require the construction of new or expanded landfills. Cumulative impacts would be less than significant, and impacts of the proposed project on solid waste disposal capacity would not be cumulatively considerable.

5.14.4.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.14-4.

5.14.4.7 MITIGATION MEASURES

No mitigation measures would be required.

5.14.4.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.14.5 Other Utilities

5.14.5.1 ENVIRONMENTAL SETTING

Relevant Programs and Regulations

California Energy Commission

The California Energy Commission (CEC) was created in 1974 as the state's principal energy planning organization in order to meet the energy challenges facing the state in response to the 1973 oil embargo. The CEC is charged with six basic responsibilities when designing state energy policy:

- Forecast statewide electricity needs.
- License power plants to meet those needs.
- Promote energy conservation and efficiency measures.
- Develop renewable energy resources and alternative energy technologies.
- Promote research, development and demonstration.
- Plan for and direct the state's response to energy emergencies.

Title 24, California Code of Regulations, Part 6: Energy Efficiency Standards for Buildings

Title 24 was first established in 1978 in response to a legislative mandate to reduce California's energy consumption. Since that time, Title 24 has been updated periodically to allow for consideration and possible incorporation of new energy-efficiency technologies and methods.

All new construction in California is subject to the energy conservation standards in Title 24, Part 6, Article 2 of the California Administrative Code. These are prescriptive standards that establish maximum energy consumption levels for the heating and cooling of new buildings. The use of alternative energy applications in development projects, while encouraged, is not required as a development condition. Such applications may include installation of photovoltaic solar panels, active solar water heating systems, or integrated pool deck water heating systems, all of which serve to displace consumption of conventional energy sources. Incentives are primarily state and federal tax credits, as well as reduced energy bills.

Title 20, California Code of Regulations, Sections 1601 et seq.: Appliance Efficiency Regulations

The 2012 Appliance Efficiency Regulations took effect on February 13, 2013. The regulations include standards for both federally and nonfederally regulated appliances.

Electric Utility Industry Restructuring Act: Assembly Bill 1890 (1996)

The California Public Utilities Commission regulates investor-owned electric power and natural gas utility companies in the State of California. AB 1890, enacted in 1996, deregulated the power generation industry, allowing customers to purchase electricity on the open market. Under deregulation, the production and distribution of power that were under the control of investor-owned utilities (e.g., Southern California Edison) were decoupled.

Existing Conditions

Electricity

The Specific Plan area is in the service area of Southern California Edison (SCE). Total electricity consumption in SCE's service area was 99,243 gigawatt-hours (gWh) per year in 2013 and is forecast to increase to 113,612 gWh in 2024 (CEC 2014). For reference, one gWh is equivalent to one million kilowatt-hours. Sources of electricity sold by SCE in 2013, the latest year for which data are available, were:

- 24 percent renewable, consisting mostly of geothermal and wind
- 3 percent large hydroelectric

- 27 percent natural gas
- 6 percent nuclear
- 40 percent unspecified sources, that is, not traceable to specific sources (SCE 2015)

Based on CalEEMod modeling, the existing uses in the Specific Plan area utilize approximately 45,044,220 kilowatt-hours (kWh) per year.

Natural Gas

The Southern California Gas Company (SCGC) provides natural gas to the Specific Plan area. SCGC's service area spans much of the southern half of California, from Imperial County on the southeast to San Luis Obispo County on the northwest, to part of Fresno County on the north, to Riverside County and most of San Bernardino County on the east. Total natural gas supplies available to SCGC are forecast to remain constant at 3,875 million cubic feet per day (MMCF/day) from 2015 through 2035. Total natural gas consumption in SCGC's service area is forecast to decline slightly from 2,681 MMCF/day in 2016 to 2,382 MMCF/day in 2035 (CGEU 2016).

Based on CalEEMod modeling, the existing uses in the Specific Plan area utilize approximately 80,827,576 thousand British thermal units (kBTU) per year.

5.14.5.2 THRESHOLDS OF SIGNIFICANCE

In accordance with Appendix G of the CEQA Guidelines and the County of Los Angeles Environmental Checklist Form, a project would normally have a significant effect on the environment if the project:

U-5 Create energy utility (electricity, natural gas, propane) system capacity problems, or result in the construction of new energy facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

5.14.5.3 PLANS, PROGRAMS, AND POLICIES

Regulatory Requirements

RR GHG-1 New buildings are required to achieve the current California Building Energy and Efficiency Standards (Title 24, Part 6) and California Green Building Standards Code (CALGreen) (Title 24, Part 11). The 2016 Building and Energy Efficiency Standards are effective starting on January 1, 2017. The Building Energy and Efficiency Standards and CALGreen are updated tri-annually with a goal to achieve net zero energy (NZE) for residential buildings by 2020 and non-residential buildings by 2030. The County's green building standards which implement and exceed CALGreen are identified County Code, Title 31. The County has adopted the Voluntary Tier 1 standards for non-residential construction greater than or equal to 25,000 square feet (Section 301.3.1, Buildings greater than or equal to 25,000 square

feet).[2] Newly constructed high-rise residential buildings of seven stories or greater are also required to comply with Section 301.3, which requires implementation of the Voluntary Tier 1 standards. Newly constructed low-rise and high-rise residential buildings (six stories or less) are only required to comply with the mandatory measures of CALGreen.

RR GHG-2 New buildings are required to adhere to the California Green Building Standards Code (CALGreen) requirement to provide bicycle parking for new non-residential buildings, or meet local bicycle parking ordinances, whichever is stricter (CALGreen Sections 5.106.4.1, 14.106.4.1, and 5.106.4.1.2). Non-residential construction would be required to provide anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for five percent of new visitor motorized vehicle parking spaces being added. For employee, long-term secured bicycle parking is required to be provided for five percent of the tenant-occupied (i.e., staff) motorized vehicle parking spaces being added. The proposed project is also required to designate parking for low-emitting, fuel-efficient, and carpool/vanpool spaces identified in CALGreen. Non-residential buildings of 25,000 square feet or more also requires compliance with the Tier 1 voluntary measures in section A5.601.2.4, which require low-emitting, fuel-efficient, and carpool/vanpool spaces for 10 percent of the total parking capacity.

RR GHG-3 New buildings are required to adhere to the California Green Building Standards Code (CALGreen) and Water Efficient Landscape Ordinance requirements integrated into the County Code to increase water efficiency and reduce urban per capita water demand. The County's green building standards are identified County Code, Title 31. Non-residential structures and residential structures seven stories and higher are also required to comply with Section 301.3.1, *Nonresidential Buildings greater than or equal to 25,000 square feet*, which requires implementation of the Tier 1 voluntary standards (30 percent reduction) for indoor potable water use and 60 percent of Reference evapotranspiration (ETo) for outdoor potable water use; Section 5.106.4, *Low Impact Development*; and Section 4.106.5, *Landscape Design*, which requires use of non-invasive, drought-tolerant plants. Title 31 requires project designs and practices that will result in the conservation of water and energy resources, such as measures for building commissioning, clean vehicle parking, and solid waste recycling.

Project Design Features

- Buildings and development projects within the Specific Plan area shall be designed and constructed using sustainable, energy efficient materials and incorporate strategies for the conservation of water, energy, and other natural resources.

- White or green roofs shall be used as much as possible, while the use of pavement, asphalt, and other heat producing surfaces should be minimized to reduce the heat island effect.

[2] With the exception that high-rise non-residential construction would be subject to the mandatory (Table A4.106.5.1(3)), rather than the Tier 1 voluntary, measures for solar reflectance in Table A5.106.11.2.2.

- Building and development projects shall be more energy efficient than required by local and state codes.
- Energy-efficient natural lighting shall be used in buildings and new developments. Maximize daylighting and views through window placement and design.

5.14.5.4 ENVIRONMENTAL IMPACTS

The following impact analysis addresses thresholds of significance for which the Notice of Preparation disclosed potentially significant impacts. The applicable thresholds are identified in brackets after the impact statement.

Impact 5.14-5: Existing electricity and natural gas facilities would be able to accommodate project-generated utility demands. [Threshold U-5]

Impact Analysis: Electricity and natural gas demand of the proposed project would be adequately accommodated by SCE and SCGC. Estimated electricity and natural gas demand were calculated using CalEEMod version 2013.2.2.

Electricity

Buildout of the proposed project is estimated to generate an electricity demand of approximately 70,763,450 kwH per year. Compared to existing electricity usage of 45,044,220 kwH per year in the Specific Plan area, the net increase in electricity usage would be 25,719,230 kwH per year. SCE forecasts that it would have adequate electricity to meet the expected growth in its service area through 2022. Using SCE's anticipated consumption in 2022 in a high-demand consumption scenario (most conservative), electricity demand is expected to be 116,637 gigawatt hours per year (CEC 2014). Therefore, electricity use at full buildout of the proposed project would represent only 0.061 percent of SCE's overall demand in 2022. Thus, projected electrical demand would not significantly impact SCE's level of service and would not require SCE to obtain additional electricity supplies.

Further, redevelopment of older residences and nonresidential buildings in accordance with the Specific Plan would require the new buildings be constructed in compliance with current building code requirements, which have more stringent energy conservation regulations (i.e., CALGreen) than in the past.

Natural Gas

Project buildout would generate an estimated natural gas demand of 107,657,397 kBTU per year. Compared to existing natural gas demand of 80,827,576 kBTU per year in the Specific Plan area, the net increase in natural gas demand would be approximately 26,829,821 kBTU per year. Total natural gas supplies available to SCGC are forecast to remain constant at 1,414,375 billion BTU per year from 2015 through 2035 (CGEU 2016). The natural gas demand from the proposed project would represent a nominal percentage of overall demand in SCGC's service area.

Conclusion

Overall, SCE and SCGC facilities that currently provide electricity and natural gas to the Specific Plan area can also serve the proposed project. Additional connections to SCE and SCGC facilities can be provided, if necessary, once utility plans are finalized for the proposed project. Overall, energy demand impacts of the proposed project would be less than significant and would not result in inefficient, wasteful, or unnecessary electricity and natural gas consumption.

Level of Significance before Mitigation: Based on the analysis above, Impact 5.14-5 would be less than significant.

5.14.5.5 CUMULATIVE IMPACTS

The areas considered for cumulative impacts are SCE's and SCGC's service areas. Total forecast consumption of electricity and natural gas in the respective utilities' service areas, and total forecast natural gas supplies, are addressed above in Section 5.13.5.1. The two utilities forecast that they will have sufficient supplies to meet demands in their service areas through 2024 (for electricity) and 2035 (for natural gas).

In addition to provisions of CALGreen mentioned above, future cumulative projects would also be required to comply with additional regulations related to energy efficiency, including the Corporate Average Fuel Economy Standards; the Renewable Fuel Standard; Renewable Portfolios Standard; Appliance Efficiency Regulations; and the California Energy Commission's 2016 Building and Energy Efficiency Standards. No significant cumulative impact would occur, and project impacts would not be cumulatively considerable.

5.14.5.6 LEVEL OF SIGNIFICANCE BEFORE MITIGATION

Upon implementation of regulatory requirements and standard conditions of approval, the following impacts would be less than significant: 5.14-5.

5.14.5.7 MITIGATION MEASURES

No mitigation measures are required.

5.14.5.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts would be less than significant.

5.14.6 References

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6. Significant Unavoidable Adverse Impacts

At the end of Chapter 1, *Executive Summary*, is a table that summarizes the impacts, mitigation measures, and levels of significance before and after mitigation. Mitigation measures would reduce the level of impact, but the following impacts would remain significant, unavoidable, and adverse after mitigation measures are applied.

Air Quality

- **Impact 5.2-1:** The proposed project would be inconsistent with the South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP) because criteria air pollutant emissions associated with the Specific Plan would exceed the SCAQMD regional significance threshold.

  The Specific Plan policies and Regulatory Requirements RR AIR-1 through RR-AIR-4 would minimize criteria air pollutant emissions from construction and operation of the proposed project. Mitigation measures applied for Impact 5.2-2 and Impact 5.2-3 would reduce the proposed project's regional construction-related and operational-phase criteria air pollutant emissions to the extent feasible. However, due to the increase in criteria air pollutant emissions, the proposed project would continue to be inconsistent with the assumptions in the AQMP. Therefore, Impact 5.2-1 would remain ***significant and unavoidable***.

- **Impact 5.2-2:** Construction activities associated with buildout of the Specific Plan could exceed SCAQMD's regional significance thresholds.

  Criteria air pollutant emissions in exceedance of SCAQMD's regional significance thresholds would contribute to the nonattainment designations of the South Coast Air Basin (SoCAB), and contribute to known health effects from poor air quality—including worsening of bronchitis, asthma, and emphysema; a decrease in lung function; premature death of people with heart or lung disease; nonfatal heart attacks; irregular heartbeat; decreased lung function; and increased respiratory symptoms. Regulatory Requirement RR AIR-3 and RR AIR-4 would minimize criteria air pollutant emissions from construction equipment exhaust and fugitive dust through compliance with the California Air Resources Board (CARB) and SCAQMD rules. Mitigation Measure AQ-1 would reduce criteria air pollutants generated from project-related construction activities. Buildout of the proposed project would occur over a long period, and construction time frames and equipment for individual site-specific projects are not available at this time. There is a potential for multiple developments to be constructed at any one time, resulting in significant construction-related emissions. Therefore, despite adherence to Mitigation Measure AQ-1, project-level and cumulative impacts under Impact 5.2-2 would remain ***significant and unavoidable***.

6. Significant Unavoidable Adverse Impacts

- **Impact 5.2-3:** Implementation of the Connect Southwest LA project would generate long-term emissions that would exceed SCAQMD's regional significance thresholds.

  Buildout of the proposed land use plan would generate additional vehicle trips and area sources of criteria air pollutant emissions that exceed SCAQMD's regional significance thresholds and would contribute to the nonattainment designations of the SoCAB and known health effects from poor air quality. Regulatory Requirements RR AIR-1 through RR AIR-2 would minimize criteria air pollutant emissions from transportation and energy use by requiring mandatory measures of CALGreen (i.e., providing bicycle parking, fuel-efficient, and carpool/vanpool parking spaces) as well as additional voluntary green building standards of CALGreen for nonresidential buildings 25,000 square feet and larger. Incorporation of Mitigation Measures AQ-2 through AQ-4 would reduce operation-related criteria air pollutants generated from stationary and mobile sources. Mitigation Measures AQ-3 and AQ-4 would encourage and accommodate use of alternative-fueled vehicles. However, despite adherence to Mitigation Measures AQ-2 through AQ-4, project-level and cumulative impacts identified under Impact 5.2-3 would remain ***significant and unavoidable*** due to the magnitude of land use development associated with the proposed project.

- **Impact 5.2-4:** Construction of the proposed project could expose sensitive receptors to substantial pollutant concentrations.

  Regulatory Requirements RR AIR-3 through RR AIR-4 would minimize criteria air pollutant emissions from construction equipment exhaust and fugitive dust through compliance with CARB and SCAQMD rules. Mitigation Measure AQ-1 (applied for Impact 5.2-2) would reduce the proposed project's regional construction emissions and therefore reduce the project's localized construction-related criteria air pollutant emissions to the extent feasible. However, because existing sensitive receptors may be close to project-related construction activities, construction emissions generated by individual development projects have the potential to exceed SCAQMD's localized significance thresholds. Mitigation Measure AQ-5 requires preparation of a construction air quality analysis for discretionary projects subject to CEQA if they are within 25 meters of a sensitive use. However, because of the scale of development activity associated with buildout of the Specific Plan, it is not possible to determine whether the scale and phasing of individual development projects would result in the exceedance of the localized emissions thresholds and contribute to known health effects. Therefore, project-level and cumulative impacts under Impact 5.2-4 would remain ***significant and unavoidable***.

Noise

- **Impact 5.8-1:** Construction activities would result in temporary noise increases in the vicinity of the project.

  Mitigation Measure N-1 would require a project-level construction noise analysis for all projects within 500 feet of noise-sensitive receptors, and require implementation of noise-minimizing best management practices. This mitigation measure would reduce construction noise impacts associated with the proposed

project to the extent feasible. However, feasible mitigation may not be effective at reducing construction-generated noise received at sensitive receptors to levels below the County Code thresholds throughout all periods of construction and at all receptors. Given the expected noise levels and the length of the construction activities, significant construction noise impacts would remain. Impact 5.8-1 would remain ***significant and unavoidable***.

Transportation and Traffic

- **Impact 5.12-1:** The proposed project is anticipated to create significant traffic impacts at 10 of the study intersections in the Existing Year (2017) With Project Scenario and at 21 study intersections for the Future Year (2035) With Project scenario.

  Mitigation Measures T-1 through T-5 would require various improvements at study area intersections to mitigate project impacts. These include, but are not limited to, adding turn lanes, widening lanes, restriping lanes, expanding the Automated Traffic Surveillance and Control network, and improving traffic signal lights.

  Improvements to seven of the roadway intersections would require the acquisition of right-of-way—Century Boulevard at Van Ness Avenue, Imperial Highway at Crenshaw Boulevard, Imperial Highway at Western Avenue, Imperial Highway at Normandie Avenue, El Segundo at Crenshaw Boulevard, El Segundo Boulevard at Normandie Avenue, and Rosecrans Avenue at Crenshaw Boulevard. Right-of-way acquisition at these intersections is believed to be infeasible due to existing development of adjacent land. Therefore, project impacts to these seven roadway intersections are determined to be ***significant and unavoidable***.

  Additionally, since the primary responsibility for approving and/or completing certain improvements outside of the Specific Plan area lies with agencies other than the County of Los Angeles (i.e., cities of Los Angeles, Inglewood, and Hawthorne), significant impacts may not be fully mitigated if the improvements are not completed for reasons beyond the County's control. (The County cannot undertake or require improvements outside of the County's jurisdiction.) Therefore, project impacts to intersections in the cities of Los Angeles, Inglewood, and Hawthorne are determined to be ***significant and unavoidable***.

- **Impact 5.12-3:** The proposed project is anticipated to create significant traffic impacts at five freeway main-line study locations in the Existing Year (2017) and Future Year (2035) With Project scenarios.

  State highway facilities in the study area are not in the jurisdiction of the County. Rather, improvements to state highways are planned, funded, and constructed through a legislative and political process involving the state legislature; the California Transportation Commission; the California Business, Transportation, and Housing Agency; and Caltrans.

  Although potential impacts to the freeway main-line segments and ramps have been evaluated, implementation of improvements to Caltrans facilities is the primary responsibility of Caltrans. Caltrans recognizes that private development may fund fair-share improvements to impacts on the I-105 and I-110, but neither Caltrans nor the state has adopted a program that can ensure that locally contributed

impact fees will be tied to improvements to freeway main lines, and only Caltrans has jurisdiction over main-line improvements. However, a number of programs are in place in Los Angeles County to improve and upgrade the regional transportation system—State Transportation Improvement Program, Caltrans Traffic Operations Strategies, State Highway Operation and Protection Program, and Metro's Measure M program. State and federal fuel taxes generate most of the funds used to pay for these programs. Funds expected to be available for transportation improvements are identified through a fund estimate prepared by Caltrans and adopted by the California Transportation Commission. These and other funds are deposited in the State Highway Account and allocated by the California Transportation Commission to specific project improvements in both the State Transportation Improvement Program and State Highway Operation and Protection Program. However, if these programs are not implemented by the agencies responsible for them, the project's freeway ramp and main-line impacts would remain ***significant and unavoidable***.

7. Alternatives to the Proposed Project

7.1 INTRODUCTION

7.1.1 Purpose and Scope

The California Environmental Quality Act (CEQA) requires that an environmental impact report (EIR) include a discussion of reasonable project alternatives that would "feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any significant effects of the project, and evaluate the comparative merits of the alternatives" (CEQA Guidelines § 15126.6[a]). As required by CEQA, this chapter identifies and evaluates potential alternatives to the proposed project.

Section 15126.6 of the CEQA Guidelines explains the foundation and legal requirements for the alternatives analysis in an EIR. Key provisions are:

- "[T]he discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." (15126.6[b])

- "The specific alternative of 'no project' shall also be evaluated along with its impact." (15126.6[e][1])

- "The no project analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." (15126.6[e][2])

- "The range of alternatives required in an EIR is governed by a 'rule of reason' that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project." (15126.6[f])

- "Among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries…, and whether the proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)." (15126.6[f][1])

- "Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR." (15126.6[f][2][A])

- "An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative." (15126.6[f][3])

For each development alternative, this analysis:

- Describes the alterative.
- Analyzes the impact of the alternative as compared to the proposed project.
- Identifies the impacts of the project that would be avoided or lessened by the alternative.
- Assesses whether the alternative would meet most of the basic project objectives.
- Evaluates the comparative merits of the alternative and the project.

According to Section 15126.6(d) of the CEQA Guidelines, "[i]f an alternative would cause…significant effects in addition those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed."

7.1.2 Project Objectives

As described in Section 3.2, the following project objectives have been established for Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont and will aid decision makers in their review of the project, the project alternatives, and associated environmental impacts:

- Objective 1: Promote uses in proximity to the transit station, along major streets, and at significant intersections that benefit from the economic opportunities afforded by the presence of the Green Line and major educational and public facilities.

- Objective 2: Develop opportunities, particularly at the Vermont Green Line Station and Los Angeles Southwest College that offer housing, shopping, and healthy food options for residents and visitors.

- Objective 3: Improve the public right-of-way to increase mobility options for pedestrians and bicyclists. New sidewalks and bike facilities should create safe and secure connections to destinations that are integrated into the transit system.

- Objective 4: Enhance public safety and reduce criminal activity through design and programmatic improvements.

- Objective 5: Promote new development that respects and responds to the existing scale and density of adjacent neighborhoods by accommodating growth near the station area and commercial nodes.

- Objective 6: Improve the Vermont/Athens Green Line Station to make it more inviting, comfortable, and safe to transit users.

- Objective 7: Reduce vehicle miles traveled per capita within the project area to be consistent with the Assembly Bill 32 and Senate Bill 375 goals.

7.2 ALTERNATIVES CONSIDERED AND REJECTED DURING THE SCOPING/PROJECT PLANNING PROCESS

The following is a discussion of the land use alternatives considered during the scoping and planning process and the reasons why they were not selected for detailed analysis in this EIR.

7.2.1 Alternative Development Areas

CEQA requires that the discussion of alternatives focus on alternatives to the project or its location that are capable of avoiding or substantially lessening any significant effects of the project. The key question and first step in the analysis is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR (CEQA Guidelines § 15126[5][B][1]). In general, any development of the size and type proposed by the project would have substantially the same impacts on air quality, greenhouse gas emissions, land use and planning, noise, population and housing, public services, recreation, transportation and traffic, and utilities and service systems. Without a site-specific analysis, impacts on aesthetics, agriculture and forestry resources, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, and tribal cultural resources cannot be evaluated. However, most of these impacts were also found to be less than significant in this DEIR. Therefore, another location would not avoid or substantially lessen the effects of the proposed project.

As part of the County of Los Angeles General Plan Update, the County identified 11 transit-oriented districts (TODs) for future specific plan development in order to address each community's needs and priorities with regard to land use, mobility, housing, infrastructure, open space, and market conditions. Each of the TOD specific plans offers opportunities to leverage the community's assets, connect uses and activities, and attract future investment to create more engaging and vibrant places. The proposed Specific Plan area is one of the 11 TODs identified in the County of Los Angeles General Plan.

The proposed project area has all the elements that make for a successful TOD. The major transit station in the area is Metro's Green Line Vermont/Athens Station, which connects to a community served by bus and shuttle service. The Los Angeles Southwest College is also located in the project area, which is completing significant renovations and attracts faculty and student commuters to the area. The County also has major facilities that serve the area, including the recently built Los Angeles County Sheriff's Department South Los Angeles Station and nearby county offices and service center. Further, the area includes diverse neighborhoods with single- and multifamily family residential areas and active commercial corridors within close range of job centers, amenities, and attractions in the region.

The overall purpose of the Connect Southwest LA project is to provide comprehensive direction for the development in the Specific Plan area and identify ways to expand opportunities for compact development

around the Metro Green Line Vermont/Athens station while being sensitive to the existing development character today. The plan facilitates increased housing opportunities and employment-generating uses in the station area to take advantage of the significant local and regional transit services already provided in the vicinity. The Specific Plan also lays the foundation to create a more walkable, transit-oriented area with a mix of land uses that is accessible by all modes of transportation, including transit, walking, and bicycling. Therefore, developing the project in another area of the County would not achieve the County's primary goal of creating and expanding TOD opportunities near the Vermont/Athens station.

Further, buildout of the proposed project would allow up to 4,518 dwelling units and 3,475,047 square feet of nonresidential uses within the project site. No other transit corridors within the Community of West Athens-Westmont would be able to accommodate this proposed growth while achieving the proposed project's guiding principles, detailed in Section 7.1.2, *Guiding Principles*. TOD specific plans for other priority policy areas identified in the County General Plan Update are also being prepared or will be prepared in the future by the County (e.g., West Carson, Willowbrook, Del Aire, Lennox, and Sawtelle). Therefore, no other sites were considered for further alternatives analysis.

7.3 ALTERNATIVES SELECTED FOR FURTHER ANALYSIS

Based on the criteria listed above, the following three alternatives have been determined to represent a reasonable range of alternatives which have the potential to feasibly attain most of the basic objectives of the project but which may avoid or substantially lessen any of the significant effects of the project. These alternatives are analyzed in detail in the following sections.

- No Project/Existing General Plan Alternative
- Reduced Intensity Alternative
- Alternative Land Use Plan

An EIR must identify an "environmentally superior" alternative, and where the No Project Alternative is identified as environmentally superior, the EIR is required to identify as environmentally superior an alternative from among the others evaluated. Each alternative's environmental impacts are compared to the proposed project and determined to be environmentally superior, neutral, or inferior (<, =, >). Impacts found to be potentially significant before mitigation and significant and unavoidable are used in making the final determination of whether an alternative is environmentally superior or inferior to the proposed project. Section 7.7 identifies the environmentally superior alternative.

7.3.1 Alternatives Comparison

The following statistical analysis provides a summary of general socioeconomic buildout projections determined by the four land use alternatives, including the proposed project. The following statistics were developed as a tool to better understand the difference between the alternatives analyzed in the DEIR. Table 7-1 identifies information regarding dwelling unit, population, and employment projections and provides the jobs-to-housing ratio for each of the alternatives.

Table 7-1 Buildout Statistical Summary

	Proposed Project	No Project/Existing General Plan Alternative	Reduced Intensity Alternative	Alternative Land Use Plan
Dwelling Units	4,518 (1,278 SFR; 3,240 MFR)	3,457 (1,448 SFR; 2,009 MFR)	3,614 (1,022 SFR; 2,592 MFR)	5,873 (1,661 SFR; 4,212 MFR)
Population[1]	14,362	14,377	11,125	18,078
Nonresidential SF	3,475,047	1,784,409	2,453,533[2]	2,453,533[2]
Employment	5,214	2,265	3,681	3,681
Jobs-to-Housing Ratio	1.15	0.66	1.02	1.16

Notes: SFR = single-family residences; MFR = multifamily residences

[1] Population projections are based on an occupancy rate of 98.6% and 3.46 persons per household (PPH) for SFR and an occupancy rate of 96.3% and 3.06 PPH for MFR. The No Project/Existing General Plan Alternative would increase population because more single-family residences are proposed than multifamily residences when compared to the proposed project.

[2] Total nonresidential SF by land use for the Reduced Intensity Alternative and Alternative Land Use Plan consists of 402,206 SF Mixed Use 1; 852,555 SF Mixed Use 2; 115,054 SF Neighborhood Commercial; 550,848 SF Public/Institutional; and 511,871 SF Civic Center.

7.3.2 NO PROJECT/EXISTING GENERAL PLAN ALTERNATIVE

The No Project/Existing General Plan Alternative assumes that Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont would not be adopted and the current General Plan designations of the project area would remain. Pursuant to CEQA Guidelines Section 15126.6(e)(3)(A), where a project is the revision of an existing regulatory plan, the "no project" alternative assumes continuation into the future of the existing plan, policy, or operation. Therefore, this alternative assumes the following land use designations from the West Athens-Westmont Community Plan, adopted in 1990 and amended in 2003 (see Figure 4-2, *Community Plan Land Uses*):

- Single-Family Residence (RD 2.3; 1 to 8 dwelling units per acre [du/ac]); 183 acres
- Two Family Residence (RD 3.1; 8 to 17 du/ac); 91 acres
- Medium Density Bonus (RD 3.2; 17 to 30 du/ac); 8 acres
- Senior Citizen-Density Bonus (SCD; 30 to 50 du/ac); 4 acres
- Regional Commercial (C.1); 21 acres
- Community Commercial (C.2); 36 acres
- Recreation/Open Space (OS.1); 1.6 acres
- Public/Quasi-Public Use (PL.1); 99 acres
- Transportation Corridor (TC); 25 acres

However, based on 2010 Census data, the population index for all of West Athens and Westmont showed a negative population trend (USA 2014a, 2014b). Therefore, it is assumed development in accordance with the existing General Plan would result in no new development or growth. Table 7-1 reflects existing conditions for the No Project/Existing General Plan Alternative.

7. Alternatives to the Proposed Project

7.3.2.1 AESTHETICS

Under the No Project/Existing General Plan Alternative, no new development would occur within the Specific Plan area. Therefore, the existing visual character and resources would remain as is. However, the aesthetic improvements to the project area would not occur under this alternative—such as implementation of the proposed design guidelines and development standards for new projects; installation of new pedestrian, bicyclist, and transit user amenities and features; and mobility network improvements. Additionally, the proposed project's impacts to aesthetics and visual resources were determined to be less than significant. No favorable impacts to aesthetics would occur under this alternative, and impacts under this alternative would be greater compared to the proposed project but remain less than significant.

7.3.2.2 AIR QUALITY

This alternative would be consistent with the South Coast Air Quality Management District's (SCAQMD) air quality management plan (AQMP) because population and employment assumptions used to develop the regional emissions inventory in the latest AQMP are based on the current General Plan. Additionally, because no growth is anticipated, this alternative would not increase construction or operational source emissions and criteria air pollutants and would not exceed SCAQMD's regional significance thresholds. Overall, air quality impacts would be reduced under this alternative, no mitigation measures would be required, and the significant and unavoidable impacts related to AQMP consistency and construction and operational emissions would be eliminated.

7.3.2.3 CULTURAL RESOURCES

No growth is anticipated under this alternative; thus, no construction or grading activities are anticipated. The potential to uncover previously undiscovered cultural resources through grading activities would not occur. Compared to the proposed project, impacts would be reduced and no mitigation measures would be required.

7.3.2.4 GREENHOUSE GAS EMISSIONS

This alternative would generate 99,673 metric tons of CO_2 equivalent per year ($MTCO_2e$/year) or 7.93 $MTCO_2e$ per service population (SP) per year compared to the proposed project, which would generate 102,600 $MTCO_2e$/year or 5.25 $MTCO_2e$ per SP per year. Although the proposed project would generate more GHG emissions overall, it would reduce GHG emissions per service population when compared to this alternative, resulting in cumulative reductions in GHG emissions. The proposed project would also incorporate transit-oriented development features of the Connect Southwest LA Specific Plan, including pedestrian, bicycle, and transit amenities and public realm and park improvements—these would not be implemented under this alternative. Thus, GHG impacts under this alternative would be greater than under the proposed project, although still less than significant.

7.3.2.5 HAZARDS AND HAZARDOUS MATERIALS

No new residential or nonresidential development would occur under this alternative. Therefore, compared to the proposed project, the potential for impacts related to the transport, use, and/or disposal of hazardous materials would be reduced. Existing buildings would not be demolished, and the potential hazard from the

release of asbestos and lead-based paints would be eliminated. Overall, impacts would be reduced, and no mitigation measures would be required.

7.3.2.6 HYDROLOGY AND WATER QUALITY

Existing water quality conditions, groundwater supplies, drainage patterns, and runoff amounts would remain as is under this alternative since no new development would occur. This alternative would not introduce new sources of water pollutants to the project area (from either construction or operations phases of development projects). However, replacement of old residences and nonresidential buildings with new development in accordance with the Specific Plan would be required to adhere to new hydrology and water quality requirements that are more stringent and result in better water quality and hydrologic conditions. Thus, impacts would be greater under this alternative but remain less than significant.

7.3.2.7 LAND USE AND PLANNING

This alternative would allow development in accordance with the existing West Athens-Westmont Community Plan. The proposed Specific Plan would not be adopted, and no general plan amendment or zone change would be required. However, the beneficial land use impacts of the proposed project would not be implemented—these include preparing a TOD specific plan for the West Athens-Westmont community as proposed in the County's General Plan Update and improving the mobility network in the project area to gain consistency with the Southern California Association of Governments' 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy. The proposed project would also help reduce vehicle miles traveled (VMT) per capita in the project area pursuant to Assembly Bill 32 and Senate Bill 375 goals, which this alternative would not achieve. Thus, impacts to land use and planning would be similar and less than significant under both scenarios.

7.3.2.8 NOISE

No new development is anticipated under the No Project/Existing General Plan Alternative. Therefore, compared to the proposed project, noise impacts associated with construction and operational activities (i.e., traffic and stationary noise sources) would be reduced, and the proposed project's significant and unavoidable construction noise impact would be eliminated.

7.3.2.9 POPULATION AND HOUSING

Under this alternative, no growth would occur. Therefore, population, housing, and employment-generating land uses would remain as is. Population and housing impacts would be reduced compared to the proposed project, but the jobs-housing ratio under this alternative would be much lower (0.66) compared to the proposed project (1.15). The American Planning Association's suggested target for an appropriate jobs-housing ratio is 1.5, with a recommended range of 1.3 to 1.7. Thus, this alternative would have a greater adverse impact on jobs-housing balance in the Specific Plan area. Overall impacts to population and housing would end up being similar and less than significant under both scenarios.

7.3.2.10 PUBLIC SERVICES

Since no new development would occur under this alternative, no impacts would occur to public services. Police, fire, school, and library services would serve the existing population as is, and impacts would be less than significant.

7.3.2.11 RECREATION

No new development would occur under this alternative. Therefore, the population of the Specific Plan area would remain as is, and existing parks and recreational facilities would not be adversely impacted by increased use. Impacts would be reduced compared to the proposed project.

7.3.2.12 TRANSPORTATION AND TRAFFIC

Although no development would occur within the Specific Plan area under this alternative, regional transportation models take into account cumulative growth between 2017 and future years.

The traffic study prepared by IBI Group analyzed Future Year (2035) No Project conditions and determined that the following roadway segments are anticipated to operate at a Level of Service (LOS) E or worse under this condition:

- 21. El Segundo Boulevard between Van Ness Avenue to Western Avenue (AM peak hour)
- 22. El Segundo Boulevard between Normandie Avenue and Vermont Avenue (AM peak hour)

The following roadway intersections are anticipated to operate at an unacceptable LOS:

- 29. 118th & I-105 WB Ramp / Crenshaw (AM peak hour)
- 32. 116th & I-105 EB Ramp / Vermont (AM peak hour)
- 35. 120th/Van Ness Avenue (AM peak hour)
- 42. El Segundo Boulevard and Van Ness Avenue (AM and PM peak hours)
- 46. El Segundo Boulevard and I-110 SB Ramps (AM peak hour)

The following congestion management plan (CMP) monitoring stations are anticipated to operate at an unacceptable LOS (LOS F):

- 2. I-105 at Western Avenue (AM and PM peak hours)
- 6. I-110 at Manchester Avenue (AM and PM peak hours)

The following freeway on-ramp locations are anticipated to experience queues that exceed the measured storage length for left turns:

- 24. I-110 SB On-Ramp at Imperial Highway (AM and PM peak hours)
- 30. I-105 EB On-Ramp at 120th Street (AM and PM peak hours)
- 31. I-105 WB On-Ramp at Vermont Avenue (AM peak hour)
- 32. I-105 EB On-Ramp at Vermont Avenue (AM peak hour)

- 47. I-110 NB On-Ramp at El Segundo Boulevard (PM peak hour)

Additionally, all freeway segments are forecast to operate at an unacceptable level of service (LOS D or worse). However, since this alternative would not add any new trips to the project area, it would eliminate the proposed project's significant and unavoidable traffic impacts to roadway intersections and freeway main lines, and its impacts would be less than significant.

It should be noted, however, that this alternative would have a greater annual VMT per capita (12,571) than the proposed project (9,726) because the project's TOD features, internal capture, and transportation demand management trip reductions would not be implemented under this alternative.

7.3.2.13 TRIBAL CULTURAL RESOURCES

As with cultural resources, no impact would occur to tribal cultural resources since no development would occur under this alternative. Since no grading activities would occur, the potential to uncover or adversely impact known or unknown tribal cultural resources in the project area would be eliminated. Compared to the proposed project, impacts would be reduced and would not need mitigation.

7.3.2.14 UTILITIES AND SERVICE SYSTEMS

Since no growth is anticipated under this alternative, no increase in wastewater generation, water demand, solid waste generation, stormwater runoff, or dry utility demand would occur. As detailed in Section 5.14, *Utilities and Service Systems*, existing wastewater generation of 1,679,602 gallons per day (gpd), water demand of 1,555 acre-feet per year (afy), solid waste generation of 34,905 pounds per day (ppd), electricity use of 45,044,220 kilowatt-hours per year, and natural gas use of 80,827,576 thousand British thermal units per year would remain as is. Compared to the proposed project, impacts to utilities and service systems would be reduced and no mitigation measures would be required.

7.3.2.15 CONCLUSION

Ability to Reduce Environmental Impacts

The No Project/Existing General Plan Alternative would reduce impacts related to air quality, cultural resources, hazards and hazardous materials, noise, public services, recreation, transportation and traffic, tribal cultural resources, and utilities and service systems. Impacts would be similar for land use and planning and population and housing, and impacts would be greater for aesthetics, greenhouse gas emissions, and hydrology and water quality. Significant and unavoidable impacts to air quality, noise, and transportation and traffic would be eliminated.

Ability to Achieve Project Objectives

No growth would occur under this alternative, and the Connect Southwest LA Specific Plan would not be adopted and implemented; thus, none of the project objectives would be achieved. This alternative would not promote uses in proximity to the transit station, along major streets, and at significant intersections (Objective No. 1); develop housing, shopping, and healthy food options near the Vermont Green Line Station and Los Angeles Southwest College (Objective No. 2); provide mobility improvements for pedestrians, bicyclists, and

transit users (Objective No. 3); enhance public safety and reduce criminal activity through design and programmatic improvements (Objective No. 4); promote new and compatible development that respects and responds to the existing scale and density of adjacent neighborhoods (Objective No. 5); improve the Vermont/Athens Green Line Station (Objective No. 6); nor reduce VMT per capita within the project area (Objective No. 7).

7.3.3 REDUCED INTENSITY ALTERNATIVE

The Reduced Density Alternative was evaluated for its potential to reduce the proposed project's significant and unavoidable impacts related to construction and operational air quality, construction noise, and traffic. This alternative would include adopting the proposed Specific Plan and implementing its goals and policies, but would reduce proposed residential and nonresidential development by 20 and 30 percent, respectively, through implementation of a development cap.

As shown in Table 7-1, buildout of the Reduced Intensity Alternative would allow up to 3,614 dwelling units (1,022 single-family residences and 2,592 multifamily residences) and 2,453,533 square feet of nonresidential development. This alternative would introduce approximately 11,125 residents and generate 3,681 jobs, creating a jobs-housing ratio of 1.02.

7.3.3.1 AESTHETICS

Reducing residential and nonresidential development intensity by 20 and 30 percent, respectively, would generally reduce the overall intensity in the Specific Plan area. The Specific Plan would still be adopted under this alternative; therefore, the proposed aesthetic improvements to the project area, including design guidelines related to site design, building design, and the public realm would be implemented. Additionally, street network improvements for vehicles, bicyclists, pedestrians, and transit users would also be implemented to create a safer and more efficient mobility network. Thus, most of the proposed aesthetic improvements would be implemented while reducing residential and nonresidential development intensity. Aesthetic impacts would be reduced and remain less than significant.

7.3.3.2 AIR QUALITY

This alternative would reduce proposed residential and nonresidential development by 20 and 30 percent, respectively, and thus substantially reduce construction and operational air quality emissions. Project-related VMT and associated mobile-source emissions would also be reduced. Despite these reductions in short-term construction and long-term operational emissions, construction and operational emissions would still exceed SCAQMD's regional significance thresholds. Similarly, this alternative would not be consistent with the SCAQMD's AQMP since population and employment assumptions used to develop the regional emissions inventory in the latest AQMP are based on the existing General Plan.

Thus, in comparison to the proposed project, this alternative would reduce construction and operational air quality impacts but would not eliminate the project's significant and unavoidable impacts related to construction and operational emissions.

7.3.3.3 CULTURAL RESOURCES

Reducing the residential and nonresidential development potential within the Specific Plan area by 20 and 30 percent, respectively, would reduce the intensity of development. However, the development footprint of this alternative and the proposed project would be the same. Therefore, the potential to adversely impact previously undiscovered historic, archaeological, and paleontological resources would be similar. Impacts would be similar to the proposed project and less than significant with mitigation.

7.3.3.4 GREENHOUSE GAS EMISSIONS

Under this alternative, residential and nonresidential development would be reduced by 20 and 30 percent, respectively, thereby reducing project-related VMT and associated GHG emissions. GHG emission impacts under the proposed project is already less than significant, thus, impacts would be further reduced and remain less than significant under this alternative.

7.3.3.5 HAZARDS AND HAZARDOUS MATERIALS

Reducing residential and nonresidential development by 20 and 30 percent, respectively, in the project area would reduce impacts related to hazards and hazardous materials. With less development, the routine transport, use, storage, and disposal of hazardous materials and potential for accidental release of hazardous materials would be reduced. It is also probable that fewer existing buildings would be demolished, reducing the potential for release and exposure of asbestos-containing materials and/or lead-based paint. Overall, impacts related to hazards and hazardous materials would be reduced under this alternative and, similar to the proposed project, would be less than significant with mitigation.

7.3.3.6 HYDROLOGY AND WATER QUALITY

Similar to the proposed project, future individual projects in accordance with the Specific Plan would be required to comply with the Construction General Permit and the County's MS4 Permit that require the preparation and implementation of a SWPPP and WQMP. Additionally, since the project area is almost completely built out, the reduced intensity of this alternative would not substantially reduce the amount of impervious surfaces compared to the proposed project, nor would it interfere less with groundwater recharge. Development in accordance with the proposed project and the Reduced Intensity Alternative would have similar impacts to hydrology and water quality, and impacts would be less than significant.

7.3.3.7 LAND USE AND PLANNING

Compared to the proposed project, this alternative would also require a General Plan Amendment and zone change to adopt the proposed Specific Plan. This alternative would also similarly implement the goals and policies of the Specific Plan. Therefore, land use and planning impacts of this alternative would be similar to the proposed project and would be less than significant.

7.3.3.8 NOISE

This alternative would reduce impacts related to construction and operational noise. Reducing residential and nonresidential development potential by 20 and 30 percent, respectively, would proportionally reduce construction activities and associated noise. However, the project's significant and unavoidable construction noise impact would remain since it is difficult to quantify construction noise impacts at site-specific offsite or onsite sensitive receptors without project-level information. The potential for multiple projects to be under construction at the same time in the same area for prolonged periods of time (depending on the project type) also contributes to the significant and unavoidable construction noise impacts.

Operational noise impacts related to stationary (e.g., maintenance and HVAC systems) and mobile (e.g., traffic) sources would also be reduced under this alternative. Overall, construction and operational noise impacts would be reduced, but construction noise would remain significant and unavoidable.

7.3.3.9 POPULATION AND HOUSING

This alternative would allow development of 904 fewer dwelling units and 1,021,514 fewer square feet of nonresidential use, thus introducing 3,237 fewer residents and 1,533 fewer jobs to the project area. However, the jobs-housing ratio would also reduce from 1.15 to 1.02 (see Table 7-1). Population and housing impacts would be similar and remain less than significant.

7.3.3.10 PUBLIC SERVICES

Approximately 3,237 fewer residents would be introduced into the Specific Plan area under this alternative. Demand for public services, including fire, police, school, and library services would be reduced, and impacts to existing and future levels of service would lessen. Generally, impacts to public services would be reduced and, similar to the proposed project, would be less than significant.

7.3.3.11 RECREATION

Recreational impacts are determined based on the potential for future permanent residents to impair existing or planned parks and recreational facilities. Since this alternative would introduce 904 fewer dwelling units and 3,237 fewer residents than the proposed project, impacts on the County's existing parkland and recreational facilities in the area would also be reduced. Thus, impacts would be reduced and remain less than significant.

7.3.3.12 TRANSPORTATION AND TRAFFIC

Reducing residential and nonresidential development by 20 and 30 percent, respectively, would proportionally reduce average daily trips and impacts to roadways and intersections levels of service compared to the proposed project. However, although the reduction in residential and nonresidential development would proportionally reduce total vehicle miles traveled, it would increase vehicle miles traveled per capita.

However, the Specific Plan would still be adopted under this alternative; therefore, the beneficial mobility improvements would be implemented as feasible. These include pedestrian, bicyclist, and transit user

amenities, such as wider sidewalks, more bicycle lanes, street trees, benches and bus shelters, wayfinding signage, transit maps, etc. These mobility improvements would help gradually transform the project area into a safe and efficient TOD. Thus, overall impacts to transportation and traffic would be reduced.

7.3.3.13 TRIBAL CULTURAL RESOURCES

Impacts to tribal cultural resources would be similar to the proposed project because the development footprint would not change. Thus, the potential to adversely impact previously undiscovered tribal cultural resources would be similar, and impacts would be reduced to less than significant levels with mitigation incorporated.

7.3.3.14 UTILITIES AND SERVICE SYSTEMS

Reducing residential and nonresidential development potential by 20 and 30 percent, respectively, under this alternative would proportionally reduce impacts to utilities and service systems. Based on a water demand rate of 0.16 acre-feet per year per capita, buildout of this alternative would generate a demand of 1,780 acre-feet per year. In comparison, buildout of the proposed project would generate an annual water demand of 2,297 acre-feet. Thus, impacts on water services, including water supply, delivery systems and treatment, would be reduced.

Additionally, this alternative would generate approximately 1,789,607 gpd of wastewater compared to 2,400,409 gpd under the proposed project, and would generate approximately 33,852 ppd of solid waste compared to 44,689 ppd under the proposed project.

Overall, impacts to utilities and service systems would be reduced and, similar to the proposed project, would remain less than significant under this alternative.

7.3.3.15 CONCLUSION

Ability to Reduce Environmental Impacts

The Reduced Intensity Alternative would reduce impacts related to aesthetics, air quality, GHG emissions, hazards and hazardous materials, noise, public services, recreation, transportation and traffic, and utilities and service systems. Impacts to cultural resources, hydrology and water quality, land use and planning, population and housing, and tribal cultural resources would be similar. However, significant and unavoidable impacts related to air quality, construction noise, and traffic would remain.

Ability to Achieve Project Objectives

Since this alternative would still involve adopting the proposed Specific Plan, many of the project objectives related to promoting transit-oriented improvements can be achieved. This alternative would improve the public right-of-way by increasing mobility options for pedestrians and bicyclists (Objective No. 3); enhance public safety and reduce criminal activity through design and programmatic improvements (Objective No. 4); and improve the Vermont/Athens Green Line Station to make it more inviting, comfortable, and safe to transit users (Objective No. 6).

This alternative would reduce residential and nonresidential development by 20 and 30 percent, respectively; therefore, some project objectives would be achieved but to a lesser degree. For example, this alternative would promote uses in proximity to the transit station, along major streets and significant intersections that benefit from the economic opportunities afforded by the presence of the Metro station, Los Angeles Southwest College, and public facilities (Objective No. 1), but the 30 percent reduction in development intensity may not provide as much economic opportunity as the proposed project. Similarly, this alternative would develop opportunities in the TOD that offer housing, shopping, and healthy food options to residents and visitors (Objective No. 2) and promote new development that is compatible with the existing scale and density of adjacent neighborhoods by accommodating growth near the station area and commercial nodes (Objective No. 5), but all to a lesser degree than the proposed project. Further, the reduction in residential and nonresidential development would reduce overall vehicle miles traveled (Objective No. 7), but would not reduce vehicle miles traveled per capita more than would the proposed project. It should also be noted that less development may result in less funding for the proposed improvements in the Specific Plan.

7.3.4 ALTERNATIVE LAND USE PLAN

The Alternative Land Use Plan was evaluated for its potential to assist the County in providing more housing at higher densities in the subregion with the potential for affordable housing development. This would help the County meet its share of the regional housing need through Program 6 (Transit Oriented Districts Program) of the County of Los Angeles Housing Element and further encourage transit ridership and reducing VMT per capita.

This alternative would involve adopting the proposed Specific Plan and implementing its goals and policies, but would increase residential development by 30 percent and decrease nonresidential development by 30 percent. As detailed in Table 7-1, buildout of the Alternative Land Use Plan would allow up to 5,873 dwelling units (1,661 single-family residences and 4,212 multifamily residences) and 2,453,533 square feet of nonresidential development. This alternative would introduce approximately 18,078 residents and generate 3,681 jobs, creating a jobs-housing ratio of 1.16.

7.3.4.1 AESTHETICS

Compared to the proposed project, this alternative would allow development of 1,355 additional dwelling units but 1,021,514 fewer square feet of nonresidential development. The proposed Specific Plan would still be adopted under this alternative; therefore, the aesthetic improvements to the project area, including uniform development standards and design guidelines, pedestrian and bicyclist amenities, and public realm enhancements, would be implemented. Thus, compared to the proposed project, this alternative would have similar and less than significant impacts related to aesthetics.

7.3.4.2 AIR QUALITY

This alternative would allow development of 1,355 additional dwelling units and approximately 1.0 million fewer square feet of nonresidential development. Construction and operational air quality emissions are comparable to that of the proposed project. This alternative also would not be consistent with the SCAQMD's AQMP since population and employment assumptions used to develop the regional emissions

inventory in the latest AQMP are based on the existing General Plan. Overall, impacts to air quality would be similar and remain significant and unavoidable.

7.3.4.3 CULTURAL RESOURCES

The development footprint of this alternative would be the same as the proposed project. Thus, grading activities associated with residential or nonresidential development would have similar potential to adversely impact previously undiscovered cultural resources. Impacts would be similar and less than significant with mitigation.

7.3.4.4 GREENHOUSE GAS EMISSIONS

The proposed project's land use mix was crafted to create a diverse mix of land uses and transit-oriented development. Properly planned TOD areas reduce average daily trips and vehicle miles traveled per capita by providing housing near other areas that provide services, entertainment, retail, and employment. Under this alternative, the increase in residential development and decrease in nonresidential development would increase overall VMT and VMT per capita, and thus, increase GHG impacts.

7.3.4.5 HAZARDS AND HAZARDOUS MATERIALS

Decreasing nonresidential development by 30 percent would reduce the potential for future nonresidential projects to create hazards to the public or environment through the routine use, disposal, transport, and storage of hazardous materials. On the other hand, the increase in residential development under this alternative would expose more people to potential hazardous materials, such as asbestos or lead-based paint during demolition of existing buildings. On balance, overall impacts would be similar and less than significant with mitigation.

7.3.4.6 HYDROLOGY AND WATER QUALITY

This alternative would have similar hydrology and water quality impacts as the proposed project. Future projects meeting the National Pollutant Discharge Elimination System Program requirements would be required to obtain a Construction General Permit and prepare and implement a SWPPP and WQMP and associated best management practices. Additionally, since the Specific Plan area is predominantly built out, development of either this alternative or the proposed project would not significantly increase impervious surfaces or interfere with groundwater recharge in the project area. Thus, impacts would be similar and less than significant.

7.3.4.7 LAND USE AND PLANNING

This alternative would still include the adoption of the proposed Specific Plan, and thus would require a General Plan Amendment and zone change. Goals and policies of the Specific Plan would also be implemented, and overall impacts would be similar and less than significant.

7.3.4.8 NOISE

Development under this alternative would allow 1,355 additional dwelling units but 1,021,514 fewer square feet of nonresidential development compared to the proposed project. Thus, construction noise associated with this alternative would be comparable to the proposed project. Impacts would also remain significant and unavoidable since the locations of specific future projects within the project area are unknown and it would be difficult to quantify construction noise impacts on sensitive receptors without project-level noise analyses for future projects.

Operational noise impacts associated with this alternative may be slightly reduced compared to the proposed project since residences typically generate less noise than nonresidential developments, but the difference would be nominal. Thus, overall noise impacts would be similar, and significant and unavoidable construction noise impacts would remain.

7.3.4.9 POPULATION AND HOUSING

This alternative land use plan would introduce 1,355 additional dwelling units and 3,716 additional residents compared to the proposed project. Thus, population and housing growth impacts would be greater than the proposed land use plan.

Additionally, the 30 percent reduction in nonresidential development would decrease the number of generated jobs by 1,533. Thus, the project's jobs-to-housing ratio would decrease substantially from 1.15 to 0.63 and have a greater impact on jobs-housing balance. Overall, population and housing impacts would be greater than the proposed project.

7.3.4.10 PUBLIC SERVICES

This alternative would increase residential development and decrease nonresidential development by 30 percent. Impacts to fire and police services would generally be similar assuming residential and nonresidential uses have similar numbers of calls for service. However, impacts to school and library services would increase because this alternative would introduce 3,716 additional residents into the project area. Thus, overall impacts to public services under this alternative would be greater than the proposed project, but remain less than significant.

7.3.4.11 RECREATION

Since this alternative would introduce 3,716 additional residents into the project area compared to the proposed project, demand and use of existing parks and recreational facilities in the neighborhood would increase and may result in the need to construct new parks and recreational amenities to meet future needs. Thus, impacts would be greater under this alternative.

7.3.4.12 TRANSPORTATION AND TRAFFIC

Peak hour trip generation rates for residential uses are lower than for commercial uses. Therefore, this alternative may reduce overall trip generation and impacts on roadways, intersections, and freeways. The

increase in 1,355 dwelling units in an area with 1,021,514 fewer square feet of nonresidential development may also increase overall VMT and VMT per capita since residents would have to travel farther for goods, services, and employment.

Nevertheless, the Specific Plan would still be adopted and the proposed mobility network improvements for vehicles, pedestrians, bicyclists, and transit users would be implemented as feasible. Thus, overall transportation and traffic impacts would balance out and be similar to the proposed project. Impacts to roadway intersections and freeway main lines would still be significant and unavoidable.

7.3.4.13 TRIBAL CULTURAL RESOURCES

Given that the development footprint of this alternative would be the same as the proposed project, the potential to uncover or adversely impact known and unknown tribal cultural resources in the project area is similar. Impacts would similarly be reduced to less than significant levels with mitigation.

7.3.4.14 UTILITIES AND SERVICE SYSTEMS

This alternative would increase residential development by 30 percent and decrease nonresidential development by the same amount. Based on a water demand rate of 0.16 acre-feet per year per capita, buildout of this alternative would generate a demand of 2,892 acre-feet per year. In comparison, buildout of the proposed project would generate an annual water demand of 2,297 acre-feet. Thus, impacts on water services, including water supply, delivery systems and treatment, would be greater.

Additionally, this alternative would generate approximately 2,602,607 gpd of wastewater compared to 2,400,409 gpd under the proposed project and would generate approximately 46,722 ppd of solid waste compared to 44,689 ppd under the proposed project. Overall, impacts to utilities and service systems would be greater.

7.3.4.15 CONCLUSION

Ability to Reduce Environmental Impacts

This alternative would reduce impacts related to aesthetics but would increase impacts related to GHG emissions, population and housing, public services, recreation, and utilities and service systems. Impacts to air quality, cultural resources, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, transportation and traffic, and tribal cultural resources would be similar. Significant and unavoidable impacts related to air quality, GHG emissions, noise, and traffic would also remain.

Ability to Achieve Project Objectives

The Alternative Land Use Plan would be able to achieve most of the project objectives, but some to a lesser degree than the proposed project. Because the proposed Specific Plan would be adopted under this alternative, the proposed policies, development standards, and physical improvements in the Specific Plan would help achieve the following goals: improve the public right-of-way and increase mobility options (Objective No. 3); enhance public safety and reduce criminal activity through design and programmatic

improvements (Objective No. 4); and improve the Vermont/Athens Green Line Station to make it more inviting, comfortable, and safe to transit users (Objective No. 6).

This alternative would also be able to achieve the remaining project objectives, but to a lesser degree than the proposed project because it increases residential use and reduces nonresidential use by 30 percent. Compared to the proposed project, this land use mix would not fully take advantage of transit-oriented development benefits, such as reducing average daily trips and vehicle miles traveled per capita by providing housing near uses that provide services, entertainment, retail, and employment in a denser area.

Thus, this alternative would promote uses in proximity to the transit station and major roadways/intersections to benefit from the economic opportunities afforded by the Metro station, the Los Angeles Southwest College, and public facilities (Objective No. 1); develop opportunities that offer housing, shopping, and healthy food options particularly near the Metro Station and Los Angeles Southwest College (Objective No. 2); promote new development that is compatible with the existing scale and density of adjacent neighborhoods by allowing more growth near the station area and commercial nodes (Objective No. 5); and reduce vehicle miles traveled per capita per Assembly Bill 32 and Senate Bill 375 goals (Objective No. 7).

7.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

Table 7-2 summarizes the environmental impacts of each alternative compared to the proposed project, and Table 7-3 summarizes each alternative's ability to achieve the project objectives.

Table 7-2 Summary of Proposed Project and Alternatives Impacts

Topic	Proposed Project	No Project/Existing General Plan Alternative	Reduced Intensity Alternative	Alternative Land Use Plan
Aesthetics	LTS	>	<	<
Air Quality				
Construction	S/U	<*	<	=
Operation	S/U	<*	<	=
Cultural Resources	LTS/M	<	=	=
Greenhouse Gas Emissions	LTS	>	<	>
Hazards and Hazardous Materials	LTS/M	<	<	=
Hydrology and Water Quality	LTS	>	=	=
Land Use and Planning	LTS	=	=	=
Noise				
Construction	S/U	<*	<	=
Operation	LTS	<	<	=
Population and Housing	LTS	=	=	>
Public Services	LTS	<	<	>
Recreation	LTS	<	<	>
Transportation and Traffic	S/U	<*	<	=
Tribal Cultural Resources	LTS/M	<	=	=
Utilities and Service Systems	LTS/M	<	<	>

Notes: LTS: Less than Significant; LTS/M: Less than Significant with Mitigation Incorporated; S/U: Significant and Unavoidable

(<) The alternative would result in less of an impact than the proposed project.
(>) The alternative would result in greater impacts than the proposed project.
(=) The alternative would result in the same/similar impacts as the proposed project.
* The alternative would reduce a significant and unavoidable impact.

Table 7-3 Ability to Meet Project Objectives

Project Objective	Proposed Project	No Project/ Existing General Plan Alternative	Reduced Intensity Alternative	Alternative Land Use Plan
1. Promote uses in proximity to the transit station, along major streets, and at significant intersections that benefit from the economic opportunities afforded by the presence of the Green Line and major educational and public facilities.	Yes	No	Yes, to a lesser degree	Yes, to a lesser degree
2. Develop opportunities, particularly at the Vermont Green Line Station and Los Angeles Southwest College that offer housing, shopping, and healthy food options for residents and visitors.	Yes	No	Yes, to a lesser degree	Yes, to a lesser degree
3. Improve the public right-of-way to increase mobility options for pedestrians and bicyclists. New sidewalks and bike facilities should create safe and secure connections to destinations that are integrated into the transit system.	Yes	No	Yes	Yes
4. Enhance public safety and reduce criminal activity through design and programmatic improvements.	Yes	No	Yes	Yes
5. Promote new development that respects and responds to the existing scale and density of adjacent neighborhoods by accommodating growth near the station area and commercial nodes.	Yes	No	Yes, to a lesser degree	Yes, to a lesser degree
6. Improve the Vermont/Athens Green Line Station to make it more inviting, comfortable, and safe to transit users.	Yes	No	Yes	Yes
7. Reduce vehicle miles traveled per capita within the project area to be consistent with the Assembly Bill 32 and Senate Bill 375 goals.	Yes	No	Yes, to a lesser degree	Yes, to a lesser degree

CEQA requires a lead agency to identify the "environmentally superior alternative" and, in cases where the "No Project" Alternative is environmentally superior to the proposed project, the environmentally superior development alternative must be identified. Since the No Project/Existing General Plan Alternative is the environmentally superior to the proposed project, an alternative has been identified as "environmentally superior" to the proposed project:

- Reduced Intensity Alternative

As shown in Table 7-2, the Reduced Intensity Alternative would lessen impacts associated with aesthetics, air quality, GHG emissions, hazards and hazardous materials, noise, public services, recreation, transportation and traffic, and utilities and service systems. Impacts to cultural resources, hydrology and water quality, land use and planning, population and housing, and tribal cultural resources would be similar. However, significant and unavoidable impacts related to air quality, construction noise, and traffic would remain.

7.5 REFERENCES

USA.com (USA). 2014a. West Athens, CA Population and Races. http://www.usa.com/west-athens-ca-population-and-races.htm. Accessed September 20, 2017.

———. 2014b. Westmont, CA Population and Races. http://www.usa.com/westmont-ca-population-and-races.htm. Accessed September 20, 2017.

8. Impacts Found Not to Be Significant

California Public Resources Code Section 21003 (f) states: "…it is the policy of the state that…[a]ll persons and public agencies involved in the environmental review process be responsible for carrying out the process in the most efficient, expeditious manner in order to conserve the available financial, governmental, physical, and social resources with the objective that those resources may be better applied toward the mitigation of actual significant effects on the environment." This policy is reflected in the State California Environmental Quality Act (CEQA) Guidelines (Guidelines) Section 15126.2(a), which states that "[a]n EIR [Environmental Impact Report] shall identify and focus on the significant environmental impacts of the proposed project," and Section 15143, which states that "[t]he EIR shall focus on the significant effects on the environment."

This chapter includes an environmental analysis and finding of no impact or less than significant impact for the topics precluded from detailed discussion in Chapter 5, *Environmental Analysis*, of this DEIR.

8.1 AGRICULTURE AND FORESTRY RESOURCES

Would the project:

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

No Impact. CEQA considers impacts to three categories of important farmland: Prime Farmland, Farmland of Statewide Importance, and Unique Farmland. According to the California Department of Conservation Important Farmland Finder, there are no important farmlands in the Metro Planning Area of Los Angeles County, including the Specific Plan area (DOC 2017). There are also no existing agricultural uses in the Specific Plan area. Additionally, as shown in Figures 3-5, *Proposed Zoning Districts*, and 4-3, *Existing Zoning*, the current and proposed zoning districts do not have any areas designated for agriculture. Therefore, development in accordance with the proposed project and any zoning district changes proposed under the Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont would have no impact on important farmlands nor convert any farmland to nonagricultural use.

B. Conflict with existing zoning for agricultural use, with a designated Agricultural Opportunity Area, or with a Williamson Act contract?

No Impact. See response to Section 8.1(A) above.

The California Department of Conservation Division of Land Resource Protection maintains updated maps showing lands bearing Williamson Act contracts. According to the State of California Williamson Act Contract Land map (dated 2016) there are no lands within the Metro Planning Area of Los Angeles County under Williamson Act contracts (DOC 2016). Additionally, the Specific Plan area is not designated as an Agricultural Opportunity Area or Agricultural Resources Area per the County's 2035 General Plan (DRP 2014). Therefore, development in accordance with the proposed project and any zoning district changes proposed under the Connect Southwest LA project would not conflict with existing agricultural zoning, impact Williamson Act lands, or impact Agricultural Opportunity Areas.

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

No Impact. As shown in Figures 3-5, *Proposed Zoning Districts*, and 4-3, *Existing Zoning*, the current and proposed zoning districts do not zone any land as forest land, timberland, or timberland production. The entire project site and Metro Planning Area are urban and built out with no existing or zoned areas for forest land, timberland, or timberland production. Thus, no impacts would occur.

D. Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. See response to Section 8.1(C), above.

E. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No Impact. See responses to Sections 8.1(A) through (C), above.

8.2 BIOLOGICAL RESOURCES

Would the project:

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

No Impact. There is no native habitat or suitable breeding or nesting habitat for sensitive species onsite. The project site is urbanized and entirely built out. Any occurrence of sensitive species onsite is expected to be an incidental occurrence, such as for foraging. Riparian habitats are those occurring along the banks of rivers

and streams. Based on the U.S. Fish and Wildlife Services National Wetlands Inventory, there are no sensitive natural communities onsite and no riparian habitat onsite (USFWS 2017). Thus, no impact would occur.

B. Have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or USFWS?

No Impact. See response to Section 8.2(A), above.

C. Have a substantial adverse effect on federally or state protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, and drainages) or waters of the United States, as defined by § 404 of the federal Clean Water Act or California Fish & Game code § 1600, et seq. through direct removal, filling, hydrological interruption, or other means?

No Impact. See response to Section 8.2(A), above. The nearest wetlands to the project site mapped on the National Wetlands Mapper are riverine in the Chester Washington Golf Course west of the Specific Plan area (USFWS 2017a). No impact would occur.

D. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Less Than Significant Impact. The project site and surrounding areas in the County's Metro Planning Area are completely built out and urbanized. The site is not available for wildlife movement and there are no wildlife corridors onsite.

Trees and other vegetation onsite could be used for nesting by migratory birds protected under state and federal law. The Migratory Bird Treaty Act of 1918 (MBTA) is the domestic law implementing the United States' commitment to the protection of migratory birds. The MBTA governs the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests. It prohibits the take, possession, import, export, transport, sale, purchase, barter, or offering of these activities, except under a valid permit or as permitted in the implementing regulations. The USFWS administers permits to take migratory birds in accordance with the regulations pursuant to the MBTA.

Options for compliance with the MBTA include:

a. avoiding grading activities during the nesting season, February 15 to August 15; or

b. if grading activities are to be undertaken during the nesting season, a site survey for nesting birds by a qualified biologist before commencement of grading activities. If nesting birds are found, the applicant would consult with the USFWS regarding means to avoid or minimize impacts to nesting birds.

8. Impacts Found Not to Be Significant

Nesting birds are also protected under California Fish and Game Code Sections 3503 et seq. Section 3503 prohibits the take, possession, or needless destruction of the nest or eggs of any bird, with specified exceptions.

Projects developed in accordance with the Specific Plan would be required to comply with the MBTA and the aforementioned California Fish and Game Code sections. Overall, impacts would be less than significant.

E. Convert oak woodlands (as defined by the state, oak woodlands are oak stands with greater than 10% canopy cover with oaks at least 5 inch in diameter measured at 4.5 feet above mean natural grade) or otherwise contain oak or other unique native trees (junipers, Joshua trees, southern California black walnut, etc.)?

Less Than Significant Impact. Given that the entire project site is built out with urban uses, there are no native oak woodlands, oak trees, or other unique native trees onsite. However, ornamental landscape vegetation onsite could include oak trees. The Los Angeles County Oak Tree Ordinance, County Code of Ordinances Sections 22.56.2050 et seq., prohibits people from damaging or removing oak trees without a permit from the Los Angeles County Department of Regional Planning. The ordinance applies to all unincorporated areas of the County.

The Oak Tree Ordinance requires permit applicants to submit the following documents to the Los Angeles County Department of Regional Planning:

1. A site plan drawn to scale and showing:

    a. The locations and dimensions of existing land uses and certain categories of proposed features on the site—including buildings, parking lots, other paved areas, landscaped areas, walls and fences, etc.

    b. The location of all oak trees subject to this [ordinance] proposed to be removed and/or relocated, or within 200 feet of proposed construction, grading, landfill or other activity.

2. An oak tree report prepared by an individual with expertise acceptable to the director and county forester and fire warden, of each tree shown on the site plan describing the size, structure, and health of each tree; and identifying trees that may be classified as heritage trees—which are either any oak tree measuring 36 inches or more in diameter, measured four and one-half feet above the natural grade; or any other oak tree having significant historical or cultural importance to the community.

Thus, compliance with the County's Oak Tree Ordinance would ensure impacts to oak woodlands and other unique native trees are less than significant.

F. Conflict with any local policies or ordinances protecting biological resources, including Wildflower Reserve Areas (L.A. County Code, Title 12, Ch. 12.36), the Los Angeles County Oak Tree Ordinance (L.A. County Code, Title 22, Ch. 22.56, Part 16), the Significant Ecological Areas (SEAs) (L.A. County Code, Title 22, § 22.56.215), and Sensitive Environmental Resource Areas (SERAs) (L.A. County Code, Title 22, Ch. 22.44, Part 6)?

Less Than Significant Impact. See response to Section 8.2(E), above.

Additionally, the project site is not in a County-designated Wildflower Reserve Area, Significant Ecological Area, or Sensitive Environmental Resources Area. Thus, impacts would be less than significant.

G. Conflict with the provisions of an adopted state, regional, or local habitat conservation plan?

No Impact. Based on a review of the USFWS's Habitat Conservation Database, the project site is not in or next to the plan area of a habitat conservation plan (USFWS 2017b). Additionally, the CDFW Regional Conservation Plans map does not identify any natural community conservation plans in or near the project site (CDFW 2015). No impact would occur and no additional analysis is needed.

8.3 ENERGY

Would the project:

A. Conflict with Los Angeles County Green Building Ordinance (L.A. County Code Title 22, Ch. 22.52, Park 20 and Title 21, § 21.24.440) or Drought Tolerant Landscaping Ordinance (L.A. County Code, Title 21, §21.24.430 and Title 22, Ch. 22.52, Part 21)?

Less Than Significant Impact. The County adopted the California Green Building Standards Code (CALGreen) in November 2013. CALGreen is issued by the California Building Standards Commission on a three-year cycle; the current CALGreen is the 2017 Code.

The purpose of the Los Angeles County Green Building Ordinance 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. Planning and design standards include those governing stormwater drainage and installation of electric circuitry supporting future electric vehicle charging stations.

2. Energy efficiency. Energy efficiency standards pertain to lighting, insulation, and mechanical systems (space heating and cooling and water heating).

3. Water efficiency and conservation. Water efficiency standards include requirements for water-efficient fixtures and water-efficient landscaping.

8. Impacts Found Not to Be Significant

4. Material conservation and resource efficiency. Standards include recycling and/or reusing at least 50 percent of nonhazardous construction and demolition waste.

5. Environmental air quality. Standards include those governing adhesives and architectural coatings to minimize air pollution, and interior moisture control standards (Section 31.101.2).

The Los Angeles County Green Building Standards Code has four groups of standards, each of which has standards covering the five aforementioned categories:

- Residential Mandatory Standards
- Nonresidential Mandatory Standards
- Residential Voluntary Standards
- Nonresidential Voluntary Standards

Projects developed under the Specific Plan would be required to comply with the Los Angeles County Green Building Ordinance. Additionally, the Specific Plan encourages energy efficiency and sustainability by incorporating the following policies:

- Buildings and development projects within the Specific Plan area shall be designed and constructed using sustainable, energy efficient materials and incorporate strategies for the conservation of water, energy, and other natural resources.

- White or green roofs shall be used as much as possible, while the use of pavement, asphalt, and other heat producing surfaces should be minimized to reduce the heat island effect.

- Building and development projects shall be more energy efficient than required by local and state codes.

- Energy-efficient natural lighting shall be used in buildings and new developments. Maximize daylighting and views through window placement and design.

The County's Drought Tolerant Landscaping Ordinance establishes minimum standards for the design and installation of landscaping using drought-tolerant plants and native plants that require minimal use of water. These requirements help conserve water resources by requiring landscaping that is appropriate to the region's climate and to the nature of a project's use. Projects developed in accordance with the Specific Plan shall comply with the requirements in Section 22.52.2230. Further, the Specific Plan includes the following project design features related to water conservation:

- Design sustainable and energy-efficient streetscapes with low-impact development strategies including sustainable stormwater practices, permeable paved surfaces, drought-tolerant plant species, and solar lighting fixtures.

- Irrigation systems shall incorporate water conserving methods and water efficient technologies such as drip emitters, evapotranspiration controllers, and moisture sensors. Explore opportunities to reuse rain water and/or gray water for irrigation.

- Irrigation systems shall be designed to apply water slowly, allowing plants to be deep watered and reducing runoff. Low-volume irrigation drip systems should be used in all areas except turf irrigation and small ornamental planting. Each street tree should be watered by at least two deep watering bubblers separate from all other irrigation.

- Drainage should be directed to permeable areas to minimize discharge to the storm drain system. Use pervious or open grid paving for parking areas whenever possible to reduce the negative effects of storm water runoff and to facilitate groundwater recharge.

- Permeable surfaces should be incorporated whenever feasible to allow infiltration of rainfall and to reduce the total volume of runoff, replenish groundwater, and improve water quality

Thus, buildout of the Specific Plan would comply with the County's Drought Tolerant Landscaping Ordinance and impacts would be less than significant.

B. Involve the inefficient use of energy resources (see Appendix F of the CEQA Guidelines)?

Less Than Significant Impact.

Regulatory Requirements

In addition to provisions of CALGreen mentioned above, future projects developed pursuant to the Specific Plan would be required to comply with the following additional regulations related to energy efficiency.

Federal

Energy Independence and Security Act of 2007

The Energy Independence and Security Act of 2007 (Public Law 110-140) seeks to provide the nation with greater energy independence and security by increasing the production of clean renewable fuels; improving vehicle fuel economy; and increasing the efficiency of products, buildings, and vehicles. It also seeks to improve the energy performance of the federal government. The act sets increased Corporate Average Fuel Economy Standards; the Renewable Fuel Standard; appliance energy efficiency standards; building energy efficiency standards; and accelerated research and development tasks on renewable energy sources (e.g., solar energy, geothermal energy, and marine and hydrokinetic renewable energy technologies), carbon capture, and sequestration.

8. Impacts Found Not to Be Significant

State

Renewables Portfolio Standard

The California Renewables Portfolio Standard (RPS) was established in 2002 under Senate Bill 1078 and was amended in 2006 and 2011. In September 2015, Senate Bill 350 (de Leon) was signed into law and established tiered increases to the RPS—40 percent by 2024, 45 percent by 2027, and 50 percent by 2030. SB 350 also set a new goal to double the energy-efficiency savings in electricity and natural gas through energy efficiency and conservation measures. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase the use of eligible renewable energy resources. This has accelerated the development of renewable energy projects throughout the state.

Additionally, the California Public Utilities Commission is required to provide quarterly progress reports on progress toward RPS goals. Based on the 4th quarter 2016 report in December, the California Energy Commission (CEC) estimated that about 27 percent of its electricity retail sales in 2016 were served by renewable energy. Statewide in-state operating capacity of renewable resources was 26,300 megawatts as of October 2016 (CEC 2016a).

Appliance Efficiency Regulations

California's Appliance Efficiency Regulations (California Code of Regulations [CCR], Title 20, Parts 1600–1608) contain energy performance, energy design, water performance, and water design standards for appliances (including refrigerators, ice makers, vending machines, freezers, water heaters, fans, boilers, washing machines, dryers, air conditioners, pool equipment, and plumbing fittings) that are sold or offered for sale in California. These standards are updated regularly to allow consideration of new energy efficiency technologies and methods.

Title 24, California Code of Regulations, Part 6: Energy Efficiency Standards for Buildings

The Energy Efficiency Standards for Residential and Nonresidential Buildings (24 CCR Part 6) were established in 1978 in response to a legislative mandate to reduce California's energy consumption. The CEC adopted the 2008 changes to the Building Energy Efficiency Standards in order to (1) Provide California with an adequate, reasonably-priced, and environmentally-sound supply of energy and (2) Respond to Assembly Bill 32, the Global Warming Solutions Act of 2006, which mandates that California must reduce its greenhouse gas emissions to 1990 levels by 2020. Title 24 Part 6 of the 2013 California Building Standards Code, the 2013 California Energy Code, went into effect on July 1, 2014, and includes energy efficiency updates. Buildings that are constructed in accordance with the 2013 Building and Energy Efficiency Standards are 25 percent (residential) to 30 percent (nonresidential) more energy efficient than the 2008 standards as a result of better windows, insulation, lighting, ventilation systems, and other features.

Most recently, the CEC adopted the 2016 Building and Energy Efficiency Standards. The 2016 standards improve upon the 2013 standards for new construction of and additions and alterations to residential and nonresidential buildings. Under the 2016 standards, residential buildings are 28 percent more energy efficient than the 2013 standards, and nonresidential buildings are 5 percent more energy efficient than the 2013 standards (CEC 2016b).

The 2016 standards do not achieve zero net energy. However, they do get very close to the state's goal and make important steps toward changing residential building practices in California. The 2019 standards will take the final step to achieve zero net energy for newly constructed residential buildings throughout California (CEC 2016b).

Overall, future individual projects developed under the Specific Plan would comply with the aforementioned energy efficiency requirements and would not result in the inefficient use of energy. Impacts would be less than significant.

Construction Energy Use

Construction of the proposed project would require the use of construction equipment for grading, hauling, and building activities. Electricity use during construction would vary during different phases of construction—the majority of construction equipment during demolition and grading activities would be gas powered or diesel powered, and the later construction phases, such as interior construction and architectural coatings, would require electricity-powered equipment. Energy use during construction activities also takes into account construction workers' vehicles traveling to and from project sites and haul trucks for the import and export of materials from site clearing, demolition, and/or grading. Since the Specific Plan area is mostly built out and already served by electrical infrastructure by Southern California Edison (SCE) and natural gas infrastructure by Southern California Gas Company (SCGC), adequate infrastructure capacity is available to accommodate the electricity and natural gas demand for construction activities, and project implementation would not require additional or expanded infrastructure.

Future construction contractors are also required to minimize idling of construction equipment during construction. These required practices would limit wasteful and unnecessary electrical energy consumption. Therefore, the proposed short-term construction activities would not result in inefficient, wasteful, or unnecessary fuel consumption.

Transportation Energy Use

Short-Term Construction Impacts

Transportation energy use depends on the type and number of trips, vehicle miles traveled, fuel efficiency of vehicles, and travel mode. As stated above, transportation energy use during construction would come from the transport and use of construction equipment, delivery vehicles and haul trucks, and construction worker vehicles that would use diesel fuel and/or gasoline. The use of energy resources by these vehicles would fluctuate according to the phase of construction and would be temporary. Therefore, impacts related to transportation energy use during construction would not require expanded energy supplies or the construction of new infrastructure. Impacts would be less than significant.

Long-Term Operational Impacts

The proposed Specific Plan would consume transportation energy during operations from the use of motor vehicles. Estimates of transportation energy use are based on the overall project-generated vehicle miles traveled (VMT).

As modeled in CalEEMod, project-related VMT would come from resident, visitor, and employee vehicle trips; delivery and supply trucks, and trips by maintenance and repair crews. The proposed project would have an estimated daily VMT of 534,386, which equates to approximately 19,550 gallons per day or 7,116,080 gallons per year of gasoline and diesel fuel (see Appendix C). In comparison, existing daily VMT in the project area is 427,123, which equates to approximately 23,057 gallons per day or 8,392,812 gallons per year of gasoline and diesel fuel (see Appendix C). Thus, the proposed project would increase daily VMT but decrease annual fuel consumption because the average fuel economy takes into account the TOD features of the Specific Plan and proposed land use plan, recent state and federal laws, including the Pavley Advanced Clean Cars program, as well as vehicle turnover, which has improved the overall fuel economy of California's vehicle fleets..

The communities of West Athens and Westmont and their surrounding areas are highly urbanized, with numerous gasoline fuel facilities and infrastructure. Consequently, the proposed project would not result in a substantial demand for energy that would require expanded supplies or the construction of other infrastructure or expansion of existing facilities.

Overall, buildout of the proposed project would not result in the inefficient, wasteful, or unnecessary use of energy through construction and transportation and impacts would be less than significant.

8.4 GEOLOGY AND SOILS

Would the project:

A. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known active fault trace? Refer to Division of Mines and Geology Special Publication 42.

No Impact. A portion of the Newport-Inglewood Fault Zone traverses the Specific Plan area in a northwest-southeast direction. This is an active fault trace and part of an Alquist-Priolo Earthquake Fault Zone (DOC 1986). Development in accordance with the Specific Plan would result in the construction of new buildings, some of which are expected to be residential. The siting of such buildings would be required to comply with the requirements of the Alquist-Priolo Earthquake Fault Zoning Act, the purpose of which is to prevent the construction of residential buildings on top of the traces of active faults. Adherence to this law and the required setbacks from active fault traces would reduce the hazards associated with earthquake fault rupture. The project would not exacerbate an existing hazardous condition, therefore, no impact would occur.

ii. Strong seismic ground shaking?

Less Than Significant Impact. Although strong seismic shaking is a risk throughout Southern California, the Specific Plan area is not at greater risk of seismic activity or impacts than other areas. Additionally, the State regulates development through a variety of tools that reduce hazards from earthquakes and other geologic hazards. The California Building Code (CBC) contains building design and construction requirements that are intended to safeguard against major structural failures or loss of life caused by earthquakes or other geologic hazards.

The County building regulations are included in the County Code, Title 26, Chapters 2 through 35, and Appendices C, I, and J, where the County has adopted the most recent version of the CBC by reference. Future development projects pursuant to the proposed project would be required to adhere to the provisions of the CBC, which are imposed on project developments by the County during the building plan check and development review process. Each future development would be preceded by a detailed, site-specific geotechnical investigation. The geotechnical investigation would calculate seismic design parameters pursuant to CBC requirements and would include foundation and structural design recommendations, as needed, to reduce hazards to people and structures arising from ground shaking. Compliance with the requirements of the CBC for structural safety during a seismic event would reduce the hazards associated with strong seismic ground shaking to a less than significant level.

iii. Seismic-related ground failure, including liquefaction and lateral spreading?

No Impact. According to the California Department of Conservation, Division of Mines and Geology, the Seismic Hazard Zones Map for the Inglewood Quadrangle shows the entire project site is outside of any seismic hazard zones, including liquefaction and earthquake-induced landslides (DOC 1999). Thus, no impact would occur.

iv. Landslides?

No Impact. See response to Section 8.4(A)(iii), above.

B. Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Given that the project site is predominantly built out, development in accordance with the Specific Plan would consist mostly of redevelopment and intensification of already developed sites. Therefore, the potential for future development to result in the loss of topsoil would be less than significant.

Additionally, all new developments, if on sites larger than an acre, are required to comply with the National Pollutant Discharge Elimination System (NPDES) program and its Construction General Permit (CGP) requirements, which include development and implementation of a Stormwater Pollution Prevention Plan

8. Impacts Found Not to Be Significant

(SWPPP). The SWPPP would include measures to minimize pollutant discharge from project sites through best management practices (BMPs) that emphasize erosion prevention through sediment control, stabilizing slopes, and minimizing soil disturbance during both construction and operation phases. In addition, the County's Low Impact Development Standards Manual, issued by the Los Angeles County Department of Public Works, requires all projects that meet the County's definition of a Designated Project to be designed to control pollutants, pollutant loads, and runoff volume to the maximum extent feasible by minimizing impervious surface area and controlling runoff from impervious surfaces. BMPs specifically related to erosion and flooding control include biofiltration, bioretention, bioswales, green roofs, infiltration, rainfall harvest and use, permeable/pervious concrete pavement, porous landscaping, etc. Given these federal and local regulations, potential soil erosion impacts would be less than significant.

C. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact. As previously stated, the project site is outside of any seismic hazard zones, including liquefaction and earthquake-induced landslides (DOC 1999). Additionally, individual development projects would be required to adhere to existing building and grading codes. These codes contain provisions for soil preparation/conditioning to minimize hazards from unstable and expansive soils. Grading and soil compaction also requires the preparation of site-specific grading plans and soils and geology reports to address liquefaction, subsidence, and other potential geologic or soil stability issues. Such plans and reports must be provided to the County for review and approval before projects can commence. Submittal of these technical plans and studies would ensure that hazards arising from unstable and expansive soils would be minimized to the extent practicable. Thus, impacts would be less than significant.

D. 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?

Less Than Significant Impact. See response to Section 8.4(C), above.

E. Have soils incapable of adequately supporting the use of onsite wastewater treatment systems where sewers are not available for the disposal of wastewater?

No Impact. The project site is served by existing sewers, and projects developed pursuant to the Specific Plan would not involve onsite wastewater treatment systems. No impact would occur.

F. Conflict with the Hillside Management Area Ordinance (L.A. County Code, Title 22, § 22.56.215) or hillside design standards in the County General Plan Conservation and Open Space Element?

No Impact. The project site is nearly flat and is not subject to the County's Hillside Management Area Ordinance or hillside design standards. No impact would occur.

8.5 MINERAL RESOURCES

Would the project:

A. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. The California Geological Survey (CGS) classifies the regional significance of mineral resources in accordance with the California Surface Mining and Reclamation Act of 1975. The State Geologist is responsible for classifying areas within California that are subject to urban expansion or other irreversible land uses. The State Geologist is also responsible for classifying Mineral Resource Zones (MRZ) to record the presence or absence of significant mineral resources in the state based on CGS data.

Lands designated MRZ-2 are of the greatest importance. Such areas are underlain by demonstrated mineral resources or are located where geologic data indicate that significant measured or indicated resources are present. MRZ-2 areas are "regionally significant."

According to the CGS's "San Gabriel Valley P-C Region Showing MRZ-2 Areas and Active Mine Operations" map, the entire communities of West Athens and Westmont are outside of the MRZ-2 areas (CGS 2010). Therefore, development in accordance with the proposed project would not impact any areas of known mineral resources. Additionally, development of the Specific Plan is not expected to affect existing oil operations. No impacts would occur.

B. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. See response to Section 8.6(A), above. There are no locally important mineral resource recovery sites within the project site. Therefore, future development in accordance with the Specific Plan would not result in the loss of availability of a locally important mineral resource, and no impacts to mineral resources recovery sites would occur.

8.6 REFERENCES

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9. Significant Irreversible Changes Due to the Proposed Project

Section 15126.2(c) of the CEQA Guidelines requires that an environmental impact report (EIR) describe any significant irreversible environmental changes that would be caused by the proposed project should it be implemented.

> Uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely. Primary impacts and, particularly, secondary impacts (such as highways improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The following are the significant irreversible changes that would be caused by implementation of the Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont project.

- Future development in accordance with the proposed project would include construction activities that would entail the commitment of nonrenewable and/or slowly renewable energy resources, human resources, and natural resources such as lumber and other forest products, sand and gravel, asphalt, steel, copper, lead, other metals, water, and fossil fuels. Future development would also require the use of natural gas and electricity, petroleum-based fuels, fossil fuels, and water. The commitment of resources required for the construction and operation of future development accommodated by the Specific Plan would limit the availability of such resources for future generations or for other uses during the life of the project.

- An increased commitment of social services and public maintenance services (e.g., police, fire, schools, libraries, and sewer and water services) would also be required. The energy and social service commitments would be long-term obligations in view of the low likelihood of returning the land to its original condition once it has been developed.

- An increase in project-related vehicle trips would accompany population growth as a result of Specific Plan buildout. Over the long term, emissions associated with such vehicle trips would continue to contribute to the South Coast Air Basin's nonattainment designation for ozone (O_3) and particulate matters ($PM_{2.5}$ and PM_{10}), nonattainment for lead (Los Angeles County only) under the California and National Ambient Air Quality Standards (AAQS), and nonattainment for nitrogen dioxide (NO_2) under the California AAQS.

9. Significant Irreversible Changes Due to the Proposed Project

- Future redevelopment and new development in accordance with the Specific Plan are long-term irreversible commitments of land in the West Athens-Westmont community.

Given the low likelihood that the developed land would revert to lower intensity uses or to its current form, the proposed project would generally commit future generations to these environmental changes.

10. Growth-Inducing Impacts of the Proposed Project

Pursuant to Sections 15126(d) and 15126.2(d) of the CEQA Guidelines, this section is provided to examine ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also required is an assessment of other projects that would foster other activities which could affect the environment, individually or cumulatively. To address this issue, potential growth-inducing effects will be examined through analysis of the following questions:

- Would this project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development?

- Would this project result in the need to expand one or more public services to maintain desired levels of service?

- Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

- Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

Please note that growth-inducing effects are not to be construed as necessarily beneficial, detrimental, or of little significance to the environment. This issue is presented to provide additional information on ways in which this project could contribute to significant changes in the environment, beyond the direct consequences of developing the land use concept examined in the preceding sections of this EIR.

Would this project remove obstacles to growth, e.g., through the construction or extension of major infrastructure facilities that do not presently exist in the project area, or through changes in existing regulations pertaining to land development?

Construction/Extension of Major Infrastructure Facilities

The project site is almost entirely built out, with only a few vacant parcels. Therefore, the entire project area is connected to water and wastewater pipe lines, electricity, and natural gas services. Water service is provided by Golden State Water Company, Southwest System; wastewater collection is provided by the County Department of Public Works (DPW); wastewater treatment is provided by the Sanitation Districts of Los Angeles County (LACSD); storm drainage services is provided by DPW and the California Department of

10. Growth-Inducing Impacts of the Proposed Project

Transportation; solid waste collection services is provided by Consolidated Disposal Services, Gardena; landfill services is provided by LACSD; electricity is provided by Southern California Edison; and natural gas is provided by Southern California Gas Company.

As detailed in Section 5.14, *Utilities and Service Systems*, development in accordance with the Specific Plan may require upsizing of water and wastewater pipelines to accommodate the demands of the proposed project at full buildout. The expansion of onsite infrastructure would induce growth in the area because the project area would be able to accommodate future uses.

Changes in Existing Regulations

The Specific Plan area is designated by the County of Los Angeles 2035 General Plan land use plan as the following (see Figure 4-2, *Community Plan Land Uses*):

- Single-Family Residence (RD 2.3; 1 to 8 dwelling units per acre [du/ac]); 183 acres
- Two Family Residence (RD 3.1; 8 to 17 du/ac); 91 acres
- Medium Density Bonus (RD 3.2; 17 to 30 du/ac); 8 acres
- Senior Citizen-Density Bonus (SCD; 30 to 50 du/ac); 4 acres
- Regional Commercial (C.1); 21 acres
- Community Commercial (C.2); 36 acres
- Recreation/Open Space (OS.1); 1.6 acres
- Public/Quasi-Public Use (PL.1); 99 acres
- Transportation Corridor (TC); 25 acres

The anticipated adoption of Connect Southwest LA: A TOD Specific Plan for West Athens-Westmont would allow development of the following zoning districts: Single Family Residence Zone, Residential Planned Development Zone, Two-Family Residence Zone, Limited Multiple Residence Zone, Mixed Use 1 Zone, Mixed Use 2 Zone, Neighborhood Commercial Zone, Civic Center Zone, Public-Institutional Zone, and Buffer Strip Zone (see Figure 3-4, *Proposed Zoning Districts*). Buildout of the proposed project would introduce up to 5,454 residential units and approximately 3.5 million square feet of nonresidential uses.

Overall, implementation of the proposed Specific Plan would involve expanding onsite infrastructure and increasing intensity and density of permitted land uses, which would induce overall growth in the project area. However, it should be noted that the growth anticipated is within the projections assumed for the area (see Section 5.9, *Population and Housing*).

Would this project result in the need to expand one or more public services to maintain desired levels of service?

The proposed project would increase demand for police, fire, school, and library services. The Los Angeles County Fire Department provides fire protection and emergency services, and the Los Angeles County Sheriff's Department provides police protection to the project area. If necessary, future expansion of police

or fire services would be financed through development impact fees that are charged to project developers of all new developments; therefore, impacts to fire and police services would be less than significant.

Buildout of the Specific Plan would introduce approximately 3,204 additional residents to the project area, which would increase demand for school and library services as well. New students would likely attend schools in the Los Angeles Unified School District, and potential library patrons would likely visit the Woodcrest Library in the Community of Westmont. Project impacts related to school and library services would not adversely impact existing capacities or levels of service.

Overall, the proposed project would not result in the need to expand one or more public services. A full discussion of public service impacts is provided in Section 5.10, *Public Services*.

Would this project encourage or facilitate economic effects that could result in other activities that could significantly affect the environment?

During construction of future projects in accordance with the Specific Plan, a number of design, engineering, and construction-related jobs would be created. This would be temporary employment conditions lasting until project construction is completed; however, it would be a direct, growth-inducing effect of the proposed project.

Buildout of the Specific Plan would introduce up to 4,518 residential units and approximately 3.5 million square feet of nonresidential uses. The increase in residents and nonresidential development and associated jobs as a result of the proposed project would spur new economic investment in commercial, office, and industrial uses serving the Specific Plan area. Future residents would also pay property and sales tax for living and buying within the West Athens-Westmont communities. This would represent an increased demand for economic goods and services and could, therefore, encourage the creation of new businesses and/or the expansion of existing businesses, particularly within the transit and mixed-use corridors of the project area. Additionally, a guiding principle of the Specific Plan is to promote uses in proximity to the transit station, along major streets, and at significant intersections that benefit from the economic opportunities afforded by the presence of the Metro Green Line and major educational and public facilities. The Specific Plan encourages development of employment-generating uses along major corridors, supports the expansion and retention of the Los Angeles Southwest College and associated educational industries, and supports the redesign of commercial corridor street frontages to encourage active pedestrian and bicyclist activity and a growing local economy. Overall, the proposed project would facilitate economic growth in the West Athens-Westmont community.

Would approval of this project involve some precedent-setting action that could encourage and facilitate other activities that could significantly affect the environment?

Approval of the Connect Southwest LA project would not require the approval of discretionary actions that would set precedents for future projects with similar characteristics. The proposed project would require approval of a general plan amendment (GPA) and zone change (ZC) to change the land use designations and zoning districts onsite, and adoption of the Specific Plan. The GPA and ZC would expand the intensity and density of permitted uses onsite, which may encourage growth of a similar type in the areas surrounding the

10. Growth-Inducing Impacts of the Proposed Project

Specific Plan area. If additional development were allowed in the vicinity of the project, it may cause additional environmental impacts. However, future projects in the West Athens-Westmont community or neighboring cities (i.e., Inglewood, Hawthorne, Gardena, and Los Angeles) would require environmental review and discretionary approval by the applicable lead agencies (e.g., County Board of Supervisors or City Council). The proposed project would not change the existing protocol for project approval and would not provide precedents or make it more likely for other projects to gain approval of similar applications.

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