



Draft Environmental Impact Report

Duke Warehouse at Patterson Avenue and Nance Street Project SCH No. 2022010274

Prepared for:



October 2022



Draft Environmental Impact Report Duke Warehouse at Patterson Avenue and

Nance Street

Perris, California

SCH No. 2022010274

Project Applicant:

Prologis 3546 Concours Street Suite 100 Ontario, CA 91764

Lead Agency:

City of Perris Planning Division 135 N. "D" Street Perris, CA 92507 Mary Blais, Contract Planner (951) 943-5003

Prepared By:

ALBERT A. WEBB ASSOCIATES 3788 McCray Street Riverside, CA 92506 (951) 686-1070

October 2022

Table of Contents

Section 1 -	Executive Summary	. 1-1
1.1	Document Purpose	1-1
1.2	Project Site Location	1-1
1.3	Site Description	1-4
	1.3.1 General Plan and Zoning Designations	. 1-6
	1.3.2 Perris Valley Commerce Center Specific Plan	. 1-7
	1.3.3 MARB/IPA Airport Overlay Zone	. 1-7
1.4	Project Characteristics	1-12
	1.4.1 Site Preparation and Construction	1-12
	1.4.2 Specific Plan Amendment (Case No. 21-05267)	1-12
	1.4.3 Tentative Parcel Map 38259 (Case No. 21-05086)	1-12
	1.4.4 Development Plan Review (DPR 21-00005)	1-15
	1.4.5 On-and-Off-Site Infrastructure	1-21
	1.4.6 Sustainability Features	1-24
1.5	Land Use Applications	1-27
1.6	Utility Providers	1-27
1.7	Project Objectives	1-27
1.8	Discretionary Actions and Approvals	1-28
1.9	Areas of Controversy and Issues to be Resolved	1-29
1.10	Summary of Environmental Impacts	1-30
1.11	Alternatives to the Proposed Project	1-72
	1.11.1 Alternatives Summary	1-72
Section 2 –	Introduction	. 2-1
2.1	Background	2-1
2.2	Purpose and Scope	2-2
2.3	Compliance with CEQA	2-2
	2.3.1 Format	. 2-2
	2.3.2 CEQA Procedures	. 2-3
	2.3.3 Breadth of Environmental Analysis	. 2-3
2.4	Effects Found Not to be Significant during Preparation of the NOP	2-4
2.5	NOP Comment Letters	2-4
2.6	Comments Received at the Scoping Meeting	2-5
2.7	Lises of this EIR	2-0 2_7
0		
Section 3 –		. 3-1
3.1	Project Location	3-1 ₂ ₄
3.2	3.2.1 Conoral Plan and Zoning Designations	ວ-4 ຊຸດ
	3.2.2 Derris Valley Commerce Center Specific Den	. J-U 2 O
	3.2.2 Ferris valley Continuence Center Specific Flat	. ວ-ອ ລຸດ
		. ა-9

3.3	Project	Characteristics	3-12
	3.3.1	Site Preparation and Construction	3-12
	3.3.2	Specific Plan Amendment (Case No. 21-05267)	3-12
	3.3.3	Tentative Parcel Map 38259 (Case No. 21-05086)	3-12
	3.3.4	Development Plan Review (DPR 21-00005)	3-15
	3.3.5	On- and Off-site Infrastructure	3-21
	3.3.6	Sustainability Features	3-24
3.4	Land U	se Applications	3-27
3.5	Utility P	Providers	3-27
3.6	Project	Objectives	3-27
3.7	Discreti	onary Actions and Approvals	3-28
Section 4 –	Environ	mental Effects Found Not Significant	4-1
4.1	Effects	Found Not to be Significant during Preparation of the NOP.	4-1
4.2	Effects	Found Not to be Significant as Part of the EIR Process	4-3
Section 5 –	Environ	mental Analysis	5-1
5.1	Aesthet	ics	5.1-1
	Setting]	5.1-2
	Relate	d Regulations	5.1-4
	Desigr	Considerations	5.1-9
	Thresh	olds of Significance	5.1-9
	Enviro	nmental Impacts before Mitigation	5.1-10
	Recorr	nmended Mitigation Measures	5.1-14
	Summ	ary of Environmental Effects After Mitigation Measures Are	
	Implen	nented	5.1-14
5.2	Air Qua	lity	5.2-1
	5.2.1	Setting	5.2-4
	5.2.2	Related Regulations	5.2-14
	5.2.3	Design Considerations	5.2-29
	5.2.4	Thresholds of Significance	5.2-32
	5.2.5	Environmental Impacts before Mitigation	5.2-32
	5.2.6	Recommended Mitigation Measures	5.2-46
	5.2.7	Summary of Environmental Effects After Mitigation Measure	es
		Are Implemented	5.2-47
5.3	Biologic	cal Resources	5.3-1
	5.3.1	Setting	5.3-2
	5.3.2	Related Regulations	5.3-7
	5.3.3	Design Considerations	5.3-12
	5.3.4	Thresholds of Significance	5.3-12
	5.3.5	Environmental Impacts Before Mitigation	5.3-12
	5.3.6	Recommended Mitigation Measures	5.3-18

	5.3.7	Summary of Environmental Effects After Mitigation Measure	ures
		Are Implemented	5.3-18
5.4	Cultura	al Resources	5.4-1
	5.4.1	Setting	5.4-2
	5.4.2	Related Regulations	5.4-11
	5.4.3	Design Considerations	5.4-18
	5.4.4	Thresholds of Significance	5.4-18
	5.4.5	Environmental Impacts Before Mitigation	5.4-18
	5.4.6	Recommended Mitigation Measures	5.4-20
	5.4.7	Summary of Environmental Effects After Mitigation Measure	ures
		Are Implemented	5.4-23
5.5	Energy	Conservation	5.5-1
	5.5.1	Setting	5.5-5
	5.5.2	Related Regulations	5.5-8
	5.5.3	Design Considerations	5.5-17
	5.5.4	Thresholds of Significance	5.5-20
	5.5.5	Environmental Impacts before Mitigation	5.5-20
	5.5.6	Recommended Mitigation Measures	5.5-26
	5.5.7	Summary of Environmental Effects after Mitigation Measu	ures
		Are Implemented	5.5-27
5.6	Geolog	y and Soils	5.6-1
	5.6.1	Setting	5.6-2
	5.6.2	Related Regulations	5.6-6
	5.6.3	Design Considerations	5.6-9
	5.6.4	Thresholds of Significance	5.6-9
	5.6.5	Environmental Impacts before Mitigation	5.6-10
	5.6.6	Recommended Mitigation Measures	5.6-16
	5.6.7	Summary of Environmental Effects After Mitigation Measure	ures
		Are Implemented	5.6-17
5.7	Greenh	nouse Gas Emissions	5.7-1
	5.7.1	Setting	5.7-8
	5.7.2	Related Regulations	5.7-13
	5.7.3	Design Considerations	5.7-41
	5.7.4	Thresholds of Significance	5.7-43
	5.7.5	Environmental Impacts Before Mitigation	5.7-43
	5.7.6	Recommended Mitigation Measures	5.7-56
	5.7.7	Summary of Environmental Effect After Mitigation Measure	res
		Are Implemented	5.7-56
5.8	Hazard	Is and Hazardous Materials	5.8-1
	5.8.1	Setting	5.8-2
	5.8.2	Related Regulations	5.8-5

	5.8.3	Design Considerations	5.8-13
	5.8.4	Thresholds of Significance	5.8-14
	5.8.5	Environmental Impacts Before Mitigation	5.8-14
	5.8.6	Recommended Mitigation Measures	5.8-22
	5.8.7	Summary of Environmental Effect After Mitigation Measur	es
		Are Implemented	5.8-22
5.9	Hydrold	ogy and Water Quality	5.9-1
	5.9.1	Setting	5.9-3
	5.9.2	Related Regulations	5.9-10
	5.9.3	Design Considerations	5.9-21
	5.9.4	Thresholds of Significance	5.9-25
	5.9.5	Environmental Impacts Before Mitigation	5.9-25
	5.9.6	Recommended Mitigation Measures	5.9-31
	5.9.7	Summary of Environmental Effects after Mitigation Measu	ires
		Are Implemented	5.9-31
5.10	Land U	se and Planning	5.10-1
	5.10.1	Setting	5.10-1
	5.10.2	Related Regulations	5.10-2
	5.10.3	Design Considerations	5.10-4
	5.10.4	Thresholds of Significance	5.10-4
	5.10.5	Environmental Impacts Before Mitigation	5.10-4
	Consis	stency with Southern California Association of Government	s'
		Connect SoCal Plan	5.10-16
	5.10.6	Recommended Mitigation Measures	5.10-19
	5.10.7	Summary of Environmental Effects After Mitigation Measu	ires
		Are Implemented	5.10-19
5.11	Noise	<u> </u>	5.11-1
	5.11.1	Setting	5.11-2
	5.11.2	Related Regulations	5.11-12
	5.11.3	Design Considerations	5.11-20
	5.11.4	Thresholds of Significance	5.11-20
	5.11.5	Environmental Impacts Before Mitigation	5.11-21
	5.11.6	Recommended Mitigation Measures	5.11-29
	5.11.7	Summary of Environmental Effects After Mitigation Measu	ires
		Are Implemented	5.11-29
5.12	Utilities	and Service Systems	5.12-1
	5.12.1	Setting	5.12-3
	5.12.2	Related Regulations	5. 12-0
	5.12.3	Design Considerations	
	5.12.4		5.12-20
	5.12.5	Environmental Impacts Before Mitigation	5.12-21

		5.12.6	Recommended Mitigation Measures	5.12-25
		5.12.7	Summary of Environmental Effects After Mitigation Measure	€S
			Are Implemented	5.12-26
	5.13	Transpo	ortation	5.13-1
		5.13.1	Setting	5.13-2
		5.13.2	Related Regulations	5.13-9
		5.13.3	Design Considerations	5.13-20
		5.13.4	Thresholds of Significance	5.13-26
		5.13.5	Environmental Impacts Before Mitigation	5.13-26
		5.13.6	Recommended Mitigation Measures	5.13-30
		5.13.7	Summary of Environmental Effects After Mitigation Measure	€S
			Are Implemented	5.13-31
	5.14	Tribal C	ultural Resources	5.14-1
		5.14.1	Setting	5.14-1
		5.14.2	Related Regulations	5.14-3
		5.14.3	Design Considerations	5.14-10
		5.14.4	Thresholds of Significance	5.14-10
		5.14.5	Environmental Impacts Before Mitigation	5.14-10
		5.14.6	Recommended Mitigation Measures	5.14-13
		5.14.7	Summary of Environmental Effects After Mitigation Measure	es e
			Are Implemented	5.14-13
Section	6 – 0	Other C	EQA Topics	6-1
	6.1	Significa	ant Unavoidable Adverse Impacts	6-1
	6.2	Growth	Inducing Impacts	6-1
		6.2.1	Short-Term Uses versus Long-Term Productivity	6-2
	6.3	Significa	ant Irreversible Impacts	6-3
		6.3.1	Irreversible Commitment of Resources	
		6.3.2	Irreversible Environmental Changes	
		6.3.3	Potential Environmental Damage from Accidents	6-4
Section	17-0	Cumulat	tive Impact Analysis	
	7.1	Introduc	ction	7-1
	7.2	Cumula	tive Analysis Setting	7-2
	7.3	Assessi	nent of Cumulative Impacts	
		7.3.1		
		7.3.2	Air Quality	
		1.3.3		
		7.3.4		
		1.3.5		
		7.3.6	Geology/Solls	
		1.3.1	Greennouse Gas Emissions	
		7.3.8	Hazards and Hazardous Materials	

		7.3.9 Hydrology and Water Quality	7-7
		7.3.10 Land Use	7-8
		7.3.11 Noise	7-8
		7.3.12 Transportation	7-9
		7.3.13 Tribal Cultural Resources	
		7.3.14 Utilities and Service Systems	7-12
	7.4	Conclusion	7-13
Sectio	n 8 –	Alternatives to the Proposed Project	
	81	Project Objectives	8-1
	8.2	Summary of the Project's Significant Unavoidable Impacts	
	8.3	Rationale for Alternative Selection	
	8.4	Alternatives Rejected from Further Consideration	8-2
		8.4.1 Alternative Project Location	
		8.4.2 No Project/No Specific Plan Amendment Alternative	8-3
	8.5	Description of Alternatives Evaluated in the DEIR	8-4
		8.5.1 Alternative 1 – No Project/No Build	8-4
	8.6	Comparison of Alternatives	8-9
	8.7	Environmentally Superior Alternative	8-9
Sectio	n 9 –	References	
	Envi	ronmental Effects Found Not Significant	9-1
	Aest	thetics	
	Air C	Quality	9-2
	Biolo	ogical Resources	9-5
	Cult	ural Resources	9-5
	Ener	ſġy	9-6
	Geo	logy and Soils	9-10
	Gree	enhouse Gas Emissions	9-11
	Haza	ards and Hazardous Materials	9-18
	Hydı	rology and Water Quality	9-19
	Lanc	d Use and Planning	9-21
	Nois	Se	9-21
	Utilit	ties and Service Systems	9-22
	Iran	Isportation	
	Iriba	al Uultural Resources	
		uments incorporated by Reference	
	DOCI	ument Preparation Statt	9-26

Appendices

Appendix A – Documents Related to the Notice of Preparation

- A.1 Notice of Preparation
- A.2 Written Comments Received in Response to the NOP

Appendix B – Air Quality

- B.1 Air Quality/Greenhouse Gas Analysis for Duke Warehouse at Patterson Avenue and Nance Street (DPR No.21-00005), City of Perris
- B.2 Health Risk Assessment Duke Warehouse at Patterson Avenue and Nance Street (DPR No. 21-00005)

Appendix C – Biological Resources

- C.1 Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Biological Resources Compliance Analysis
- C.2 Western Riverside County Multiple Species Habitat Conservation (MSHCP) Focused Burrowing Owl Surveys for the 35.65-Acres Duke
- C.3 Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Biological Resources Compliance Analysis for the 7.65 Acre Duke Reality Perris Valley Channel Lateral B Stage 4 Connection Project, City of Perris/Unincorporated Riverside County, California

Appendix D – Cultural Resources

- D.1 Cultural Resources Assessment for the Duke Warehouse at Patterson Avenue and Nance Street, City of Perris, Riverside County, California
- D.2 A Phase I Cultural Resources Survey for The Perris Valley Channel Lateral B Extension Project, Perris California

Appendix E – Energy

E Energy Calculation Tables Duke Warehouse at Patterson Avenue and Nance Street

Appendix F – Geology and Soils

- F.1 Geotechnical Investigation Proposed Warehouse NEC Patterson Avenue and Nance Street Perris, California
- F.2 Paleontological Technical Memorandum for the Duke Warehouse at Patterson Avenue and Nance Street, City of Perris, Riverside County, California
- F.3 Paleontological Assessment For The Perris Valley Channel Lateral B Extension Project, Perris, California

Appendix G – Hazards and Hazardous Materials

- G.1 Phase 1 Environmental Site Assessment Update
- G.2 Airport Land Use Commission Development Review Findings

Appendix H – Hydrology and Water Quality

- H.1 Duke Patterson and Nance P21-00005 City of Riverside, Riverside County, California Preliminary Drainage Study
- H.2 Project Specific Water Quality Management Plan
- H.3 Water Supply Assessment Patterson and Nance

Appendix I – Noise

I

Noise and Vibration Study Duke Warehouse at Patterson Avenue & Nance Street City of Perris

Appendix J – Utilities and Service Systems

J.1 Patterson & Nance (APN 314-153-024 thru 314-161-050) WS:2020-1153, WO: 16238 Design Conditions Report

Appendix K – Transportation

- K.1 Patterson Nance Warehouse Vehicle Miles Traveled (VMT) Analysis Case Number DPR 21-00005
- K.2 Patterson-Nance Warehouse Project Traffic Impact Analysis DPR 21-00005

List of Figures

Figure 1-1- Regional Map	1-2
Figure 1-2 – Aerial Map	1-3
Figure 1-3 – Project Site Photographs	1-5
Figure 1-4 – Zoning	1-9
Figure 1-5 – General Plan Land Use	1-10
Figure 1-6 – Specific Plan Land Use	1-11
Figure 1-7 – Proposed Specific Plan Amendment Circulation Plan	1-13
Figure 1-8 – Tentative Parcel Map 38259	1-14
Figure 1-9 - Development Plan Review No. 21-00005	1-17
Figure 1-10 - Building Elevations	1-18
Figure 1-11 - Screen Wall and Line of Site	1-19
Figure 1-12 – Conceptual Landscape Plan	1-20
Figure 1-13 – Off-Site Improvements	1-23
Figure 3-1 – Regional Map	
Figure 3-2 – Aerial Map	
Figure 3-3 – Project Site Photographs	
Figure 3-4 – Zoning	
Figure 3-5 – General Plan Land Use	
Figure 3-6 – Specific Plan Land Use	
Figure 3-7 – Proposed Specific Plan Amendment Circulation Plan	
Figure 3-8– Tentative Parcel Map 38259	
Figure 3-9– Development Plan Review No. 21-00005	
Figure 3-10 – Building Elevations	
Figure 3-11 – Screen Wall and Line of Site	
Figure 3-12 – Conceptual Landscape Plan	
Figure 3-13 – Off-Site Improvements	
Figure 5.2-1 – HBA Discrete Receptor Locations	
Figure 5.3-1 – Project Site Vegetation Communities Map	5.3-4
Figure 5.3-2 – Off-Site lateral-B Stage 4 Vegetation Communities Map	5.3-5
Figure 5.3-3 - MSHCP Survey Areas	5 3-6
Figure 5.6-1 – Boring Locations	5.6-4
Figure 5.8-1 – MARB/IPA Zones	5 8-4
Figure 5.9-1 – Watershed Map	5.9-5
Figure 5.9-2- Existing Drainage Condition	5.9-6
Figure 5.9-3- Groundwater Basins	5 9-8
Figure 5.9-4- Flood Insurance Bate Maps	5 9-9
Figure 5.9-5 - Proposed On-Site Drainage Facilities	5 9-23
Figure 5.9-6 – Proposed Off-Site Drainage Facilities	5 9-24
Figure 5.11-1 – Beceptor and Monitoring Locations	5 11-6
Figure 5.11-2 – Airport Noise Contours	5 11-9
Figure 5 13-1 - City of Perris General Plan Circulation Floment	
Figure 5 13-2 – PVCCSP Circulation Plan and Truck Route	5 12-5
Figure 5 13-3 – PVCCSP Mass Transit Circulation	5 13-6
Figure 5 13-4 – City of Perris General Plan Rikeway Systems	5 13-7
Figure 5 13-5 - Project Passenger Car Traffic Distribution	5 13-24
Figure 5 13-6 - Project Truck Traffic Distribution	5 13-25

List of Tables

Table 1-A – Surrounding Land Uses	1-4
Table 3-A – Surrounding Land Uses	3-4
Table 5.2-A- Perris Meteorological Data	5.2-6
Table 5.2-B - Primary Sources and Effects of Criteria Pollutants	5.2-12
Table 5.2-C- Air Quality Monitoring Summary from 2018-2020 (SRA 24)	5.2-13
Table 5.2-D- Attainment Status	5.2-14
Table 5.2-E - CALGreen Code Electric Vehicle Charging Space Calculation	5.2-19
Table 5.2-F-SCAQMD CEQA Regional Significance Thresholds	5.2-34
Table 5.2-G – Estimated Daily Construction Emissions	5.2-35
Table 5.2-H – Estimated Daily Project Operation Emissions (Summer)	5.2-36
Table 5.2-I- Estimated Daily Project Operation Emissions (Winter)	5.2-36
Table 5.2-J – LST Results for Construction Emissions	5.2-38
Table 5.2-K – LST Results for Operational Emissions	5.2-39
Table 5.2-L - Project-Generated Cancer Risk (2023) at Discrete Receptors	5.2-45
Table 5.2-M – Mitigated Estimated Daily Construction Emissions	5.2-47
Table 5.4-A – Cultural Resources in the Study Area	5.4-9
Table 5.4-B – Native American Agencies Contacted	5.4-10
Table 5.5-A – Electricity Consumption in SCE Service Area (2020) ^{a, b}	5.5-6
Table 5.5-B – Natural Gas Consumption in SCG Service Area (2020) ^a	5.5-7
Table 5.5-C – Construction Energy Use	5.5-21
Table 5.5-D – Annual Fuel Consumption	5.5-23
Table 5.7-A – Global Warming Potentials and Atmospheric Lifetimes	5.7-11
Table 5.7-B – California Green Building Code Electric Vehicle Charging Space	
Calculation ^a	5.7-31
Table 5.7-C – Project Construction Equipment GHG Emissions	5.7-46
Table 5.7-D – Energy-Related GHG Emissions	5.7-47
Table 5.7-E – Total Project-Related GHG Emissions	5.7-49
Table 5.8-A – Building Average Land Use Intensity Calculation	5.8-18
Table 5.9-A - Constituents and Beneficial Uses for Receiving Waters	5.9-12
Table 5.9-B - Numeric Water Quality Objectives for Receiving Waters	5.9-13
Table 5.10-A - Consistency with Perris GP 2030 Goals and Policies	5.10-5
Table 5.10-B - Proposed Project Consistency with Connect SoCal Goals	5.10-16
Table 5.11-A - Typical Noise Levels of Common Sounds	5.11-3
Table 5.11-B – Common Noise Descriptors	5.11-4
Table 5.11-C - Existing (Ambient) Long-Term (24-hour) Noise Level Measurement	s ¹ 5.11-7
Table 5.11-D – Equipment by Construction Activity	5.11-10
Table 5.11-E - Construction Schedule	5.11-11
Table 5.11-F – Reference Noise Levels	5.11-11
Table 5.11-G - City of Perris Land Use Compatibility Guidelines	5.11-14
Table 5.11-H - City of Perris Outdoor Noise Regulations	5.11-16
Table 5.11-I – City of Perris Noise Standards Summary	5.11-19
Table 5.11-J – Construction Vibration Damage Criteria	5.11-21
Table 5.11-K - Ground-borne Vibration Impact Criteria for General Assessment	5.11-21
Table 5.11-L - Construction Noise Levels by Construction Phase	5.11-22

Table 5.11-M – Change in Existing Noise Levels at Road Segments as a	
Result of Project	5.11-24
Table 5.11-N – Project Only Operational Noise Levels (dBA Lmax)	5.11-25
Table 5.11-O – Project Only Operational Noise Levels (dBA Leq) & CNEL	5.11-25
Table 5.11-P – Daytime Operational Noise Levels (dBA Leq)	5.11-26
Table 5.11-Q – Nighttime Operational Noise Levels (dBA Leq)	5.11-26
Table 5.11-R - Construction Equipment Vibration Levels	5.11-27
Table 5.13-A – Trip Generation Rates	5.13-22
Table 5.13-B- Project Trip Generation	5.13-23
Table 5.13-C - Project-Generated VMT	5.13-29
Table 6-A – Demographics and Growth	6-2
Table 7-A – Project Generated VMT	7-10
Table 8-A - Alternative 1 (No Project Alternative) Ability to Meet Project Objectives	8-7
Table 8-B – Comparison of Alternatives Matrix	8-9

Acronyms

AAQS	Ambient Air Quality Standards
AB	Assembly Bill
AB-32	The California Global Warming Solutions Act of 2006
AB-52	Assembly Bill 52
AB-939	California Integrated Waste Management Act
ACBCI	Agua Caliente Band of Cahuilla Indians
ACT	Advanced Clean Trucks
ADA	Americans with Disabilities Act
ADP	Area Drainage Plan
ADT	Average Daily Traffic
AFY	Acre Feet Per Year
AIA	Airport Influence Area
AICUZ	Air Installation Compatible Use Zones
ALUC	Airport Land Use Commission
AMI	Advanced Metering Infrastructure
AMSL	Above Mean Sea Level
ANSI	American National Standards Institute
AOZ	Airport Overlay Zone
APN	Assessor's Parcel Number
APZ	Accident Potential Zone
APZ-1	Accident Potential Zone I
APZ-2	Accident Potential Zone II
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
ARRA	American Recovery and Reinvestment Act
ASF	Age Specific Factor
ASHRAE	American Society of Heating, Refrigeration, and Air Conditioning
	Engineers
BACT	Best Available Control Technology
Basin	South Coast Air Basin
BAU	Business-as-usual
BMP	Best Management Practices
BP	Before Present
BPO	Business Professional Office
Btu	British thermal units
BUOW	Burrowing Owl
С	Commercial
CAA	Federal Clean Air Act
CAAP	Clean Air Action Plan
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy

City of Perris Duke Warehouse at Patterson Avenue and Nance Street DEIR

Cal/ARP	California Emergency Management Agency's Accidental Release
	Prevention
CalEEMod	California Emissions Estimator Model
Cal EPA	California Environmental Protection Agency
Cal Fire	California Department of Forestry and Fire Protection
CalGreen	California Green Building Standards Code
CalRecycle	California Department of Resources Recycling and Recovery
CalTrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CARE CA	Californians Allied for a Responsible Economy
CASGEM	California Statewide Groundwater Elevation Monitoring
CBC	California Building Code
CBSB	California Building Standards Commission
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDF	California Department of Forestry and Fire Protection
CDFW	California Department of Fish and Wildlife
CDMV	Department of Motor Vehicles
CEAP	Community Energy Action Plan
CEC	California Energy Commission
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CF ₄	Perfluoromethane
CFC	California Fire Code
CFCs	Chlorofluorocarbons
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
CGS	California Geological Survey
CH ₄	Methane
CHP	Combined Heat and Power
CHRIS	California Historical Resource Information System
CIWMB	California Integrated Waste Management Board
CMA	Congestion Management Agency
CMP	Congestion Management Program
CNEL	Community Noise Equivalent Level
CNRA	California Natural Resources Agency
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CO ₂ e	CO ₂ -equivalents
COG	Council of Governments
CPUC	California Public Utilities Commission

CREC	Controlled Recognized Environmental Conditions
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
CWA	Federal Clean Water Act
CY	Cubic Yards
CZ	Clear Zone
DAMP	Drainage Area Management Plan
dB	decibel
dBA	A-weighted decibel
Bcf	Billion Cubic Feet
DBESP	Determination of Biologically Equivalent or Superior Preservation
DC	Design Conditions Report
DCV	Design Capture Volume
DGE	Diesel Gallons Equivalent
DEIR	Draft Environmental Impact Report
DIF	Development Impact Fees
DNL	Dav-Night Average Noise Level
DOC	Department of Conservation
DOF	U.S. Department of Energy
DOGGR	Division of Oil, Gas, and Geothermal Resources
DOPP	Database of Proposed Projects
DOT	Department of Transportation
DBR	Daily Breathing Bate
DPM	Diesel Particulate Matter
DPR	Development Plan Beview
DTSC	Department of Toxic Substances Control
DWR	California Department of Water Resources
FD	Exposure Duration
FG	Electric Generation
FIC	Eastern Information Center
FIR	Environmental Impact Beport
FIS	Environmental Impact Statement
EISA	Environmental impact statement
	Eastern Municipal Water District
FOR	Ensanced Ail Becovery
EDΔ	Environmental Protection Agency
	Enderal Energy Policy and Conservation Act
	Endangered Species Act
	Electric Vehicles
	Electric Vehicles
	Electric vehicle Supply Equipment
	Fraction of Time at Home
ГАК	rederal Aviation Regulations

FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program
FPEIR	Final Program Environmental Impact Report
FRA	Federal Railroad Administration
FRAP	Fire and Resources Protection
FTA	Federal Transit Administration
FT	Feet
GGE	Gross Gasoline Equivalents
GHG	Greenhouse Gas
GI	General Industrial
GIS	Geographic Information System
GMZ	Groundwater Management Zone
GP 2030	Perris Comprehensive General Plan 2030
GP 2030 EIR	Perris Comprehensive General Plan EIR
GSA	Groundwater Sustainability Agencies
GSP	Groundwater Sustainability Plan
GWh	Million Kilowatt-Hours
GWMP	Groundwater Management Plan
GWP	Global Warming Potential
HABS	Historic American Buildings Survey
HAER	Historic American Engineering Record
HANS	Habitat Evaluation and Acquisition Negotiation Strategy
HAPs	Hazardous Air Pollutants
HC	Hydrocarbons
H&C	Health and Safety Code
HCOC	Hydrologic Condition of Concern
HCP	Habitat Conservation Plan
HDV	Heavy Duty Vehicle
HFCs	Hydrofluorocarbons
HMTA	Hazardous Materials Transportation Act
HMTUSA	Hazardous Materials Transportation Uniform Safety Act
HP	Horse Power
HRA	Health Risk Assessment
HRECs	Historical Recognized Environmental Conditions
HSC	Health and Safety Code
HSJ	Hemet/San Jacinto Ground Water Management Plan
HSWA	Hazardous and Solid Waste Amendments
HVAC	Heating, Ventilation, and Air Conditioning
HVIP	Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project
HVLP	High Velocity-Low Pressure

HWCL	Hazardous Waste Control Law
IBC	International Building Code
IPA	Inland Port Airport
IPCC	Intergovernmental Panel on Climate Change
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Traffic Engineers
JPR	Joint Project Review
kWh	Kilowatt-Hour
kBtus	kilo-British thermal units
Lb	Pound
LBs/SF	Pounds per Square Foot
LCFS	Low Carbon Fuel Standards
LDMF	Local Development Mitigation Fee
LED	Light-Emitting Diode
LEED	Leadership in Energy and Environmental Design
L _{eq}	Equivalent Continuous Sound Level
LI	Light Industrial
LID	Low Impact Development
LOS	Level of Service
LST	Localized Significance Threshold
LUCP	Land Use Compatibility Plan
LRTS	Long Range Transportation Study
MARB	March Air Reserve Base
MARB/IPA	March Air Reserve Base/Inland Port Airport
MARB/IPA LUCP	March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan
MATES	Multiple Air Toxics Exposure Study
MBTA	Migratory Bird Treaty Act
MDP	Master Drainage Plan
MEP	Maximum Extent Practicable
MGD	Million Gallons Per Day
MHMP	County of Riverside Multi-Jurisdictional Hazard Mitigation Plan
MICR	Maximum Individual Cancer Risk
MLD	Most Likely Descendent
MM	Mitigation Measure
MPOs	Metropolitan Planning Organization
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
MTA	Metropolitan Transportation Authority
MTCO ₂ E	Metric Tons of CO ₂ E
MWD	Metropolitan Water District of Southern California

MY	Model Years
NAAQS	National Ambient Air Quality Standards
n/a	Not applicable
NAHC	Native American Heritage Commission
NAS	National Academy of Sciences
NCCP	Natural Communities Conservation Plan
NEPA	National Environmental Policy Act
NGV	Natural Gas Vehicles
NH4NO3	Ammonium Nitrate
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic and Safety Administration
NPDES	National Pollutant Discharge Elimination System
NPRBBD	North Perris Road and Bridge Benefit District
NO	Nitric Oxide
NO ₂	Nitrogen Dioxide
NOx	Oxides of Nitrogen
NOP	Notice of Preparation
NRHP	National Register of Historic Places
NWS	National Weather Service
O ₃	Ozone
OCP	Organochlorine Pesticides
OEHHA	Office of Environmental Health and Hazard Assessment
OPC	Ocean Protection Council (California)
OPR	Governor's Office of Planning and Research
OS	Open Space
OSHA	U.S. Department of Labor's Occupational Safety and Health
	Administration
PA 1	Planning Area
PAH	Polycyclic Aromatic Hydrocarbons
Pb	Lead
PCE	Passenger Car Equivalence
PEL	Permissible Exposure Limit
PEV	Plug-in Electric Vehicle
PG&E	Pacific Gas & Electric
Phase I ESA	Phase I Environmental Site Assessment
PQP	Public/Quasi-Public
PM	Atmospheric Particulate Matter
PM-2.5	Particulate Matter less than 2.5 microns in diameter
PPV	Peak Particle Velocity
PM-10	Particulate Matter less than 10 microns in diameter
PRC	Public Resources Code
PRIMMP	Paleontological Resource Impact Mitigation Monitoring Program
PV	Photovoltaic

PVC	Perris Valley Channel
PVCCSP	Perris Valley Commerce Center Specific Plan
PVCCSP EIR	Perris Valley Commerce Center Specific Plan Environmental Impact
	Report
PVCCSP IS	Perris Valley Commerce Center Specific Plan Initial Study
PVL	Perris Valley Rail Line
PVSD	Perris Valley Storm Drain
PWQMP	Preliminary Water Quality Management Plan
QSD	Qualified Stormwater Pollution Prevention Plan Developer
RBOB	Reformulated Gasoline Blendstock for Oxygenate Blending
RCA	Western Riverside County Regional Conservation Agency)
RCALUC	Riverside County Airport Land Use Commission
RCALUCP	Riverside County ALUCP
RCB	Reinforced Concrete Box
RCDEH	Riverside County Department of Environmental Health
RCFC&WCD	Riverside County Flood Control and Water Conservation District
RCHCA	Riverside County Habitat Conservation Agency
RCLS	Riverside County Library System
RCNM	Roadway Construction Noise Model
RCP	Reinforced Concrete Pipe
RCRA	Resource Conservation and Recovery Act
RCSD	Riverside County Sheriff's Department
RCTC	Riverside County Transportation Commission
RCDWR	Riverside County Department of Waste Resources
RCGP EIR	Riverside County General Plan Environmental Impact Report
REC	Recognized Environmental Conditions
REL	Reference Exposure Level
RFD	Riverside Fire Department
RFS	Renewable Fuel Standard
RMS	Root Mean Square
ROG	Reactive Organic Gases
ROW	Right of Way
RPS	Renewable Portfolio Standard
RSHA	Regional System of Highways and Arterials
RST	Regional Significance Threshold
RTA	Riverside Transit Agency
RTPs	Regional Transportation Plans
RTPA	Regional Transportation Planning Agency
RTP/SCS	Regional Transportation Plan / Sustainable Communities Strategy
RWRF	Regional Water Reclamation Facilities
RWQCB	Regional Water Quality Control Board
RWQCP	Regional Water Quality Control Plant
SB 100	Senate Bill 100

SB 350 SB 605	Senate Bill 350 Senate Bill 605
SB 1016	Solid Waste Disposal Measurement Act of 2008
SBCTA	Senale Bill San Bornardino County Transportation Authority
SB X7-7	Water Conservation Act of 2009
SCAG	Southern California Association of Governments
SCAOMD	South Coast Air Quality Management District
SCF	Southern California Edison
SCS	Sustainable Communities Strategy
SoCal Gas	Southern California Gas Company
SDG&E	San Diego Gas & Electric
SEER	Seasonal Energy Efficiency Ratio
SCMA	Sustainable Groundwater Management Act
SF	Square Feet
SHMA	Seismic Hazards Mapping Act
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
SKR	Stephens' Kangaroo Rat
SLCP	Short-lived Climate Pollution
SLF	Sacred Lands File
SKR HCP	Stephens' Kangaroo Rat Habitat Conservation Plan
SO ₂	Sulfur Dioxide
SOON	Surplus Off-road Opt-in for NOx
SOx	Sulfur Oxides
SR-60	State Route 60
SRA	Source Receptor Area
SRA	State Responsibility Area
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TAZ	Transportation Analysis Zone
TCA	Trichloroethane
TCM	Transportation Control Measure
	Best Available Control Technology for Toxics
TEA-21	Iransportation Equity Act for the 21st Century
	I raffic Impact Analysis
TMDL	Total Maximum Daily Load
	Transit-Oriented Development
	Tentative Parcel Map
IUA	I raditional Use Area

Transportation Uniform Mitigation Fee (Western Riverside County)
Uniform Building Code
University of California, Riverside
University of California, Riverside Archaeological Research Unit
University of California Museum of Paleontology
U.S. Army Corps of Engineers
United States Census Bureau
United States Department of Agriculture
United States Department of Transportation
United States Environmental Protection Agency
United States Geological Survey
Urban Water Management Plan
Urban Water Management Planning Act
Vibration Decibel
Very High Fire Hazard Severity Zone
Vehicle Hours Traveled
Voucher Incentive Program
Vehicle Miles Traveled
Volatile Organic Compound
Val Verde Unified School District
Williamson Act
Western Regional Climate Action Initiative
Waste Discharge Requirements
Water Efficient Landscape Orientation
Water Quality Management Plan
Western Riverside County Council of Governments
Western Regional Climate Center
Western Riverside Energy Leader Partner
Waste Reuse and Recycling Act
Water Supply Assessment
Western Sciences Center
West San Jacinto Groundwater Basin Management Plan
Zero-emission vehicle

City of Perris Duke Warehouse at Patterson Avenue and Nance Street DEIR

Section 1 - Executive Summary

1.1 Document Purpose

This Draft Environmental Impact Report (DEIR) has been prepared to inform decision-makers and the public of the potentially significant environmental effects associated with the project approvals for the Duke Warehouse at Patterson Avenue and Nance Street (Project) in the City of Perris. This study has been prepared pursuant to the California Environmental Quality Act, known as CEQA, (California Public Resources Code Sections 21000 et seq.) and the Guidelines for Implementation of the Environmental Quality Act (State CEQA Guidelines) (California Code of Regulations, Sections 15,000, et seq.). The City of Perris is the Lead Agency for the proposed Project under CEQA and is responsible for the preparation of this DEIR.

1.2 Project Site Location

The overall Project vicinity is shown on **Figure 1-1 – Regional Map**. The Project site is located within Section 1, Township 4 South, Range 4 West, San Bernardino Base and Meridian. The approximate 35.7-net-acre Project site is located at the northeastern corner of Patterson Avenue and Nance Street, in the City of Perris (City), Riverside County.

The Project site is located within the northwest portion of the Perris Valley Commerce Center Specific Plan (PVCCSP) which encompasses more than five square miles and over 3,500 acres in the northern end of the City. The PVCCSP planning area is relatively flat, sloping in a southeasterly direction with elevations ranging from 1,430 to 1,500 feet above mean sea level. (PVCCSP, p. 1.0-1, 1.0-5) The City lies on the Perris Block, a 20- by 50-square-mile mass of crystalline rocks generated during the Cretaceous time period (Perris Comprehensive General Plan 2030 (Perris GP 2030), p. SE-8). It is also located within the San Jacinto River Watershed, which drains an approximately 540-square-mile area of western Riverside County. The 250-foot-wide Perris Valley Channel is the major tributary to the San Jacinto River within the City and flows from north to south through southern Moreno Valley and Perris (Perris GP 2030 DEIR, p. IV-48).

The Project site is located approximately 0.1 mile to the southwest of March Air Reserve Base/Inland Port Airport (MARB/IPA) and approximately 0.20 mile east of the Interstate 215 (I-215) freeway. The major road that currently provides access to the Project site is Patterson Avenue. The freeway interchange closest to the Project site is at Harley Knox Boulevard, which is a designated truck route, approximately one-half mile to the northwest (**Figure 1-2 – Aerial Map**).





Figure 1-2 – Aerial Map Duke Warehouse at Patterson Avenue and Nance Street



0

1

250

500

1,000 Feet

1

1.3 Site Description

The Project site encompasses approximately 35.7 net acres located at the northeastern corner of Patterson Avenue and Nance Street, within the PVCCSP planning area in the City of Perris, California. The Assessor's Parcel Numbers (APNs) for the Project site are: 314-153-015 through -040, 314-153-042, 314-153-044, 314-153-046, 314-153-048, 314-160-005 through -012, and 314-160-033.

The Project site is unimproved and vacant, apart from three parcels (APNs 314-153-019, -020 and -021), totaling approximately 2.7 acres, located in the northwest corner of the Project site currently utilized for semi-truck trailer storage. The Project site is generally flat and dominated by fallow field croplands. Views of the Project site in its existing condition are included in **Figure 1-3 – Project Site Photographs**.

The site is situated at an elevation approximately 1,499 feet above mean sea level in the southwest corner to 1,486 feet above mean sea level in the northeast corner. The existing topography slopes approximately 1.0% in the southwest to northwest direction. The Project site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Mead Valley Area Plan. The Project site is not located within an MSHCP Criteria Cell, Cell Group, or Linkage Area. Vegetation types at the Project site consist primarily of fallow field croplands and disturbed habitat generally devoid of vegetation. No Riparian/Riverine areas or vernal pools are located within or adjacent to the Project site.

The area surrounding the Project site is dominated by industrial and commercial uses with some vacant land. Specifically, the Project site is bordered by an industrial warehouse to the south, commercial businesses to the north, vacant land and legal, non-conforming residential uses to the east, and commercial businesses and legal, non-conforming residential uses to the west as shown on **Figure 1-2 – Aerial Map** and described in **Table 1-A – Surrounding Land Uses**.

Direction from Project Site	Land Uses
North	Commercial uses and vacant land
East	Legal non-conforming residential uses and vacant land.
South	Industrial warehouse.
West	Commercial uses, legal non-conforming residential uses, and vacant land.



PHOTOGRAPH 1



PHOTOGRAPH 2





PHOTOGRAPH 3

-L Source: MSHCP Conservation Plan 2022, Site Photographs



PHOTOGRAPH 4



Figure 1-3 – Project Site Photographs Duke Warehouse Patterson Avenue and Nance Street





There is limited existing water, sewer, recycled water, and drainage facilities currently serving the Project site. Existing roadways surrounding the Project site include Patterson Avenue, Nance Street, and Nevada Avenue. Harley Knox Boulevard, a City-designated truck route, is in close proximity to the Project site to the north. The PVCCSP Circulation Plan designation and current improvements to these roadways are described below.

- Harley Knox Boulevard is an east-west six-lane roadway classified as an Arterial in the PVCCSP Circulation Plan. Within the Project vicinity, it has either a raised, landscaped median or a two-way left-turn median lane. The proposed Project does not include any improvements to Harley Knox Boulevard.
- Patterson Avenue is a north-south two-lane roadway with a two-way left-turn median lane from California Avenue to Markham Street. A Class II bike lane is included in each direction. It is classified as a Collector in the PVCCSP Circulation Plan, terminating north of Harley Knox Boulevard at Nandina Avenue and south of Markham Street. The proposed Project includes improvements to Patterson Avenue as described in Section 3.3.5, On- and Off-Site Infrastructure.
- Nevada Avenue is a north-south two-lane undivided roadway classified as a Local roadway per the PVCCSP Circulation Plan. It terminates to the north at Harley Knox Boulevard and to the south at Nance Street. The proposed Project includes improvements to Nevada Avenue as described in Section 3.3.5, On- and Off-Site Infrastructure.
- Nance Street is an east-west two-lane undivided roadway classified as a Local roadway per the PVCCSP Circulation Plan. It terminates to the west at Wade Avenue and to the east at Indian Avenue. It is currently an undeveloped dirt road between Patterson Avenue and Webster Avenue. The proposed Project includes a Specific Plan Amendment to delete this roadway from the PVCCSP Circulation Plan and a Tentative Parcel Map that would vacate the dedicated rightof-way.

Refer to Section 5.13 – Transportation for additional discussion regarding streets in the vicinity of the Project site.

California Avenue and Nance Street are designated as Local roadways in the PVCCSP Circulation Plan that traverse the Project site in an east-west direction. The City accepted the right-of-way for Nance Street, but not for California Avenue within the Project site. No improvements have been made to these planned roadways. As discussed in Section 3.3.2, the Project Applicant proposes a Specific Plan Amendment to the PVCCSP to delete these planned streets from the PVCCSP Circulation Plan.

1.3.1 General Plan and Zoning Designations

The Project site is located within Planning Area 1 (PA 1), North Commercial/Industrial, of the Perris GP 2030, which consists of approximately 1,925 acres and is bounded by the MARB/IPA to the north, I-215 to the west, City limits near Lake Perris to the east, and Ramona Expressway to the south. PA 1 is primarily made up of land designated for industrial use with very little area designated for residential use. The industrial planning of PA 1 is based upon the restrictions placed on properties in this area due to flight operations of MARB/IPA. Specifically, the Project site has a Perris GP 2030 Land Use Designation of Specific Plan – Perris Valley Commerce Center Specific Plan and is zoned PVCCSP.

(Figure 1- 4 – Zoning, Figure 1-5 – General Plan Land Use). The area to the west of PA 1 is unincorporated Riverside County, but is within the City's Sphere of Influence, and is zoned for manufacturing under the Riverside County's Zoning Ordinance.

1.3.2 Perris Valley Commerce Center Specific Plan

On January 10, 2012, the City Council adopted the PVCCSP for a planning area that encompasses approximately 5.23 square miles in north Perris located east of I-215 and west of the Perris Valley Storm Drain, south of MARB/IPA, and north of Placentia Avenue. This area provides convenient access to a multi-directional freeway system via I-215 traveling north and south and State Route 60 (SR-60) traveling east and west as well as access to MARB/IPA for air transport. The PVCCSP Land Use Plan envisions this area to be a concentrated commerce center with a balanced mix of industrial uses including Business Professional Office (BPO), Light Industrial (LI), and General Industrial (GI).

The portion of the proposed Project site located south of Nance Street has a PVCCSP land use designation of LI and the portion located north of Nance Street has a land use designation of GI (**Figure 1-6 – Specific Plan Land Use**). The site is surrounded by areas designated as GI to the north and east, and LI to the south and west.

The LI land use designation provides for development of light industrial uses and related activities including manufacturing, research, warehouse and distribution, assembly of non-hazardous products or materials, and retail related to manufacturing. The GI land use designation provides for the development of basic industrial uses which may support a wide range of manufacturing and non-manufacturing uses, from large-scale warehouse and warehouse/distribution facilities to outdoor industrial activities.

Section 3.0 of the PVCCSP also outlines land use planning and design standards to assist in accommodating future development proposals and provides suitable transitions to neighboring land uses. Additionally, the PVCCSP outlines green development practices to encourage and require construction methods and materials that have a lower environmental impact. The proposed Project site will be required to comply with all design guidelines, landscape guidelines, and relevant policies outlined in the PVCCSP as well as the Perris GP 2030.

1.3.3 MARB/IPA Airport Overlay Zone

In 2014, and subsequent to approval of the Perris GP 2030, the Riverside County Airport Land Use Commission (ALUC) adopted the 2014 MARB/IPA Airport Land Use Compatibility Plan (ALUCP). Thus, the City was required to update its General Plan to reflect the new ALUCP. The City created an Airport Overlay Zone (AOZ) to accommodate development within the City consistent with the land use designations of the 2014 MARB/IPA ALUCP. On July 14, 2016, the Riverside County ALUC determined that the City's AOZ is consistent with the 2014 MARB/IPA ALUCP.

In August 2016, the City of Perris approved the following: Resolution 5050 approving General Plan Amendment 15-01522, to amend the Perris GP 2030 Land Use, Noise, and Safety Elements to implement the 2014 MARB/IPA ALUCP; Ordinance Number 1331 approving Ordinance Amendment 16-05024 to update Perris Municipal Code Chapter 19.82 (Districts and Map) to revise the City of Perris Zoning Map to include an Airport Overlay Zoning designation and adopt an AOZ Code Chapter 19 (19.51) to implement the 2014 MARB/IPA ALUCP; and, Ordinance Number 1332 approving Specific Plan Amendment 16-05025 to amend the PVCCSP to update the Airport Overlay Zone Section (Section 12) to implement the 2014 MARB/IPA ALUCP. On March 10, 2022, the Riverside County ALUC found the Project consistent with the 2014 MARB/IPA ALUCP. This consistency finding included several conditions of approval, including Condition of Approval 9:

The project does not propose rooftop solar panels at this time. However, if the project were to propose solar rooftop panels in the future, the applicant/developer shall prepare a solar glare study that analyzes glare impacts, and this study shall be reviewed by the Airport Land Use Commission and March Air Reserve Base.

In addition, ALUC and MARB personnel have communicated to the Applicant on this Project and have taken the position on other projects within the MARB/IPA runway approach, that solar panels are generally discouraged due to potential issues with approaching and departing aircraft. A more detailed discussion of the ALUC review can be found in Section 5.8, Hazards and Hazardous Materials of this DEIR. The Riverside County ALUC review findings are included in Appendix G.2 of this DEIR.

Remainder of Page Intentionally Left Blank











1.4 Project Characteristics

The proposed Project includes construction and operation of a high-cube, non-refrigerated warehouse building and supporting on- and off-site infrastructure, as discussed below.

1.4.1 Site Preparation and Construction

Project site construction will involve grading and earthwork within the site boundaries to accommodate the proposed warehouse structure, infrastructure and associated parking lot. The Project site grading is expected to balance on-site; no soil import or export is anticipated.

Prior to grading operations, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared in accordance with the requirements of the statewide general National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for stormwater discharge from construction sites. The SWPPP will include Project-specific best management practices (BMPs) to reduce erosion and sedimentation and is subject to review and comment by the City Public Works Department. BMPs may include, but not be limited to, soil stabilization controls, perimeter silt fences, placement of hay bales, and use of sediment basins. All erosion and sediment controls will be in accordance with the currently adopted state general permit. The developer and construction contractor will be responsible for implementing the BMPs in accordance with the SWPPP.

Construction is anticipated to begin no sooner than the fourth quarter of 2022 and be completed in 2023. This construction schedule represents a "worst-case" analysis. The duration of construction activity (and associated equipment) represents a reasonable approximation of the expected construction activities as required per the State CEQA Guidelines.

1.4.2 Specific Plan Amendment (Case No. 21-05267)

The warehouse proposed by the Project Applicant is consistent with existing LI and GI PVCCSP land use designations for the Project site. However, the Project Applicant proposes to amend the PVCCSP Circulation Plan to delete two planned streets: California Avenue and Nance Street between Patterson Avenue to the west and Nevada Avenue to the east. (see **Figure 1-7 – Proposed Specific Plan Amendment Circulation Plan**).

1.4.3 Tentative Parcel Map 38259 (Case No. 21-05086)

Tentative Parcel Map 38259 proposes: to (i) merge thirty-eight (38) existing parcels into one parcel; (ii) vacate all or portions of the right-of-way (ROW) of California Avenue and Nance Street between Patterson Avenue and Nevada Avenue; and (iii) dedicate a portion of Patterson Avenue and Nevada Avenue; Avenue ROW as shown on **Figure 1-8 – Tentative Parcel Map 38259**.



1,500

_ Feet

500

1,000




Source: WEBB, TPM 3-16-22



Figure 1-8 – Tentative Parcel Map 38259



1.4.4 Development Plan Review (DPR 21-00005)

The proposed Project involves the construction and operation of a 769,668-square-foot (SF) building on the approximate 35.7-net acre Project site (see **Figure 1-9 – Development Plan Review No. 21-00005**). The building is proposed to accommodate 749,668 SF of high-cube, non-refrigerated warehouse distribution uses with the remaining 20,000 SF for supporting office uses. The building includes 64 dock doors on the east side and 49 dock doors on the west side. The proposed Project would be constructed as a "spec" building; that is, there is not a specific tenant identified at this time. It is anticipated that the building could operate 24 hours a day, seven days a week.

The Project will provide a total of 366 automobile parking stalls, consisting of 326 standard stalls, 10 American Disabilities Act-compliant (ADA) stalls, and 30 Electric Vehicle (EV)/Clean Air/Vanpool stalls. Automobile parking is provided in three locations: one across from each office area on the northwest and southwest corners of the building and a third area along the north side of the building. ADA path of travel is provided between passenger vehicle parking areas and the office areas. Raised planter islands are proposed at the automobile parking lot entrances along Patterson Avenue and a five (5)-foot-wide landscaped curb is proposed between the automobile parking area and the truck drive aisle along the north side of the building to provide separation of the cars and trucks. The Project also includes 140 trailer parking stalls. Bike racks will also be provided at the Project site for employee use, per City standards.

Passenger vehicles will access the Project site via two driveways on Patterson Avenue. Trucks will access the site via two separate driveways on Patterson Avenue. Emergency access is also available from Nevada Avenue.

The Project will also provide sidewalks to facilitate pedestrian access even though the site is not adjacent to any existing or planned area-wide open space, trails, parks, or other community amenities. Sidewalks will be installed adjacent to Patterson Avenue and Nevada Avenue along the Project site's frontage as shown on **Figure 1-9**. Signage and striping for the existing Class II bicycle lane will be maintained along the Project's frontage of Patterson Avenue.

As shown on **Figure 1-10 – Building Elevations**, the design of the building is modern industrial and includes concrete tilt-up wall construction with board-formed cement veneer and standard window glazing. The building height would be a maximum of 50 feet. The building is proposed to be painted in varying hues of gray and white and will include decorative elements of Bronze Reflective Glazing and Black Anodized Mullions. A 14-foot-tall pilaster wall is proposed along the east and west sides of the Project site, to screen the view of the truck parking areas and loading bays from Patterson Avenue and Nevada Avenue. **Figure 1-11 – Screen Wall and Line of Site** shows the typical elevations of the proposed screen walls and gates around the truck yard and line of site from Patterson Avenue at the northern office area and truck area. The existing chain-link fence along the northern property line will be replaced with an eight (8)-foot tall tubular steel fence. The existing wall along the Project site's southern boundary will be protected in place.

The Project includes approximately 168,406 SF of landscaping, which constitutes approximately 11.5 percent of the Project site. On-site perimeter landscaping is proposed adjacent to Patterson Avenue and Nevada Avenue along the Project site's frontage, except at driveway locations, the Project's passenger vehicle parking areas, and along the northern and southern portions of the proposed building. (Figure 1- 12 – Conceptual Landscape Plan). The landscaping consists of drought-tolerant and climate

appropriate trees, shrubs and ground cover that include native species and will meet or exceed standards set forth in the PVCCSP. The landscape plan is designed to provide visual appeal and screen the views of the passenger vehicle parking lots from public rights-of-way. Consistent with Section 8.2.1.4 of the PVCCSP, the Project site includes two shaded outdoor patio areas for break areas as employee amenities. These outdoor amenity areas are adjacent to the offices proposed at the northwest and southwest corner of the building. One indoor employee amenity area will also be provided by the future tenant.

As part of the Development Plan Review process the proposed building design, wall design, site design, landscaping and irrigation plans, lighting plans, parking plans, and pedestrian areas, shall be reviewed for consistency with the PVCCSP and harmonious relationships with existing and proposed adjoining developments, avoiding monotonous repetition, but allowing, when feasible, for similarity of style or originality of design.

Project lighting will include security lights along the buildings and wall and pole-mounted lights in the parking areas. All Project-related lighting shall be required to conform to the PVCCSP Guidelines and the Perris Municipal Code.



Source: WEBB, 3-16-2022

2022

Aug

23

created 2

Map

aprx

Conceptual.

nceptual/Project

Š

H:\2021\21-0032\GIS\Project

Not to Scale



Figure 1-9 – Development Plan Review No. 21-00005



Source: Herdman, A4, 3-18-2022









Source: HERDMAN, A1, 3-18-2022



Not to Scale

Figure 1-11 – Screen Wall and Line of Sight Duke Warehouse at Patterson Avenue and Nance Street





Source: Hunter Landscape, 03-17-22



Figure 1-12 – Conceptual Landscape Plan



1.4.5 On-and-Off-Site Infrastructure

Water and Sewer

Domestic water, recycled water, and sewer (wastewater) collection and treatment services in the Project vicinity are provided by the Eastern Municipal Water District (EMWD).

No off-site water line improvements are proposed. Project site improvements consist of a looped 10inch diameter water line around the proposed building which would include two connections to the existing 12-inch diameter waterline in Patterson Avenue. There will also be a fire flow pump for fire flow demands.

There are no existing sewer lines adjacent to the Project site. As such, off-site improvements are required to serve the Project. There is an existing 15-inch diameter gravity sewer line in Harley Knox Boulevard. A new off-site 8-inch diameter gravity sewer line is proposed to be constructed by the Project Applicant in Nevada Avenue between the Project site and the existing sewer line in Harley Knox Boulevard.

There is an existing 8-inch diameter recycled water line just north of Markham Street on Patterson Avenue that extends approximately 190 feet north of the intersection. An 8-inch diameter recycled water line is proposed in Patterson Avenue between the existing line just north of Markham Street north to Nance Street. At Nance Street, a tee will be placed with stubs going north and west to extend just beyond the intersection. This recycled water line will serve the proposed Project site, but the environmental documentation and subsequent construction will be the responsibility of another developer under City Case No. DPR 22-00003.

The location of the proposed off-site sewer and recycled water lines are shown on **Figure 1-13 – Off- Site Improvements**.

Storm Drain and Drainage

With regard to drainage, the Project Applicant proposes on-site curb and gutter and subsurface storm drains that would direct all on-site stormwater and nuisance runoff in subsurface storm drains to underground chambers located in the southeastern portion of the site (see **Figure 1-10**). Following water quality treatment, discharged stormwater will flow to a proposed 48-inch diameter reinforced concrete pipe (RCP) storm drain that will connect into a proposed Lateral-B6.1 of the Perris Valley Master Drainage Plan (MDP) in Nevada Avenue. All high intensity flows will push out of the chambers from a raised outlet pipe and gravity flow to Lateral-B6.1. To convey nuisance runoff from three existing corrugated metal pipe (CMP) culverts under Patterson Avenue, a west collector channel is proposed. The channel will be 2 feet deep at 2:1 side slopes with a 4-foot bottom width. The channel will have a concrete bottom up to one foot above the channel invert and will convey flow to proposed Lateral-B6 in Patterson Avenue.

Two off-site storm drain facilities are proposed (see **Figure 1-13**). The two Perris Valley MDP drainage facilities will be constructed by the Project Applicant to provide flood protection for this Project and the surrounding area. A portion of MDP Lateral-B6 in Patterson Avenue is needed to protect the site from the tributary area between Patterson Avenue and I-215; it will be designed to ultimate tributary runoff conditions. MDP Lateral-B6.1 in Nevada Avenue is needed to drain the proposed Project.

Lateral-B6 is a Perris Valley MDP facility proposed to be a 48-inch RCP that transitions to a 24-inch RCP upstream. It will be installed in Patterson Avenue near the intersection with California Avenue and connect to the existing Lateral B Stage 3 facility, an 8-foot-wide by 7-foot-high to 8-foot-wide by 6-foot-high reinforced concrete box (RCB), within Harley Knox Boulevard. Lateral B Stage 3 is also referred to as the Caltrans RCB. Lateral-B6-1 is a 24-inch RCP that will convey interim runoff from the tributary between California Avenue and Old Oleander from a new inlet to Lateral-B6. Lateral-B6-2 is a new 18-inch RCP that will convey nuisance runoff collected by the on-site west collector channel to Lateral-B6. Lateral-B6-3 is a 30-inch RCP that will convey interim runoff from the tributary south of California Avenue from a new inlet to Lateral-B6.

Lateral-B6.1 is a Perris Valley MDP facility proposed to be a 48-inch RCP that connects to the existing Lateral B Stage 3 facility. Lateral B6.1 will be installed from the intersection of Nevada Avenue and Nance Street to the connection point beneath Harley Knox Boulevard.

The tributary drainage capacity of the two proposed MDP facilities, Laterals-B6 and B6.1, highly depends on the capacity of the existing Caltrans RCB running parallel to Harley Knox Boulevard. Currently, there is roughly 50 cubic feet per second (cfs) of capacity in the Caltrans RCB (See the *Preliminary Drainage Study* Included as Appendix H.1 to this DEIR and Section 5.9 – Hydrology and Water Quality for further details). The two MDP storm drains will add approximately 180 cfs of capacity during the ultimate condition.

However, the Riverside County Flood Control & Water Conservation District (RCFC&WCD) is currently leading the design of Perris Valley MDP facility Lateral-B Stage 4, which will cutoff roughly 300 cfs of tributary runoff, after accounting for confluences, from the existing Caltrans RCB. RCFC&WCD is also responsible for the environmental documentation (e.g., CEQA), and construction of the Lateral B-Stage 4 facility. The Lateral B-Stage 4 plan is proposing to construct a stub out for future connection to the existing Caltrans RCB. The proposed Project Applicant will be responsible for the construction of the off-site lateral extension between the Lateral B Stage 4 stub out and the existing Caltrans RCB, across APN(s) 294-220-007 and/or -010 to the existing Caltrans RCB where it turns south along Patterson Avenue. This lateral extension was evaluated under CEQA by RCFC&WCD in the 1991 Perris Valley Master Drainage Plan Initial Study and Negative Declaration (State Clearinghouse No. 91042072) (hereinafter referred to as the 1991 PV MDP CEQA). The 1991 PV MDP and the 1991 PV MDP CEQA document were approved on June 11, 1991 and are hereby incorporated by reference.

The upstream connection to MDP Lateral-B will provide an additional 300 cfs of capacity in the Caltrans RCB. This connection must be made for the Caltrans RCB to have capacity for unrestricted runoff from MDP Lateral-B6 and -B6.1 under ultimate conditions. However, in the interim condition, the timing of the runoff from the Project is such that the time for the Project's stormwater to drain down is significantly less than the time of concentration of waters upstream have to travel to reach the same connection point for Lateral-B6 and Lateral-B6.1.





Figure 1-13 – Off-Site Improvements Duke Warehouse at Patterson Avenue and Nance Street



Traffic/Circulation

The Project developer would install curb and gutter, parkway, streetlights and a sidewalk along the Project site frontage on Patterson Avenue. Depending on the condition of the existing paved roadway at the time of construction, the Project developer may be required to repave along the frontage, up to the road centerline plus one travel lane on the southbound side. Signage and striping for the existing Class II bicycle lane will be maintained along the Project's frontage of Patterson Avenue. Nevada Avenue along the Project site's frontage will be improved with curb, gutter, parkway, streetlights and sidewalk and paved with 38 feet of asphalt. North of the Project site's frontage, 30-foot-wide roadway paving shall be continued to Harley Knox Boulevard.

Five driveways are proposed at the Project site: one off Nevada Avenue and four off of Patterson Avenue. Two of the driveways off Patterson Avenue are for passenger car access to the automobile parking lots, while the other two driveways are designated for trucks. The driveway off Nevada Avenue is for emergency access only. ADA path of travel is provided between passenger vehicle parking areas and the office areas. Raised planter islands are proposed at the automobile parking lot entrances along Patterson Avenue and a five (5)-foot wide landscaped curb is proposed between the automobile parking area and the truck drive aisle along the north side of the building to provide separation of the cars and trucks.

Trucks serving the proposed Project would be required to use Harley Knox Boulevard and Patterson Avenue to travel to and from the Project site. Signage shall be posted on-site directing truck drivers to use existing City truck routes on Harley Knox Boulevard. The information on the signage will be coordinated with City Planning and the City's Traffic Engineer during the plan check process.

Electric Utilities

Existing power poles along Patterson Avenue, Nance Street and Nevada Avenue within the Project site or off-site improvement areas will be relocated or moved underground to avoid any interference with the proposed building or improvements; power poles that do not interfere with the proposed improvements will be protected in place.

1.4.6 Sustainability Features

The Project will meet or exceed all applicable standards under California's Green Building Code (CalGreen) and the Building Energy Efficiency Standards contained in Title 24. The Project shall implement concepts of efficient design and material use that are consistent with LEED Certification Levels. This will be accomplished by incorporating, at a minimum, the following sustainability features or other features that are equally efficient:

Energy Efficiency

- Design building shells and components, such as windows, roof systems and electrical systems to meet California Title 24 Standards for nonresidential buildings.
- Design buildings to achieve U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) features for potential certification. This includes design considerations related to the building envelope, heating, ventilation, and air conditioning (HVAC), lighting, and power systems. Additionally, the architectural expression such as roofs and windows in the buildings will relate to conserving energy.

- Install energy efficient light-emitting diodes (LED) lighting on the site. Provide skylights for natural day light to reduce the lighting load, therefore saving energy. Lighting will incorporate motion sensors that turn them off when not in use.
- Meet City minimum landscape requirements and provide adequate landscape shade for the site to reduce energy use.
- Install light-colored roofing materials over office area spaces and light-colored paving materials.
- For future office space, install energy efficient HVAC systems (seasonal energy efficiency ratio (SEER) 13), appliances and equipment, and control systems that are Energy Star rated.
- For future office improvement, refrigerants and HVAC equipment will be selected to minimize or eliminate the emission of compounds that contribute to ozone depletion and global climate change. Ventilation and HVAC systems will be designed to meet or exceed the minimum outdoor air ventilation rates described in the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) standards and/or per California Title 24 requirements.
- For future office improvement, implement design features to increase the efficiency of the building envelope (i.e., the barrier between conditioned and unconditioned spaces). This includes providing R-19 roof insulation for conditioned space and R-22 between conditioned and unconditioned space to minimize heat transfer and minimize energy consumption.
- Provide greatly enhanced window glazing insulation for exterior walls at conditioned spaces (0.28 or less U-factor).
- Incorporate Energy Star rated space heating and cooling equipment, light fixtures, appliances, or other applicable electrical equipment.

Water Conservation and Efficiency

- Recycled water shall be used for landscape irrigation.
- Surface parking lots will be landscaped in accordance with City standards to reduce heat island effect.
- Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and sensors for landscaping according to the California Department of Water Resources Model Efficient Landscape Ordinance and Chapter 19.70 (Landscaping) of the Perris Municipal Code.
- Design buildings to be water-efficient. Install water-efficient fixtures in accordance with Section 5.303 of the California Green Building Standards Code Part 11.
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff in accordance with City Standards.
- Provide education about water conservation and available programs and incentives to the building operators to distribute to employees.

Solid Waste Measures

• Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1 of the California Green Building Standards Code Part 11.

- Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance with Section 5.410.1 of the California Green Building Standards Code Part 11.
- The property operator will provide readily available information provided by the City for employee education about reducing waste and available recycling services.

Transportation and Motor Vehicles

- The Project site will include preferred parking locations for clean air/vanpool vehicles in accordance with Section 5.106.5.2, Designated parking for clean air vehicles, of the California Green Building Standards Code Part 11.
- Limit idling time for commercial vehicles to no more than five minutes per Title 13 of the California Code of Regulations, Section 2485.
- Provide at least six percent of the total parking spaces to facilitate future installation of electric vehicle supply equipment in accordance with Section 5.106.5.3.2, Multiple Charging Space Requirements, of the California Green Building Standards Code Part 11.
- Provide up to two electric vehicle charging facilities to encourage the use of low or zeroemission vehicles.
- Signage shall be posted on-site directing truck drivers to use existing City truck routes on Harley Knox Boulevard.
- Maintain existing Class II bike lane on Patterson Avenue.
- Provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience in compliance with Section 5.106.4 of the California Green Building Standards Code Part 11 and standard City code requirements.

On-Site Equipment and Loading Docks

- The Project owner will inform building operators of existing requirements to turn off equipment, including heavy-duty equipment, motor vehicles, and portable equipment, when not in use for more than 5 minutes. Truck idling shall not exceed 5 minutes in time. All facilities will post signs (both interior- and exterior-facing signs, including signs directed at all dock and delivery areas) requiring that trucks shall not be left idling for more than 5 minutes pursuant to Title 13 of the California Code of Regulations, Section 2485, which limits idle times to not more than five minutes and to report violations to California Air Resources Board, the South Coast Air Quality Management District, and the building manager.
- Service equipment (i.e., yard trucks and forklifts) used within the site shall be electric or powered by other alternative fuels.

Construction

- Require Construction Equipment to Turn Off When Not in Use per Title 13 of the California Code of Regulations, Section 2449.
- Use regionally produced and/or manufactured building materials, where feasible, for Project construction.

• Use "green" building materials where feasible, such as those materials that are resource efficient and recycled and manufactured in an environmentally friendly way.

1.5 Land Use Applications

The proposed Project includes the following land use applications (previously described in detail in Sections 1.4.2, 1.4.3, and 1.4.4): Specific Plan Amendment Case No. 21-05267, Tentative Parcel Map (TPM) 38259 (Case No. 21-05086) and Development Plan Review (DPR) 21-00005.

- Specific Plan Amendment Case No. 21-05267 to amend the PVCCSP Circulation Plan to reflect the deletion of two planned streets: California Avenue and Nance Street between Patterson Avenue to the west and Nevada Avenue to the east;
- TPM 38259 (Case No. 21-05086) to merge thirty-eight (38) existing parcels into one parcel, vacate all or portions of the ROW of California Avenue and Nance Street within the Project site, and dedicate a portion of Patterson Avenue and Nevada Avenue ROW; and
- DPR 21-00005 to allow the development of the approximately 35.7-net-acre site with a 769,668 SF building with 749,668 SF for high-cube, non-refrigerated warehouse distribution uses and approximately 20,000 SF of supporting office space.

1.6 Utility Providers

Future development within the PVCCSP area, including the proposed Project, may require utility services provided by these purveyors:

Purveyor	Type of Services
Eastern Municipal Water District (EMWD)	water, sewer, recycled water
Verizon	telephone
Southern California Edison (SCE)	electricity
Southern California Gas Company	natural gas
CR&R Waste Services	solid waste disposal
Frontier Communications	cable television and internet

1.7 Project Objectives

Per State CEQA Guidelines Section 15124 (b), an EIR needs to include a statement of the objectives of a project which help the City develop a reasonable range of alternatives. The Objectives need to outline the general purpose of the Project. The purpose of the proposed Project is to construct and operate a high-cube, non-refrigerated warehouse building. The Project Objectives are identified by the Project Applicant as follows:

- Develop and operate a logistics center that takes advantage of existing City infrastructure and is adjacent to similar industrial logistics and distribution center uses.
- Develop and operate a logistics center that is in close proximity to MARB/IPA, I-215/SR-60 and I-10, to support the distribution of goods throughout the region and that also limits traffic truck disruption to residential areas within the City and neighboring jurisdictions.
- Develop and operate a logistics center that takes advantage of visibility from I-215 that will attract quality tenants and will be competitive with other similar facilities in the region.

- Maximize efficient goods movement throughout the region by locating a logistics center in close proximity to the Ports of Los Angeles and Long Beach, enabling trucks servicing the site to achieve a minimum of two roundtrips per day.
- Develop and operate a logistics center that meets industry standards for operational design criteria.
- Implement the PVCCSP through development of a land use allowed by the Industrial land use designation and consistent with the development standards and criteria relevant to the site and proposed use.
- Positively contribute to the economy of the City through new capital investment, creation of new employment opportunities, including opportunities for highly trained workers, and expansion of the tax base.
- Provide local employment for residents of the City to improve jobs-housing balance within the City.

1.8 Discretionary Actions and Approvals

The DEIR serves as an informational document for use by public agencies, the general public, and decision makers. This DEIR discusses the impacts of development and operation pursuant to the proposed Project and related components and analyzes Project site alternatives. This DEIR will be used by the City of Perris and responsible agencies in assessing impacts of the proposed Project.

The following approvals and permits are required from the City of Perris to implement the proposed Project:

- Certification of the EIR with the determination that the EIR has been prepared in compliance with the requirements of CEQA;
- Specific Plan Amendment Case No. 21-05267 to amend the PVCCSP Circulation Plan to delete two planned streets: California Avenue and Nance Street between Patterson Avenue to the west and Nevada Avenue to the east;
- TPM 38259 (Case No. 21-05086) to merge thirty-eight (38) existing parcels into one parcel, and vacate all or portions of the ROW of California Avenue and Nance Street and dedicate a portion of Patterson Avenue and Nevada Avenue ROW; and
- DPR 21-00005 to allow the development of the approximately 35.7-net-acre site with a 769,668square foot (SF) building with 749,668 SF for high-cube, non-refrigerated warehouse distribution uses and approximately 20,000 SF of supporting office space.

Other non-discretionary actions anticipated to be taken by the City at the staff level as part of the proposed Project include:

- a) Review and approval of all off-site infrastructure plans, including street and utility improvements pursuant to the conditions of approval;
- b) Review all on-site plans, including grading and on-site utilities; and
- c) Approval of a Preliminary Water Quality Management Plan (WQMP) to mitigate post-construction runoff flows.

Approvals and permits that may be required by other agencies include:

- A National Pollutant Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board (RWQCB) to ensure that construction site drainage velocities are equal to or less than the pre-construction conditions and downstream water quality is not worsened;
- e) Compliance with the South Coast Air Quality Management District Indirect Source Rule (Rule 2305) for warehouse owners and operators;
- f) Approval of Water Supply Assessment and water and sewer improvement plans by the EMWD; and
- g) Permits or associated approval by other utility agencies, as necessary, for installation of new utility infrastructure or connections to existing facilities.

1.9 Areas of Controversy and Issues to be Resolved

State CEQA Guidelines Section 15123(b)(2) requires that areas of controversy known to the Lead Agency must be stated in the EIR summary. Issues of interest to the public and public agencies were identified during the 30-day public comment period of the Notice of Preparation (NOP), as well as comments received during the public scoping meeting that was held on February 2, 2022, for the proposed Project at the City of Perris.

An NOP for the DEIR was distributed to the State Clearinghouse, responsible agencies, and other interested parties via digital upload, overnight mail, or delivery on January 19, 2022. A notice advising of the availability of the NOP was also posted by the Riverside County Clerk on January 19, 2022. The objective of distributing an NOP is to solicit public comment in order to identify and determine the full range and scope of issues of concern so that these issues might be fully examined in the DEIR. Comments received regarding the NOP were used to help identify impacts that could result from implementation of the proposed Project.

The NOP and NOP comment letters are included in Appendices A.1 and A.2 of this DEIR. By the close of the 30-day public review period, five responses to the NOP had been received which will be addressed in the DEIR. A summary of NOP comments has been included in Section 2.0 (Introduction).

The NOP prepared and circulated for public review regarding the Duke Warehouse at Patterson Avenue and Nance Street Project (Appendix A.1) concluded that the proposed Project would not result in potentially significant impacts to: Agriculture and Forestry Resources, Mineral Resources, Population and Housing, and Wildfire. Based on further review it was also concluded that the Project, which does not involve residential uses, would not result in physical environmental impacts related to Public Services or Recreation (see Section 4.2, Effects Found Not to be Significant as Part of the EIR Process).

State CEQA Guidelines Section 15123(b)(3) requires that a DEIR identify issues to be resolved; this includes the choice among alternatives and whether or how to mitigate significant impacts. The major issues to be resolved for the proposed Project include decisions by the City of Perris as to whether:

- this DEIR adequately describes the potential environmental impacts of the proposed Project;
- the recommended mitigation measures should be adopted or modified;
- additional mitigation measures need to be applied;
- the Project should or should not be approved as proposed; or
- the Project should be modified based on the alternatives considered in this DEIR.

1.10 Summary of Environmental Impacts

The following table, **Table 1-B – DEIR Impact Summary Matrix**, provides a summary of impacts related to the proposed Project. The table identifies significant environmental impacts resulting from the Project pursuant to the State CEQA Guidelines Section 15123(b)(1)

Remainder of Page Intentionally Left Blank

Table 1-B – DEIR	Impact Summary	Matrix
------------------	----------------	--------

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
Aesthetics	Have a substantial adverse effect on a scenic vista	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Aesthetics	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	No impact.
Aesthetics	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Aesthetics	Create a new source of	Applicable PVCCSP Mitigation Measures	Less than significant.
	which would adversely affect day or nighttime views in the area	MM Haz 3: Any outdoor lighting installed shall be hooded or shielded to prevent either the spillage of lumens or reflection into the sky or above the horizontal plane.	

Section 1

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		 MM Haz 5: The following uses shall be prohibited: a. Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator. b. Any use which would cause sunlight to be reflected towards an aircraft engaged in a straight final approach towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards an aircraft engaged in a straight final approach towards a landing at an airport. c. Any use which would generate smoke or water vapor or which would generate large concentrations of birds, or which may otherwise affect safe air navigation within the area. d. Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation. e. All retention and water quality basins shall be designed to dewater within 48 hours of a rainfall event. 	

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		Additional Project-Level Mitigation Measures	
		MM AES 1 : Prior to the issuance of grading permits, the Property Owner/Developer shall provide evidence to the City that the Contractor Specifications require that: (1) construction staging areas shall be located as far as possible from residences east and west of the Project area; and, (2) any temporary nighttime lighting installed during construction for security or any other purpose shall be downward facing and hooded or shielded to prevent security light from spilling outside the staging area or from directly broadcasting security light into the sky or onto adjacent residential properties. Compliance with this measure shall be verified by the City of Perris' Building Division during construction.	
Air Quality	Conflict with or obstructing of implementation of the applicable air quality plan	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Air Quality	Result in a cumulatively	Applicable PVCCSP Mitigation Measures	Less than significant.
any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed	MM Air 2 : Each individual implementing development project shall submit a traffic control plan prior to the issuance of a grading permit. The traffic control plan shall describe in detail safe detours and provide temporary traffic control during construction activities for that project. To reduce traffic congestion, the plan shall include, as necessary, appropriate, and practicable, the following: temporary traffic controls such as a flag person		

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
	quantitative thresholds for ozone precursors)	during all phases of construction to maintain smooth traffic flow, dedicated turn lanes for movement of construction trucks and equipment on- and off-site, scheduling of construction activities that affect traffic flow on the arterial system to off-peak hour, consolidating truck deliveries, rerouting of construction trucks away from congested streets or sensitive receptors, and/or signal synchronization to improve traffic flow.	
		MM Air 3: To reduce fugitive dust emissions, the development of each individual implementing development project shall comply with SCAQMD Rule 403. The developer of each implementing project shall provide the City of Perris with the SCAQMD-approved dust control plan, or other sufficient proof of compliance with Rule 403, prior to grading permit issuance. Dust control measures shall include, but are not limited to:	
		 requiring the application of non-toxic soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 20 days or more, assuming no rain), 	
		 keeping disturbed/loose soil moist at all times, requiring trucks entering or leaving the site hauling dirt, sand, or soil, or other loose materials on public roads to be covered, 	
		 installation of wheel washers or gravel construction entrances where vehicles enter and 	

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip,	
		 posting and enforcement of traffic speed limits of 15 miles per hour or less on all unpaved potions of the project site, 	
		 suspending all excavating and grading operations when wind gusts (as instantaneous gust) exceed 25 miles per hour, 	
		 appointment of a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM-10 generation, 	
		 sweeping streets at the end of the day if visible soil material is carried onto adjacent paved public roads and use of SCAQMD Rule 1186 and 1186.1 certified street sweepers or roadway washing trucks when sweeping streets to remove visible soil materials, 	
		 replacement of ground cover in disturbed areas as quickly as possible. 	
		MM Air 4: Building and grading permits shall include a restriction that limits idling of construction equipment on site to no more than five minutes.	

Executive Summary

City of Perris

Table 1-B – DEIR Impact Summary Matrix

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		MM Air 5: Electricity from power poles shall be used instead of temporary diesel or gasoline-powered generators to reduce the associated emissions. Approval will be required by the City of Perris' Building Division prior to issuance of grading permits.	
		MM Air 6: The developer of each implementing development project shall require, by contract specifications, the use of alternative fueled off-road construction equipment, the use of construction equipment that demonstrates early compliance with off-road equipment with the CARB in-use off-road diesel vehicle regulation (SCAQMD Rule 2449) and/or meets or exceeds Tier 3 standards with available CARB verified or US EPA certified technologies. Diesel equipment shall use water emulsified diesel fuel such as PuriNOx unless it is unavailable in Riverside County at the time of project construction activities. Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Perris' Building Division prior to issuance of a grading permit.	
		MM Air 7: During construction, ozone precursor emissions from mobile construction equipment shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Perris' Building Division. Equipment maintenance records and	

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		equipment design specification data sheets shall be kept on-site during construction. Compliance with this measure shall be subject to periodic inspections by the City of Perris' Building Division.	
		MM Air 8: Each individual implementing development project shall apply paints using either high volume low pressure (HVLP) spray equipment with a minimum transfer efficiency of at least 50 percent or other application techniques with equivalent or higher transfer efficiency.	
		MM Air 9: To reduce VOC emissions associated with architectural coating, the project designer and contractor shall reduce the use of paints and solvents by utilizing pre-coated materials (e.g. bathroom stall dividers, metal awnings), materials that do not require painting, and require coatings and solvents with a VOC content lower than required under Rule 1113 to be utilized. The construction contractor shall be required to utilize "Super-Compliant" VOC paints, which are defined in SCAQMD's Rule 1113. Construction specifications shall be included in building specifications that assure these requirements are implemented. The specifications for each implementing development project shall be reviewed by the City of Perris' Building Division for compliance with this mitigation measure prior to issuance of a building permit for that project.	

Table 1-B – DEIR Impact Summary Matrix
--

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		MM Air 11: Signage shall be posted at loading docks and all entrances to loading areas prohibiting all on-site truck idling in excess of five minutes.	
		MM Air 12: Where transport refrigeration units (TRUs) are in use, electrical hookups will be installed at all loading and unloading stalls in order to allow TRUs with electric standby capabilities to use them.	
		MM Air 13: In order to promote alternative fuels, and help support "clean" truck fleets, the developer/successor-in-interest shall provide building occupants and businesses with information related to SCAQMD's Carl Moyer Program, or other state programs that restrict operations to "clean" trucks, such as 2007 or newer model year or 2010 compliant vehicles and information including, but not limited to, the health effect of diesel particulates, benefits of reduced idling time, CARB regulations, and importance of not parking in residential areas. If trucks older than 2007 model year would be used at a facility with three or more dock-high doors, the developer/successor-in-interest shall require, within one year of signing a lease, future tenants to apply in good-faith for funding for diesel truck replacement/retrofit through grant programs such as the Carl Moyer, Prop 1B, VIP [On-road Heavy Duty Voucher Incentive Program], HVIP [Hybrid and Zero- Emission	

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		[Surplus Off-Road Opt-in for NO _x] funding programs, as identified on SCAQMD's website (http://www.aqmd.gov). Tenants would be required to use those funds, if awarded.	
		MM Air 14: Each implementing development project shall designate parking spaces for high- occupancy vehicles and provide larger parking spaces to accommodate vans used for ride sharing. Proof of compliance would be required prior to the issuance of occupancy permits.	
		MM Air 19: In order to reduce energy consumption from the individual implementing development projects, applicable plans (e.g., electrical plans, improvement maps) submitted to the City shall include the installation of energy-efficient street lighting throughout the Project site. These plans shall be reviewed and approved by the applicable City Department (e.g., City of Perris' Building Division) prior to conveyance of applicable streets.	
		MM Air 20: Each implementing development project shall be encouraged to implement, at a minimum, an increase in each building's energy efficiency 15 percent beyond Title 24, and reduce indoor water use by 25 percent. All reductions will be documented through a checklist to be submitted prior to issuance of building	

Table 1-B – DEIR Impact Sun	nmary Matrix
-----------------------------	--------------

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		permits for the implementing development project with building plans and calculations.	
		Additional Project-Level Mitigation Measures	
		No additional Project-level mitigation is required.	
Air Quality	Expose sensitive receptors to substantial pollutant concentrations	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Air Quality	Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Biological Resources	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service	Applicable PVCCSP Mitigation Measures MM Bio 2: Project-specific habitat assessments and focused surveys for burrowing owls would be conducted for implementing development or infrastructure projects within burrowing owl survey areas. A pre-construction survey for resident burrowing owls would also be conducted by a qualified biologist within 30 days prior to commencement of grading and construction activities within those portions of implementing project sites containing suitable burrowing owl habitat and for those properties within an implementing project site where the biologist could not gain access. If ground disturbing activities in these areas are delayed or suspended for more than 30 days after the pre-construction survey, the	Less than significant.

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		area shall be resurveyed for owls. The pre-construction survey and any relocation activity would be conducted in accordance with the current Burrowing Owl Instruction for the Western Riverside MSHCP.	
		If active nests are identified on an implementing project site during the pre- construction survey, the nests shall be avoided or the owls actively or passively relocated. To adequately avoid active nests, no grading or heavy equipment activity shall take place within at least 250 feet of an active nest during the breeding season (February 1 through August 31), and 160 feet during the non- breeding season.	
		If burrowing owls occupy any implementing project site and cannot be avoided, active or passive relocation shall be used to exclude owls from their burrows, as agreed to by the City of Perris Planning Department and the CDFG. Relocation shall be conducted outside the breeding season or once the young are able to leave the nest and fly. Passive relocation is the exclusion of owls from their burrows (outside the breeding season or once the young are able to leave the nest and fly) by installing one-way doors in burrow entrances. These one-way doors allow the owl to exit the burrow, but not enter it. These doors shall be left in place 48 hours to ensure owls have left the burrow. Artificial burrows shall be provided nearby. The	
		implementing project area shall be monitored daily for one week to confirm owl use of burrows before excavating burrows in the impact area. Burrows shall be excavated	
		using hand tools and refilled to prevent reoccupation.	

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		Sections of flexible pipe shall be inserted into the tunnels	
		during excavation to maintain an escape route for any	
		animals inside the burrow. The CDFG shall be consulted	
		prior to any active relocation to determine acceptable	
		receiving sites available where this species has a greater	
		chance of successful long-term relocation. If avoidance is	
		infeasible, then a DBESP would be required, including	
		associated relocation of burrowing owls. If conservation is	
		not required, then owl relocation would still be required	
		following accepted protocols. Take of active nests would	
		be avoided, so it is strongly recommended that any	
		relocation occur outside of the nesting season.	
		Additional Project-Level Mitigation Measures	
		MM BIO 1: To reduce potential indirect impacts to	
		regulated nesting birds, if construction is proposed	
		between February 1st and September 15th, the Project	
		Applicant shall retain a qualified biologist to conduct a	
		nesting bird survey(s) no more than three (3) days prior to	
		initiation of ground-disturbing activities to document the	
		presence or absence of nesting birds within or directly	
		adjacent (100 feet) to the Project site impact area. If the	
		survey identifies the presence of active nests, then the	
		qualified biologist shall implement avoidance measures	
		until the nests are no longer occupied and the juvenile	
		birds can survive independently from the nests.	
		Construction outside the nesting season (September 16th	

Table 1-B – DEIR Impact Summary M	Matrix
-----------------------------------	--------

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		to January 31st) will not require pre-construction nesting bird surveys. A copy of the nesting bird survey results report shall be provided to the City of Perris Planning Division.	
Biological Resources	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	No impact.
Biological Resources	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal) through direct removal, filling, hydrological interruption, or other means	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	No impact.
Biological Resources	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or establish native resident or migratory wildlife corridors, or impede	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	No impact.

Section 1

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
	the use of native wildlife nursery sites		
Biological Resources	Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Biological	Conflict with the provisions	Applicable PVCCSP Mitigation Measures	Less than significant.
Resources	Conservation Plan, Natural	MM Bio 2, above.	
Conservation Community Plan, or other approved local, regional, or state conservation plan	Conservation Community Plan, or other approved local,	Additional Project-Level Mitigation Measures	
	No additional Project-level mitigation is required.		
Cultural	Cause a substantial adverse	No applicable PVCCSP mitigation measures.	Less than significant.
Resources	Resources change in the significance of a historical resource pursuant to Section 15064.5	No additional Project-level mitigation is required.	
	Cause a substantial adverse	Applicable PVCCSP Mitigation Measures	Less than significant.
an arch	an archeological resource pursuant to Section 15064.5	No applicable PVCCSP mitigation measures.	

Table 1-B – DEIR Impact Summary Mat	rix
-------------------------------------	-----

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		Additional Project-Level Mitigation Measures	
		MM CR 1: Prior to the issuance of grading permits, the Project proponent/developer shall retain a professional archaeologist meeting the Secretary of the Interior's Professional Standards for Archaeology (U.S. Department of Interior, 2012; Registered Professional Archaeologist preferred). The primary task of the consulting archaeologist shall be to monitor the initial ground- disturbing activities at both the subject site and any off- site Project-related improvement areas for the identification of any previously unknown archaeologist shall be subject to the approval of the City of Perris Director of Development Services and no ground- disturbing activities shall occur at the site or within the off-site Project improvement areas until the archaeologist has been approved by the City.	
		The archaeologist shall be responsible for monitoring ground-disturbing activities, maintaining daily field notes and a photographic record, and for reporting all finds to the developer and the City of Perris in a timely manner. The archaeologist shall be prepared and equipped to record and salvage cultural resources that may be unearthed during ground-disturbing activities and shall be empowered to temporarily halt or divert ground-disturbing equipment to allow time for the recording and removal of the resources. In the event that archaeological resources are discovered at the Project site or within the off-site project	
		improvement areas, the handling of the discovered	

Table 1-B -	DEIR	Impact Summary	Matrix
-------------	------	-----------------------	--------

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		resource(s) will differ, depending on the nature of the find. Consistent with California Public Resources Code Section 21083.2(b) and Assembly Bill 52 (Chapter 532, Statutes of 2014), avoidance shall be the preferred method of preservation for Native American/tribal cultural/archaeological resources. However, it is understood that all artifacts, with the exception of human remains and related grave goods or sacred/ceremonial/religious objects, belong to the property owner. The property owner will commit to the relinquishing and curation of all artifacts identified as being of Native American origin. All artifacts, Native American or otherwise, discovered during the monitoring program shall be recorded and inventoried by the consulting archaeologist.	
		If any artifacts of Native American origin are discovered, all activities in the immediate vicinity of the find (within a 50-foot radius) shall stop and the Project proponent and Project archaeologist shall notify the City of Perris Planning Division and the Soboba Band of Luiseño Indians and the Pechanga Band of Luiseño Indians. A designated Native American representative from either the Soboba Band of Luiseño Indians or the Pechanga Band of Luiseño Indians shall be retained to assist the Project archaeologist in the significance determination of the Native American artifact as deemed possible. The designated Luiseño tribal representative will be given ample time to examine the find. The significance of Native American resources shall be evaluated in accordance with the provisions of CEQA and shall consider the religious beliefs, customs, and practices of the Luiseño tribe. If the find is determined to be of sacred or religious value, the	

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		Luiseño tribal representative will work with the City and consulting archaeologist to protect the resource in accordance with tribal requirements. All analysis will be undertaken in a manner that avoids destruction or other adverse impacts.	
		In the event that human remains are discovered at the Project site or within the off-site Project improvement areas, mitigation measure MM CR 2 shall immediately apply and all items found in association with Native American human remains shall be considered grave goods or sacred in origin and subject to special handling.	
		Native American artifacts that are relocated/reburied at the Project site would be subject to a fully executed relocation/reburial agreement with the assisting Luiseño tribe. This shall include, but not be limited to, an agreement that artifacts will be reburied on-site and in an area of permanent protection, and that reburial shall not occur until all cataloging and basic recordation have been completed by the consulting archaeologist.	
		Native American artifacts that cannot be avoided or relocated at the Project site shall be prepared for curation at an accredited curation facility in Riverside County that meets federal standards (per 36 CFR Part 79) and available to archaeologists/researchers for further study. The Project archaeologist shall deliver the Native American artifacts, including title, to the identified curation facility within a reasonable amount of time, along with applicable fees for permanent curation.	
		Non-Native American artifacts shall be inventoried, assessed, and analyzed for cultural affiliation, personal	

Table 1-B – DE	EIR Impact Summar	y Matrix
----------------	-------------------	----------

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		affiliation (prior ownership), function, and temporal placement. Subsequent to analysis and reporting, these artifacts will be subjected to curation, as deemed appropriate, or returned to the property owner.	
		Once grading activities have ceased and/or the archaeologist, in consultation with the designated Luiseño representative, determines that monitoring is no longer warranted, monitoring activities can be discontinued following notification to the City of Perris Planning Division.	
		A report of findings, including an itemized inventory of artifacts, shall be prepared upon completion of the tasks outlined above. The report shall include all data outlined by the Office of Historic Preservation guidelines, including a conclusion of the significance of all recovered, relocated, and reburied artifacts. A copy of the report shall also be filed with the City of Perris Planning Division, the University of California, Riverside, Eastern Information Center (EIC) and the Luiseño tribe(s) involved with the Project.	
Cultural	Disturb any human remains,	Applicable PVCCSP Mitigation Measures	Less than significant.
Resources	outside of dedicated	No applicable PVCCSP mitigation measures.	
cemeteries	cemeteries	Additional Project-Level Mitigation Measures	
		MM CR 2: In the event that human remains (or remains that may be human) are discovered at the Project site or within the off-site Project improvement areas during around-disturbing activities, the construction contractors,	

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		Project archaeologist, and/or designated Luiseño tribal representative shall immediately stop all activities within 100 feet of the find. The Project proponent shall then inform the Riverside County Coroner and the City of Perris Planning Division immediately, and the coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b).	
		If the coroner determines that the remains are of Native American origin, the coroner would notify the Native American Heritage Commission (NAHC), which will identify the "Most Likely Descendent" (MLD). Despite the affiliation with any Luiseño tribal representative(s) at the site, the NAHC's identification of the MLD will stand. The MLD shall be granted access to inspect the site of the discovery of Native American human remains and may recommend to the Project proponent means for treatment or disposition, with appropriate dignity of the human remains and any associated grave goods. The MLD shall complete his or her inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The disposition of the remains will be determined in consultation between the Project proponent and the MLD. In the event that there is disagreement regarding the disposition of the remains, State law will apply and mediation with the NAHC will make the applicable determination (see Public Resources Code Section 5097.98I and 5097.94(k)).	
		The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. The locations will be documented by the consulting archaeologist in conjunction with the various	
Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
--------------------	---	---	-------------------------
		stakeholders and a report of findings will be filed with the Eastern Information Center (EIC).	
Energy	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation	Applicable PVCCSP Mitigation Measures	Less than significant.
		MM Air 4, MM Air 11, MM Air 12, MM Air 14, MM Air 19, and MM Air 20 above	
		MM Air 18: Prior to the approval of each implementing development project, the Riverside Transit Agency (RTA) shall be contacted to determine if the RTA has plans for the future provision of bus routing within any street that is adjacent to the implementing development project that would require bus stops at the project access points. If the RTA has future plans for the establishment of a bus route that will serve the implementing development project, road improvements adjacent to the Project site shall be designed to accommodate future bus turnouts at locations established through consultation with the RTA. RTA shall be responsible for the construction and maintenance of the bus stop facilities. The area set aside for bus turnouts shall conform to RTA design standards, including the design of the contact between sidewalks and curb and gutter at bus stops and the use of ADA-compliant paths to the major building entrances in the Project.	
		Additional Project-Level Mitigation Measures	
		No additional Project-level mitigation is required.	

Table 1-B – DEIR	Impact Summary	Matrix
------------------	-----------------------	--------

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
Energy	Conflict with or obstruct a state or local plan for renewable energy or energy efficiency	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Geology and Soils	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving rupture of a known earthquake fault, as delineated on the most Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault.	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Geology and Soils	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving strong seismic ground shaking.	Applicable PVCCSP Mitigation Measures MM Geo 1: Concurrent with the City of Perris' review of implementing development projects, the project proponent of the implementing development project shall submit a geotechnical report prepared by a registered geotechnical engineer and a qualified engineering geologist to the City of Perris Public Works/ Engineering Administration Division for its review and approval. The geotechnical report shall assess the soil stability within the implementing development project affecting individual lots building pads, and shall describe the methodology	Less than significant.

Table 1-B – DEIR Impact Sumn	nary Matrix
------------------------------	-------------

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		(e.g., over excavated, backfilled, compaction) being used to implement the project's design.	
		Additional Project-Level Mitigation Measures	
		No additional Project-level mitigation is required.	
Geology and Soils	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction.	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Geology and Soils	Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving landslides.	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	No impact.
Geology and Soils	Result in substantial soil erosion or the loss of topsoil.	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Geology and Soils	Be located on a geologic unit	Applicable PVCCSP Mitigation Measures	Less than significant.
	that would become unstable as a result of the project, and	MM Geo 1 above.	
	potentially result in on- or off- site landslide, lateral	Additional Project-Level Mitigation Measures	
	spreading, subsidence, liquefaction, or collapse.	No additional Project-level mitigation is required.	

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
Geology and	Be located on expansive soil, as defined in Table 18-I-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.	Applicable PVCCSP Mitigation Measures	Less than significant.
50115		MM Geo 1 above.	
		Additional Project-Level Mitigation Measures	
		No additional Project-level mitigation is required.	
Geology and Soils	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	No impact.
Geology and	Directly or indirectly destroy a unique paleontological resource or site or unique	Applicable PVCCSP Mitigation Measures	Less than significant.
30115		No applicable PVCCSP mitigation measures.	
		Additional Project-Level Mitigation Measures	
		MM GEO 1: Prior to the issuance of grading permits, the Project proponent/developer shall submit to and receive approval from the City, a Paleontological Resource Impact Mitigation Monitoring Program (PRIMMP). The PRIMMP shall include the provision for a qualified professional paleontologist (or his or her trained paleontological representative) to be on-site for any Project-related excavations that exceed three (3) feet below the pre-grade surface. Selection of the	

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		paleontologist shall be subject to the approval of the City of Perris Planning Manager and no grading activities shall occur at the Project site or within the off-site Project improvement areas until the paleontologist has been approved by the City.	
		Monitoring shall be restricted to undisturbed subsurface areas of older Quaternary alluvium. The approved paleontologist shall be prepared to quickly salvage fossils as they are unearthed to avoid construction delays. The paleontologist shall also remove samples of sediments which are likely to contain the remains of small fossil invertebrates and vertebrates. The paleontologist shall have the power to temporarily halt or divert grading equipment to allow for removal of abundant or large specimens.	
		Collected samples of sediments shall be washed to recover small invertebrate and vertebrate fossils. Recovered specimens shall be prepared so that they can be identified and permanently preserved. Specimens shall be identified and curated and placed into an accredited repository (such as the Western Science Center or the Riverside Metropolitan Museum) with permanent curation and retrievable storage.	
		A report of findings, including an itemized inventory of recovered specimens, shall be prepared upon completion of the steps outlined above. The report shall include a discussion of the significance of all recovered specimens. The report and inventory, when submitted to the City of Perris Planning Division, will signify completion of the program to mitigate impacts to paleontological resources.	

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		MM GEO 2: Prior to the start of construction, a paleontological resources Worker Environmental Awareness Program (WEAP) training program shall be presented to all earthmoving personnel to inform them of the possibility for buried resources and the procedures to follow in the event of fossil discoveries.	
Greenhouse	Generate greenhouse gas	Applicable PVCCSP Mitigation Measures	Less than significant.
Gas	indirectly, that may have a significant impact on the environment	MM Air 2, MM Air 4, MM Air 5, MM Air 6, MM Air 7, MM Air 11, MM Air 12, MM Air 13, MM Air 14, MM Air 19, and MM Air 20 above	
		Additional Project-Level Mitigation Measures	
		No additional Project-level mitigation	
Greenhouse Gas	Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Hazards and Hazardous Materials	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.

Table 1-B – DEIR Impact Summary Matrix	Ĺ
--	---

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
Hazards and	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	Applicable PVCCSP Mitigation Measures	Less than significant.
Materials		No applicable PVCCSP mitigation measures.	
		Additional Project-Level Mitigation Measures	
		MM HAZ 1: To avoid the exposure of construction workers to potentially contaminated soil during Project construction, prior to the issuance of a grading permit, the Project Applicant shall retain a qualified professional to collect a minimum of four (4) samples at a depth of 0- to 0.5-feet below ground surface in each quarter of the Project site and have them analyzed for organochlorine pesticides (OCPs) and metals. If the levels of OCPs and metals exceed applicable safety standards, a remediation plan shall be developed and implemented for worker soil handling safety purposes.	
		MM HAZ 2: Prior to issuance of a grading permit, the Project Applicant shall perform an investigation of the Project site to confirm the presence or absence of a well on the Project site. If a well is determined to be present, the Project Applicant shall ensure said well is properly destructed and abandoned in accordance with the provisions of the California Department of Water Resources Water Well Standards Part III. Destruction of Water Wells (available at https://water.ca.gov/Programs/Groundwater- Management/Wells/Well-Standards/Combined-Well- Standards/Water-Destruction).	

Table 1-B – DEIR	Impact Summary	Matrix
------------------	-----------------------	--------

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
Hazards and Hazardous Materials	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 1-quarter-mile of an existing or proposed school	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Hazards and Hazardous Materials	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Hazards and Hazardous Materials	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area	Applicable PVCCSP Mitigation Measures MM Haz 2: Prior to the recordation of a final map, issuance of a building permit, or conveyance to an entity exempt from the Subdivision Map Act, whichever occurs first, the landowner shall convey an avigation easement to the MARB/March Inland Port Airport Authority. MM Haz 3: Any outdoor lighting installed shall be hooded or shielded to prevent either the spillage of lumens or reflection into the sky or above the horizontal plane.	Less than significant.

Executive Summary

Table 1-B – DEIR Impact Summary Matrix	(
--	---

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		MM Haz 4: The following notice shall be provided to all potential purchasers and tenants:	
		"This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example, noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Profession Code 11010 13(A)".	
		MM Haz 5: The following uses shall be prohibited:	
		 a. Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator. b. Any use which would cause sunlight to be reflected towards an aircraft engaged in a straight final approach towards an aircraft engaged in a straight climb following takeoff or towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards an aircraft engaged in a straight final approach towards an aircraft engaged in a straight final approach towards a landing at an airport. 	
		 Any use which would generate smoke or water vapor or which would attract large 	

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		 concentrations of birds, or which may otherwise affect safe air navigation within the area. d. Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation. e. All retention and water quality basins shall be designed to dewater within 48 hours of a rainfall event. 	
		MM Haz 6: A minimum of 45 days prior to submittal of an application for a building permit for an implementing development project, the implementing development project applicant shall consult with the City of Perris Planning Department in order to determine whether any implementing project-related vertical structures or construction equipment will encroach into the 100-to-1 imaginary surface surrounding the MARB. If it is determined that there will be an encroachment into the 100-to-1 imaginary surface, the implementing development project applicant shall file a FAA Form 7460- 1, Notice of Proposed Construction or Alteration. If FAA determines that the implementing development project would potentially be an obstruction unless reduced to a specified height, the implementing development project applicant and the Perris Planning Division will work with FAA to resolve any adverse effects on aeronautical operations.	
		Additional Project-Level Mitigation Measures	
		No additional Project-level mitigation is required.	

Table 1-B – DEIR Impact Sun	nmary Matrix
-----------------------------	--------------

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
Hazards and Hazardous Materials	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	No impact.
Hazards and Hazardous Materials	Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Hydrology and Water Quality	Violate any water quality standards or waste discharge requirements.	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Hydrology and Water Quality	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Hydrology and Water Quality	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.

Table 1-B – DEIR	Impact Summary	Matrix
------------------	----------------	--------

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
	substantial erosion or siltation on- or off-site		
Hydrology and Water Quality	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Hydrology and Water Quality	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
Hydrology and Water Quality	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows.	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Hydrology and Water Quality	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to provide inundation.	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Hydrology and Water Quality	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Land Use	Physically divide an established community	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	No impact.
Land Use	Cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
Noise	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in local general plan or noise ordinance, or applicable standards of other agencies	Applicable PVCCSP Mitigation Measures	Less than significant.
		MM Noise 1: During all project site excavation and grading on-site, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturer's standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the project site.	
		MM Noise 2: During construction, stationary construction equipment, stockpiling and vehicle staging areas will be placed a minimum of 446 feet away from the closet sensitive receptor.	
		MM Noise 3: No combustion-powered equipment, such as pumps or generators, shall be allowed to operate within 446 feet of any occupied residence unless the equipment is surrounded by a noise protection barrier.	
		MM Noise 4: Construction contractors of implementing development projects shall limit haul truck deliveries to the same hours specified for construction equipment. To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings.	
		Additional Project-Level Mitigation Measures	
		No additional Project-level mitigation is required.	

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
Noise	Generation of excessive ground-borne vibration or ground-borne noise levels	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Noise	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Utilities and Service Systems	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.

Table 1-B – DEIR	Impact Summary	Matrix
------------------	-----------------------	--------

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
Utilities and Service Systems	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Utilities and Service Systems	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Utilities and Service Systems	Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.
Utilities and Service Systems	Comply with federal, state, and local management and reduction statutes and regulations related to solid waste	No applicable PVCCSP mitigation measures. No additional Project-level mitigation is required.	Less than significant.

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
Transportation	Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities	Applicable PVCCSP Mitigation Measures	Less than significant.
		MM Trans 3: Each implementing development project shall participate in the phased construction of off-site traffic signals through payment of that project's fair share of traffic signal mitigation fees and the cost of other off-site improvements through payment of fair share mitigation fees which include TUMF (Transportation Uniform Mitigation Fee), DIF (Development Impact Fee) and the NPRBBD (North Perris Road and Bridge Benefit District). The fees shall be collected and utilized as needed by the City of Perris to construct the improvements necessary to maintain the required LOS and build or improve roads to their build-out level.	
		MM Trans 4: Prior to the approval of individual implementing development projects, the Riverside Transit Agency (RTA) shall be contacted to determine if the RTA has plans for the future provision of bus routing in the project area that would require bus stops at the project access points. If the RTA has future plans for the establishment of a bus route that would serve the project area, road improvements adjacent to the project site shall be designed to accommodate future bus turnouts at locations established through consultation with the RTA. RTA shall be responsible for the construction and maintenance of the bus stop facilities. The area set aside for bus turnouts shall conform to RTA design standards, including the design of the contact between sidewalk and curb and gutter at bus stops and the use of ADA-	

Table 1-B – DEIF	R Impact Summary	Matrix
------------------	------------------	--------

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		compliant paths to the major building entrances in the project.	
		MM Trans 5: Bike racks shall be installed in all parking lots in compliance with City of Perris standards.	
		MM Trans 7: Implementing project-level traffic impact studies shall be required for all subsequent implementing development proposals within the boundaries of the PVCC as approved by the City of Perris Engineering Department. These subsequent traffic studies shall identify specific project impacts and needed roadway improvements to be constructed in conjunction with each implementing development project. All intersection spacing for individual tracts or maps shall conform to the minimum City intersection spacing standards. All turn pocket lengths shall conform at least to the minimum City turn pocket length standards. If any of the proposed improvements are found to be infeasible, the implementing development project applicant would be required to provide alternative feasible improvements to achieve levels of service satisfactory to the City.	
		MM Trans 8: Proposed mitigation measures resulting from project-level traffic impact studies shall be coordinated with the NPRBBD to ensure that they are in conformance with the ultimate improvements planned by the NPRBBD. The applicant shall be eligible to receive proportional credits against the NPRBBD for construction of project-level mitigation that is included in the NPRBBD.	

Executive Summary

Table 1-B – DE	EIR Impact S	ummary Matrix
----------------	--------------	---------------

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
		Additional Project-Level Mitigation Measures	
		No additional Project-level mitigation is required.	
Transportation	Conflict or be inconsistent	No applicable PVCCSP mitigation measures.	Less than significant.
	Section 15064.3, subdivision (b)	No additional Project-level mitigation is required.	
Transportation	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)	Applicable PVCCSP Mitigation Measures	Less than significant.
		MM Trans 1: Future implementing development projects shall construct on-site roadway improvements pursuant to the general alignments and right-of-way sections set forth in the PVCC Circulation Plan, except where said improvements have previously been constructed.	
		MM Trans 2: Sight distance at the project entrance roadway of each implementing development project shall be reviewed with respect to standard City of Perris sight distance standards at the time of preparation of final grading, landscape and street improvement plans.	
		MM Air 2, above.	
		Additional Project-Level Mitigation Measures	
		No additional Project-level mitigation is required.	

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
Transportation	Result in inadequate	Applicable PVCCSP Mitigation Measures	Less than significant.
	energency access	MM Air 2 above.	
		Additional Project-Level Mitigation Measures	
		No additional Project-level mitigation is required.	
Tribal Cultural	Cause a substantial adverse	Applicable PVCCSP Mitigation Measures	Less than significant.
Resources	change in the significance of a tribal cultural resource defined in Public Resources Code section 21074 as either	No applicable PVCCSP mitigation measures.	
		Additional Project-Level Mitigation Measures	
	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)	MM CR 1, MM CR 2 above.	

Duke Warehouse at Patterson Avenue and Nance Street DEIR

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
Tribal Cultural	Cause a substantial adverse	Applicable PVCCSP Mitigation Measures	Less than significant.
Resources	change in the significance of a tribal cultural resource defined in Public Resources Code section 21074 as either	No applicable PVCCSP mitigation measures.	
		Additional Project-Level Mitigation Measures	
	a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision(c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of	MM CR 1, MM CR 2 above.	

Impact Category	Impact	Applicable PVCCSP Mitigation Measures and Additional Project-Level Mitigation Measures	Impact After Mitigation
	the resource to a California Native American tribe		

1.11 Alternatives to the Proposed Project

One of the most important aspects of the environmental review process is the identification and assessment of reasonable alternatives that have the potential for avoiding or minimizing the significant impacts of a proposed project. The State CEQA Guidelines (Section 15126(d)) emphasizes the selection of a reasonable range of technically feasible alternatives and adequate assessment of these alternatives to allow for a comparative analysis and consideration by decision-makers. The State CEQA Guidelines state that the discussion of alternatives shall focus on alternatives capable of eliminating or reducing significant adverse environmental effects of a proposed project, even if these alternatives would impede to some degree the attainment of the project objectives or would be more costly.

The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. The range of alternatives required in an EIR is governed by a "rule of reason," which requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. Of the alternatives considered, the EIR need examine in detail only the ones that the lead agency determines could feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. Pursuant to CEQA, "feasible" has been defined as "…capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors."

1.11.1 Alternatives Summary

One alternative was identified for further analysis in this Draft EIR. Pursuant to State CEQA Guidelines Section 15126.6(e)(3)(B), the No Project Alternative for a development project on identifiable property is the circumstance under which the proposed Project does not proceed, and the discussion of the No Project Alternative must compare the environmental effects from the Project site remaining in its existing state, versus the environmental effects that would occur if the proposed Project is approved. Accordingly, under the No Build Alternative, the site would remain in its existing condition and no development would occur.

Alternative 1 No Project/No Build

Under the No Project Alternative, Alternative 1, no development would take place within the Project site limits. No ground-disturbing activities would take place, nor would any form of structure be erected.

The following discussion compares the impacts of Alternative 1 with the impacts of the proposed Project, as detailed in Section 5.1 Aesthetics through Section 5.14 Tribal Cultural Resources, of this DEIR. **Table 1-C – Comparison of Alternatives Matrix**, below, compares the potential environmental impacts of each alternative and ranks each alternative as having impacts that are increased, similar, or reduced in comparison to the proposed Project.

Environmental Issue	Proposed Project	Alternative 1 No Project/ No Build
Aesthetics	LTSM	Reduced
Air Quality	LTSM	Reduced
Biological Resources	LTSM	Reduced
Cultural Resources	LTSM	Reduced
Energy	LTS	Reduced
Geology and Soils	LTSM	Reduced
Greenhouse Gas (GHG) Emissions	LTSM	Reduced
Hazards and Hazardous Materials	LTSM	Reduced
Hydrology and Water Quality	LTS	Increased
Land Use and Planning	LTS	Increased
Noise	LTS	Reduced
Transportation	LTS	Reduced
Tribal Cultural Resources	LTSM	Reduced
Utilities/Service Systems	LTS	Increased
LTS = Less than Significant Impact LTSM = Less than Significant Impact with Mitigation SU = Significant and Unavoidable Impact		

Table 1-C – Comparison of Alternatives Matrix

Section 2 – Introduction

This Draft Environmental Impact Report (DEIR) has been prepared pursuant to the California Environmental Quality Act (CEQA) (California Public Resources Code, Sections 21000, et seq.) to assess the potential environmental effects of the Duke Warehouse at Patterson Avenue and Nance Street Project (Project), which is proposed for an approximate 35.7-net-acre site within the Perris Valley Commerce Center Specific Plan (PVCCSP) planning area in the northern portion of the City of Perris (City). The PVCCSP is intended to contribute to the planned economic development of the City of Perris by creating jobs, increasing disposable income in the area, generating tax revenue, and stimulating other economic growth in and around the City.

The intentions of CEQA are to: (1) inform governmental decision-makers and the public about the potentially significant environmental effects of proposed activities; (2) identify the ways that environmental damage can be avoided or substantially reduced; (3) prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and (4) disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose, if significant environmental effects are involved (State CEQA Guidelines Section 15002).

The City of Perris is the Lead Agency under CEQA for this Project pursuant to Sections 15051 and 15367 of the Guidelines for Implementation of the California Environmental Quality Act (State CEQA Guidelines) (California Code of Regulations, Sections 15,000, et seq.) and will use this document to objectively review and assess the proposed Project prior to approving or disapproving the Project. As discussed further in Section 2.3, Compliance with CEQA, this DEIR is tiered from *City of Perris General Plan 2030 Environmental Impact Report* as well as the *Perris Valley Commerce Center Specific Plan Final Environmental Impact Report* (State Clearinghouse No. 2009081086) (PVCCSP EIR), which are hereby incorporated herein by reference.

2.1 Background

The approximately 35.7-net-acre Project site is located at the northeastern corner of Patterson Avenue and Nance Street in the City of Perris in Riverside County and is within the PVCCSP planning area. The PVCCSP was adopted by the City of Perris on January 12, 2012 (Ordinance No. 1284). The environmental impacts resulting from implementation of allowed development under the PVCCSP have been evaluated in the PVCCSP EIR, which was also certified by the City on January 12, 2012. The PVCCSP EIR is a program EIR, and project-specific evaluations in later-tier environmental documents for individual development projects within the Specific Plan area were anticipated. This DEIR is such a document.

The Project site has a General Plan Land Use Designation of Specific Plan – Perris Valley Commerce Center Specific Plan and is zoned PVCCSP. The PVCCSP Land Use Plan Designation for the northern approximately 26 acres is General Industrial (GI) and the southern approximately 9 acres is designated Light Industrial (LI). The Project site is surrounded by land designated in the PVCCSP as GI (to the north and east) and LI (to the south and west).

The Project site is relatively flat, with a gentle regional slope downwards to the east-southeast, and is situated at an elevation approximately 1,486 feet above mean sea level. The Project site is located on

land designated by the California Department of Conservation in its Farmland Mapping and Monitoring Program as "Farmland of Local Importance."

The Project site primarily consists of unimproved vacant land with the exception of three parcels in the northwest corner of the Project site, totaling approximately 2.7 acres, currently utilized for semi-truck trailer storage. The Project site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Mead Valley Area Plan. The Project site is not located within an MSHCP Criteria Cell, Cell Group, or Linkage Area. Vegetation types at the Project site consist primarily of fallow field croplands and disturbed habitat generally devoid of vegetation. No Riparian/Riverine areas or vernal pools are located within or adjacent to the Project site.

2.2 Purpose and Scope

The purpose of this DEIR is to evaluate potential environmental impacts resulting from the implementation of the Duke Warehouse at Patterson Avenue and Nance Street Project. The City of Perris is the Lead Agency under CEQA and is responsible for the preparation of this DEIR. This DEIR is an informational document intended for use by the City, decision-makers, and members of the general public in evaluating the potential environmental effects associated with the proposed Project. This DEIR has been prepared pursuant to the State CEQA Guidelines, and the rules, regulations, and procedures for implementing CEQA as adopted by the City.

2.3 Compliance with CEQA

2.3.1 Format

Section 1 of this document covers the summary requirements of CEQA as required by Section 15123 of the State CEQA Guidelines. Section 2 introduces the document, provides background regarding the Project, and discusses the DEIR's compliance with CEQA. Section 3 satisfies the project description requirements of CEQA by discussing the project location, the project objectives, a general description of the project's environmental setting, and a statement of document purpose and intended use. Section 4 identifies the environmental effects found not to be significant during preparation of the Notice of Preparation (NOP) and EIR process. Section 4 also provides a summary of the written comments received in response to the NOP and the comments received at the scoping meeting held for the proposed Project.

Environmental issues identified in the Notice of Preparation prepared for the proposed Project are discussed in Sections 5 through 8 of this DEIR, which has been formatted to address the following general topics: Environmental Impact Analysis, Cumulative Impact Analysis, Alternatives, and Other CEQA Topics. Under each issue, an analysis is performed to determine the amount and degree of impact that is associated with the Project. For all identified significant environmental impacts, mitigation measures, where feasible, are recommended in order to reduce the impact to a less than significant level or to the maximum extent feasible.

The analysis of impacts and identification of mitigation measures is derived from technical reports which are included as technical appendices to this DEIR and from other informational resources as listed in Section 9, References.

2.3.2 CEQA Procedures

The EIR process typically consists of three parts – the NOP, Draft EIR (or DEIR), and Final EIR. Pursuant to Section 15063 of the State CEQA Guidelines, a NOP for a DEIR with a description of potential adverse impacts was distributed to the State Clearinghouse, responsible agencies, and other interested parties via digital upload, overnight mail, or delivery on January 19, 2022. A notice advising of the availability of the NOP was also posted by the Riverside County Clerk on January 19, 2022. Pursuant to State CEQA Guidelines Section 15082, recipients of the NOP were requested to provide responses within 30 days after their receipt of the NOP. Copies of the NOP and the NOP distribution list are provided in Appendix A.1 to this DEIR. Copies of comment letters regarding the NOP, received by the City, are included in Appendix A.2. The comment letters are summarized in Section 2.5 – NOP Comment Letters. A DEIR scoping meeting was held on February 2, 2022 before the City of Perris Planning Commission pursuant to the requirements of State CEQA Guidelines Section 15082(c)(1).

This document provides for the DEIR stage of the EIR process. Pursuant to Public Resources Code Section 21091(a), the DEIR will be published for a 45-day public review and comment period. At the conclusion of the 45-day public review and comment period, the City will prepare the Final EIR (FEIR), which will include responding to any written comments received on the DEIR during the 45-day public review period. The FEIR will be a separate document.

As the "Lead Agency" for the purposes of CEQA compliance, the City of Perris has the principal responsibility for processing and approving the Project. As set forth in State CEQA Guidelines Section 15021, as "Lead Agency", the City of Perris also has the duty to avoid or minimize significant environmental damage where feasible. Furthermore, Section 15021(d) states that, "CEQA recognizes that in determining whether and how a project should be approved, a public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social factors and in particular the goal of providing a decent home and satisfying living environment for every Californian." Other public agencies (i.e., Responsible and Trustee Agencies) that may use this EIR in their decision-making or permit processing, will consider the information in this EIR along with other information that may be presented during the CEQA process. In accordance with CEQA, the public agencies will be required to make findings for each environmental impact of the Project that cannot be mitigated to a less than significant level. If the Lead Agency determines the benefits of the proposed Project outweigh unavoidable significant environmental effects, the agency will be required to adopt a Statement of Overriding Considerations stating the reasons supporting their action, notwithstanding the Project's significant environmental effects.

2.3.3 Breadth of Environmental Analysis

Pursuant to the provisions of State CEQA Guidelines Section 15152, the environmental analysis contained within this DEIR shall consist of effects which were not examined as significant effects on the environment in the Perris GP EIR or the PVCCSP EIR; or which are susceptible to substantial reduction or avoidance by the choice of specific revisions in the Project, by the imposition of conditions, or other means. As appropriate, the general discussions contained within the Perris GP EIR and the PVCCSP EIR will be incorporated by reference and summarized within this DEIR. (State CEQA Guidelines Sections 15150 and 15152).

2.4 Effects Found Not to be Significant during Preparation of the NOP

CEQA provides that an EIR shall focus on the potentially significant effects on the environment, discussing the effects with emphasis in proportion to their severity and probability of occurrence. Effects dismissed in an NOP as clearly insignificant and unlikely to occur need not be discussed further in the EIR unless information inconsistent with the finding in the NOP is subsequently received.

Public Resources Code Section 21100(c) states that an EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR.

The NOP prepared and circulated for public review regarding the Duke Warehouse at Patterson Avenue and Nance Street Project (Appendix A.1) concluded that the proposed Project would not result in potentially significant impacts to: Agriculture and Forestry Resources, Mineral Resources, Population and Housing, and Wildfire. The basis for elimination of each relevant impact in these issue areas is documented in the NOP (Appendix A.1). Based on further review it was also concluded that the Project, which does not involve residential uses, would not result in physical environmental impacts related to Public Services or Recreation (see Section 4.2, Effects Found Not to be Significant as Part of the EIR Process).

2.5 NOP Comment Letters

The public review period for the NOP began January 19, 2022 and ended February 17, 2022. The following is a list of all parties from which written comments were received and a brief summary of the issues raised. None of the comments received had the effect of changing the issue areas that the NOP had identified to be discussed in the DEIR. These letters can be found in Appendix A.2.

- Maria L. Matienzo Trust 1/26/22 Ms. Matienzo, as the former owner of the subject property, expresses her support for the Project and states that it presents no environmental issues as it is located adjacent to the existing industrial warehouses.
- Southern California Association of Governments (SCAG) 2/16/22 SCAG recommends a review of certain SCAG policies, including Connect SoCal for Project consistency and the review of the Final Program Environmental Impact Report (Final PEIR) for the 2020-2045 RTP/SCS for guidance on consistency with the adoption of RTP/SCS. Section 5.10– Land Use and Planning addresses Project consistency with SCAG's RTP/SCS.
- Californians Allied for a Responsible Economy (CARE CA) 2/17/22 CARE CA requests complete analysis of all impacts under CEQA, imposition of all feasible mitigation and study of a reasonable range of alternatives to the Project. CARE also recommends/requests the DEIR include a Health Risk Assessment (HRA), analysis of high intensity uses, including heavy truck in the vehicle miles travelled (VMT) analysis, incorporation of modern technology in its mitigation measures, and reliance on substantial evidence in the DEIR analysis. Section 4 Environmental Effects Found Not Significant, Sections 5.1 through 5.14 for all impact categories and specifically Sections 5.2 Air Quality, and 5.13 Transportation related to health risk and VMT, as well as Sections 7.0 Cumulative Impact Analysis, 8.0 Alternatives, and 9.0 Other CEQA Topics evaluate all potential impacts pursuant to CEQA requirements and implement mitigation measures, where applicable, to reduce significant impacts.

- Riverside County Flood Control & Water Conservation District (RCFCWCD) 2/17/22 The RCFCWCD recommends that the DEIR address impacts to the Perris Valley Master Drainage Plan (MDP) facilities within the proposed Project area. They also advise that if the Project requires a connection to the existing Perris Valley Channel Lateral B, Stage 3 storm drain an encroachment permit may be needed. Finally, if the Project proposes storm drains 36 inches or larger in diameter the RCFCWCD would consider accepting ownership of such facilities. The environmental issues raised by the RCFCWCD have been addressed in Sections 5.12 – Utilities and Service Systems, and 5.9 – Hydrology.
- Eastern Municipal Water District (EMWD) 3/3/22 The EMWD recommends that the Project Applicants consult EMWD's Development Services Department to compare proposed and existing water demands and sewer flows to determine the water, sewer, and recycled water services requirements from the EMWD. The water, sewer, and recycled water service pipelines are described in Section 3 – Project Description, and impacts to these services are discussed in Section 5.12 – Utilities and Service Systems.

2.6 Comments Received at the Scoping Meeting

Because the Project is considered to be of statewide, regional, or areawide significance, per State CEQA Guidelines Section 15206(b)(2)(E), a public scoping meeting was held February 2, 2022 with the Perris Planning Commission. In addition to the Planning Commission, seven members of the public provided comments. Comments received from the Planning Commission and the public are included in the following table.

Торіс	Summary of Comment	Location in DEIR in which Comment is Addressed ^a
Aesthetics	 Plants and trees should be included to make the site aesthetically pleasing. Plants should be native species. 	Section 3 – Project Description Section 5.1 – Aesthetics
	Appearance of industrial building should be aesthetically pleasing.	
Air Quality	Address meeting Air Quality Management District standards	Section 5.2 – Air Quality Section 5.5 – Energy
	 Concern was expressed about air pollution, truck idling limits 	Section 5.7 – Greenhouse Gas Emissions
	 DEIR should identify how to avoid adding to ozone burden, and Metrolink/mobility options should be analyzed 	
	Electric car charging stations should be provided	
Energy	 Solar panels, electric vehicle charging should be considered 	Section 5.5 – Energy Section 5.7 – Greenhouse Gas Emissions

Introduction

Торіс	Summary of Comment	Location in DEIR in which Comment is Addressed ^a
Greenhouse Gas Emissions	 Address greenhouse gas emissions, mitigation Address need for electric vehicle, charging, solar panels 	Section 5.5 – Energy Section 5.7 – Greenhouse Gas Emissions
Hazards and Hazardous Materials	 Concern was expressed about project hazardous material impacts and soil contaminants 	Section 5.8 – Hazards and Hazardous Materials Section 5.6 – Geology and Soils
Noise	Concern was expressed about noise impacts	Section 5.11 – Noise
Population/Housing	 Concern was expressed that population/housing not addressed in DEIR 	Section 4 – Environmental Effects Found Not Significant
Transportation	 Truck traffic and personal vehicle traffic should not intermingle Truck route enforcement Roads should be pedestrian friendly The building is speculative, highest use that could potentially be in the building should be used for VMT Concern was expressed about existing traffic on the Interstate 215 (I-215) to the State Route 60 (SR 60), and fear that additional warehouses will make the traffic worse 	Section 5.13 – Transportation

Notes: a Comments may also be addressed in other sections of the DEIR.

2.7 Potentially Significant Environmental Effects

State CEQA Guidelines Sections 15126, 15126.2 and 15126.4 require consideration and discussion of significant environmental effects and mitigation measures proposed to minimize significant effects. All phases of a project must be considered when evaluating its impact on the environment: planning, land acquisition, development, and operation (Section 15126), and an EIR shall identify and focus on the significant environmental effects of the proposed project (Section 15126.2).

The NOP determined that the proposed Project may have potentially significant effects on the environment, and therefore specific issues are discussed further in Section 5 – Potentially Significant Environmental Effects. Impacts related to the following issues were found to be potentially significant in the NOP: Aesthetics, Air Quality, Biological Resources, Cultural Resources, Energy, Greenhouse Gas Emissions, Hazards/Hazardous Materials, Hydrology/Water Quality, Land Use/Planning, Noise, Transportation, Tribal Cultural Resources, and Utilities/Service Systems. Where applicable, mitigation measures are recommended to reduce significant effects.

No significant unavoidable impacts associated with the implementation of the proposed Project will occur.

Please see the following referenced sections of this DEIR for more detailed discussion of each issue area:

- Aesthetics (Section 5.1)
- Air Quality (Section 5.2)
- Biological Resources (Section 5.3)
- Cultural Resources (Section 5.4)
- Energy (Section 5.5)
- Geology and Soils (Section 5.6)
- Greenhouse Gas Emissions (Section 5.7)
- Hazards and Hazardous Materials (Section 5.8)
- Hydrology and Water Quality (Section 5.9)
- Land Use and Planning (Section 5.10)
- Noise (Section 5.11)
- Transportation (Section 5.13)
- Tribal Cultural Resources (Section 5.14)
- Utilities and Service Systems (Section 5.12)

2.8 Uses of this EIR

As the Lead Agency, the City of Perris has assumed responsibility for preparing this DEIR. The decision to implement the Project is within the purview of the City of Perris. The City decision makers will use the information included in this DEIR to consider potential impacts to the physical environment associated with implementation of the proposed Project when making its decision regarding the Project.

The DEIR will be made available for review to the public and public agencies for 45 days to allow for the preparation of comments regarding the sufficiency of the document in identifying and analyzing the possible impacts on the environment and ways in which the significant effects of the Project might be avoided or mitigated (State CEQA Guidelines Section 15204).

The City will use the EIR and supporting documentation for implementation of the proposed Project through the approval of land use proposals. Regulatory agencies will use the EIR and supporting documentation in its decision to issue permits related to development of the subject property.

Section 3 – Project Description

This Draft Environmental Report (DEIR) is being prepared to analyze the potential environmental effects of the construction and operation of a proposed high-cube, non-refrigerated warehouse building located at the northeast corner of Patterson Avenue and Nance Street and all associated on- and off-site supporting improvements, which are herein collectively referred to as the "Project" or "proposed Project." Discretionary actions to be considered by the City of Perris associated with the proposed Project are an amendment to the Perris Valley Commerce Center Specific Plan (PVCCSP), Tentative Parcel Map (TPM 38259), and Development Plan Review (DPR 21-00005).

The Project Description serves as a basis for analyzing the Project's impacts on the existing physical environment.

3.1 Project Location

The overall Project vicinity is shown on **Figure 3-1 – Regional Map**. The Project site is located within Section 1, Township 4 South, Range 4 West, San Bernardino Base and Meridian. The approximate 35.7-net-acre Project site is located at the northeastern corner of Patterson Avenue and Nance Street, within the PVCCSP planning area in the City of Perris (City), Riverside County.

The Project site is located within the northwest portion of the PVCCSP planning area, which encompasses more than five square miles and over 3,500 acres that is located in the northern end of the City. The PVCCSP planning area is relatively flat, sloping in a southeasterly direction with elevations ranging from 1,430 to 1,500 feet above mean sea level. (PVCCSP, p. 1.0-1, 1.0-5) The City lies on the Perris Block, a 20- by 50-square-mile mass of crystalline rocks generated during the Cretaceous time period (Perris Comprehensive General Plan 2030 (Perris GP 2030), p. SE-8). It is also located within the San Jacinto River Watershed, which drains an approximately 540-square-mile area of western Riverside County. The 250-foot-wide Perris Valley Channel is the major tributary to the San Jacinto River within the City and flows from north to south through southern Moreno Valley and Perris (GP 2030 DEIR, p. IV-48).

The Project site is located approximately 0.1 mile to the southwest of March Air Reserve Base/Inland Port Airport (MARB/IPA) and approximately 0.20 mile east of the Interstate 215 (I-215) freeway. The major road that currently provides access to the Project site is Patterson Avenue. The freeway interchange closest to the Project site is at Harley Knox Boulevard, which is a designated truck route, approximately one-half mile to the northwest (**Figure 3-2 – Aerial Map**). The Assessor's Parcel Numbers (APNs) for the Project site are: 314-153-015 through -040, 314-153-042, 314-153-044, 314-153-046, 314-153-048, 314-160-005 through -012, and 314-160-033.





Source: Riverside County 2021



Figure 3-2 – Aerial Map Duke Warehouse at Patterson Avenue and Nance Street



3.2 Site Description

As stated previously, the Project site encompasses approximately 35.7-net-acres located at the northeastern corner of Patterson Avenue and Nance Street, within the PVCCSP planning area in the City of Perris, California.

The Project site is unimproved and vacant, apart from three-parcels (APNs 314-153-019, -020 and -021), totaling approximately 2.7 acres, located in the northwest corner of the Project site currently utilized for semi-truck trailer storage. The Project site is generally flat and dominated by fallow field croplands. Views of the Project site in its existing condition are included in **Figure 3-3 – Project Site Photographs**.

The site is situated at an elevation approximately 1,499 feet above mean sea level in the southwest corner to 1,486 feet above mean sea level in the northeast corner. The existing topography slopes approximately 1.0% in the southwest to northwest direction. The Project site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Mead Valley Area Plan. The Project site is not located within an MSHCP Criteria Cell, Cell Group, or Linkage Area. Vegetation types at the Project site consist primarily of fallow field croplands and disturbed habitat generally devoid of vegetation. No Riparian/Riverine areas or vernal pools are located within or adjacent to the Project site.

The area surrounding the Project site is dominated by industrial and commercial uses with some vacant land. Specifically, the Project site is bordered by an industrial warehouse to the south, commercial businesses to the north, vacant land and legal, non-conforming residential uses to the east, and commercial businesses and legal, non-conforming residential uses to the west as shown on **Figure 3-2** – **Aerial Map** and described in **Table 3-A** – **Surrounding Land Uses**.

Direction from Project Site	Land Uses
North	Commercial uses and vacant land.
East	Legal non-conforming residential uses and vacant land.
South	Industrial warehouse.
West	Commercial uses, legal non-conforming residential uses, and vacant land.

Table 3-A – Surrounding Land Uses

There is limited existing water, sewer, recycled water, and drainage facilities currently serving the Project site.



PHOTOGRAPH 1



PHOTOGRAPH 2





PHOTOGRAPH 3

Source: MSHCP Conservation Plan 2022, Site Photographs



PHOTOGRAPH 4



Figure 3-3 – Project Site Photographs Duke Warehouse Patterson Avenue and Nance Street


Existing roadways surrounding the Project site include Patterson Avenue, Nance Street, and Nevada Avenue. Harley Knox Boulevard, a City-designated truck route, is in close proximity to the Project site to the north. The PVCCSP Circulation Plan designation and current improvements to these roadways are described below.

- Harley Knox Boulevard is an east-west six-lane roadway classified as an Arterial in the PVCCSP Circulation Plan. Within the Project vicinity, it has either a raised, landscaped median or a twoway left-turn median lane. The proposed Project does not include any improvements to Harley Knox Boulevard.
- Patterson Avenue is a north-south two-lane roadway with a two-way left-turn median lane from California Avenue to Markham Street. A Class II bike lane is included in each direction. It is classified as a Collector in the PVCCSP Circulation Plan, terminating north of Harley Knox Boulevard at Nandina Avenue and south of Markham Street. The proposed Project includes improvements to Patterson Avenue as described in Section 3.3.5, On- and Off-Site Infrastructure.
- Nevada Avenue is a north-south two-lane undivided roadway classified as a Local roadway per the PVCCSP Circulation Plan. It terminates to the north at Harley Knox Boulevard and to the south at Nance Street. The proposed Project includes improvements to Nevada Avenue as described in Section 3.3.5, On- and Off-Site Infrastructure.
- Nance Street is an east-west two-lane undivided roadway classified as a Local roadway per the PVCCSP Circulation Plan. It terminates to the west at Wade Avenue and to the east at Indian Avenue. It is currently an undeveloped dirt road between Patterson Avenue and Webster Avenue. The proposed Project includes a Specific Plan Amendment to delete this roadway from the PVCCSP Circulation Plan and a Tentative Parcel Map that would vacate the dedicated rightof-way.

Refer to Section 5.13 – Transportation for additional discussion regarding streets in the vicinity of the Project site.

California Avenue and Nance Street are designated as Local roadways in the PVCCSP Circulation Plan that traverse the Project site in an east-west direction. The City accepted the right-of-way for Nance Street, but not for California Avenue within the Project site. No improvements have been made to these planned roadways. As discussed in Section 3.3.2, the Project Applicant proposes a Specific Plan Amendment to the PVCCSP to delete these planned streets from the PVCCSP Circulation Plan.

3.2.1 General Plan and Zoning Designations

The Project site is located within Planning Area 1 (PA 1), North Commercial/Industrial, of the Perris GP 2030, which consists of approximately 1,925 acres and is bounded by the MARB/IPA to the north, I-215 to the west, City limits near Lake Perris to the east, and Ramona Expressway to the south. PA 1 is primarily made up of land designated for industrial use with very little area designated for residential use. The industrial planning of PA 1 is based upon the restrictions placed on properties in this area due to flight operations of MARB/IPA. Specifically, the Project site has a Perris GP 2030 Land Use Designation of Specific Plan – Perris Valley Commerce Center Specific Plan and is zoned PVCCSP (**Figure 3-4** – **Zoning, Figure 3-5** – **General Plan Land Use**). The area to the west of PA 1 is unincorporated Riverside County but is within the City's Sphere of Influence and is zoned for manufacturing under the Riverside County Zoning Ordinance.







Figure 3-5 – General Plan Land Use Duke Warehouse at Patterson Avenue and Nance Street



3.2.2 Perris Valley Commerce Center Specific Plan

On January 10, 2012, the City Council adopted the PVCCSP for a planning area that encompasses approximately 5.23 square miles in north Perris located east of I-215 and west of the Perris Valley Storm Drain, south of MARB/IPA, and north of Placentia Avenue. This area provides convenient access to a multi-directional freeway system via I-215 traveling north and south and State Route 60 (SR-60) traveling east and west as well as access to MARB/IPA for air transport. The PVCCSP Land Use Plan envisions this area to be a concentrated commerce center with a balanced mix of industrial uses including Business Professional Office (BPO), Light Industrial (LI), and General Industrial (GI).

The portion of the proposed Project site located south of Nance Street is designated as LI and the portion located north of Nance Street is designated as GI in the PVCCSP planning area (**Figure 3-6 – Specific Plan Land Use**). The site is surrounded by areas designated as GI to the north and east, and LI to the south and west.

The LI land use designation provides for development of light industrial uses and related activities including manufacturing, research, warehouse and distribution, assembly of non-hazardous products or materials, and retail related to manufacturing. The GI land use designation provides for the development of basic industrial uses which may support a wide range of manufacturing and non-manufacturing uses, from large-scale warehouse and warehouse/distribution facilities to outdoor industrial activities.

Section 3.0 of the PVCCSP also outlines land use planning and design standards to assist in accommodating future development proposals and provides suitable transitions to neighboring land uses. Additionally, the PVCCSP outlines green development practices to encourage and require construction methods and materials that have a lower environmental impact. The proposed Project site will be required to comply with all design guidelines, landscape guidelines, and relevant policies outlined in the PVCCSP as well as Perris GP 2030.

3.2.3 MARB/IPA Airport Overlay Zone

In 2014, and subsequent to approval of the Perris GP 2030, the Riverside County Airport Land Use Commission (ALUC) adopted the 2014 MARB/IPA Airport Land Use Compatibility Plan (ALUCP). Thus, the City was required to update its General Plan to reflect the new ALUCP. The City created an Airport Overlay Zone (AOZ) to accommodate development within the City consistent with the land use designations of the 2014 MARB/IPA ALUCP. On July 14, 2016, the Riverside County ALUC determined that the City's AOZ is consistent with the 2014 MARB/IPA ALUCP.

In August 2016, the City of Perris approved the following: Resolution 5050 approving General Plan Amendment 15-01522, to amend the Perris GP 2030 Land Use, Noise, and Safety Elements to implement the 2014 MARB/IPA ALUCP; Ordinance Number 1331 approving Ordinance Amendment 16-05024 to update Perris Municipal Code Chapter 19.82 (Districts and Map) to revise the City of Perris Zoning Map to include an Airport Overlay Zoning designation and adopt an AOZ Code Chapter 19 (19.51) to implement the 2014 MARB/IPA ALUCP; and, Ordinance Number 1332 approving Specific Plan Amendment 16-05025 to amend the PVCCSP to update the Airport Overlay Zone Section (Section 12) to implement the 2014 MARB/IPA ALUCP.

On March 10, 2022, the Riverside County ALUC found the Project consistent with the 2014 MARB/IPA ALUCP. This consistency finding included several conditions of approval, including Condition of Approval 9:

The project does not propose rooftop solar panels at this time. However, if the project were to propose solar rooftop panels in the future, the applicant/developer shall prepare a solar glare study that analyzes glare impacts, and this study shall be reviewed by the Airport Land Use Commission and March Air Reserve Base.

In addition, ALUC and MARB personnel have communicated to the Applicant on this Project and have taken the position on other projects within the MARB/IPA runway approach, that solar panels are generally discouraged due to potential issues with approaching and departing aircraft. A more detailed discussion of the ALUC review can be found in Section 5.8, Hazards and Hazardous Materials of this DEIR. The Riverside County ALUC review findings are included in Appendix G.2 of this DEIR.

Remainder of Page Intentionally Left Blank



3.3 **Project Characteristics**

The proposed Project includes construction and operation of a high-cube, non-refrigerated warehouse building and supporting on- and off-site infrastructure, as discussed below.

3.3.1 Site Preparation and Construction

Project site construction will involve grading and earthwork within the site boundaries to accommodate the proposed warehouse structure, infrastructure and associated parking lot. The Project site grading is expected to balance on-site; no soil import or export is anticipated.

Prior to grading operations, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared in accordance with the requirements of the statewide general National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for stormwater discharge from construction sites. The SWPPP will include Project-specific best management practices (BMPs) to reduce erosion and sedimentation and is subject to review and comment by the City Public Works Department. BMPs may include, but not be limited to, soil stabilization controls, perimeter silt fences, placement of hay bales, and use of sediment basins. All erosion and sediment controls will be in accordance with the currently adopted state general permit. The developer and construction contractor will be responsible for implementing the BMPs in accordance with the SWPPP.

Construction is anticipated to begin no sooner than the fourth quarter of 2022 and be completed in 2023. This construction schedule represents a "worst-case" analysis. The duration of construction activity (and associated equipment) represents a reasonable approximation of the expected construction activities as required per the State CEQA Guidelines.

3.3.2 Specific Plan Amendment (Case No. 21-05267)

The warehouse proposed by the Project Applicant is consistent with existing LI and GI PVCCSP land use designations for the Project site. However, the Project Applicant proposes to amend the PVCCSP Circulation Plan to delete two planned streets: California Avenue and Nance Street between Patterson Avenue to the west and Nevada Avenue to the east. (see **Figure 3-7 – Proposed Specific Plan Amendment Circulation Plan**).

3.3.3 Tentative Parcel Map 38259 (Case No. 21-05086)

Tentative Parcel Map 38259 proposes: to (i) merge thirty-eight (38) existing parcels into one parcel; (ii) vacate all or portions of the right-of-way (ROW) of California Avenue and Nance Street between Patterson Avenue and Nevada Avenue; and (iii) dedicate a portion of Patterson Avenue and Nevada Avenue; Avenue ROW as shown on **Figure 3-8 – Tentative Parcel Map 38259**.



1,500

_ Feet

500

1,000





Source: WEBB, TPM 3-16-22



Figure 3-8 – Tentative Parcel Map 38259

Duke Warehouse at Patterson Avenue and Nance Street



3.3.4 Development Plan Review (DPR 21-00005)

The proposed Project involves the construction and operation of a 769,668-square-foot (SF) building on the approximate 35.7-net-acre Project site (see **Figure 3-9 – Development Plan Review No. 21-00005**). The building is proposed to accommodate 749,668 SF of high-cube, non-refrigerated warehouse distribution uses with the remaining 20,000 SF for supporting office uses. The building includes 64 dock doors on the east side and 49 dock doors on the west side. The proposed Project would be constructed as a "spec" building; that is, there is not a specific tenant identified at this time. It is anticipated that the building could operate 24 hours a day, seven days a week.

The Project will provide a total of 366 automobile parking stalls, consisting of 326 standard stalls, 10 American Disabilities Act-compliant (ADA) stalls, and 30 Electric Vehicle (EV)/Clean Air/Vanpool stalls. Automobile parking is provided in three locations: one across from each office area on the northwest and southwest corners of the building and a third area along the north side of the building. ADA path of travel is provided between passenger vehicle parking areas and the office areas. Raised planter islands are proposed at the automobile parking lot entrances along Patterson Avenue and a five (5)-foot-wide landscaped curb is provide between the automobile parking area and the truck drive aisle along the north side of the building to provide separation of the cars and trucks. The Project also includes 140 trailer parking stalls. Bike racks will also be provided at the Project site for employee use, per City standards.

Passenger vehicles will access the Project site via two driveways on Patterson Avenue. Trucks will access the site via two separate driveways on Patterson Avenue. Emergency access is also available from Nevada Avenue.

The Project will also provide sidewalks to facilitate pedestrian access even though the site is not adjacent to any existing or planned area-wide open space, trails, parks, or other community amenities. Sidewalks will be installed adjacent to Patterson Avenue and Nevada Avenue along the Project site's frontage as shown on **Figure 3-9**. Signage and striping for the existing Class II bicycle lane will be maintained along the Project's frontage of Patterson Avenue.

As shown on **Figure 3-10 – Building Elevations**, the design of the building is modern industrial and includes concrete tilt-up wall construction with board-formed cement veneer and standard window glazing. The building height would be a maximum of 50 feet. The building is proposed to be painted in varying hues of gray and white and will include decorative elements of Bronze Reflective Glazing and Black Anodized Mullions. A 14-foot-tall pilaster wall is proposed along the east and west sides of the Project site, to screen the view of the truck parking areas and loading bays from Patterson Avenue and Nevada Avenue. **Figure 3-11 – Screen Wall and Line of Site** shows the typical elevations of the proposed screen walls and gates around the truck yard and line of site from Patterson Avenue at the northern office area and truck area. The existing chain-link fence along the northern property line will be replaced with an eight (8)-foot tall tubular steel fence. The existing wall along the Project site's southern boundary will be protected in place.

The Project includes approximately 168,406 SF of landscaping, which constitutes approximately 11.5 percent of the Project site. On-site perimeter landscaping is proposed adjacent to Patterson Avenue and Nevada Avenue along the Project site's frontage, except at driveway locations, the Project's passenger vehicle parking areas, and along the northern and southern portions of the proposed building. (Figure 3- 12 – Conceptual Landscape Plan). The landscaping consists of drought-tolerant and climate

appropriate trees, shrubs and ground cover that include native species and will meet or exceed standards set forth in the PVCCSP. The landscape plan is designed to provide visual appeal and screen the views of the passenger vehicle parking lots from public rights-of-way. Consistent with Section 8.2.1.4 of the PVCCSP, the Project site includes two shaded outdoor patio areas for break areas as employee amenities. These outdoor amenity areas are adjacent to the offices proposed at the northwest and southwest corner of the building. One indoor employee amenity area will also be provided by the future tenant.

As part of the Development Plan Review process the proposed building design, wall design, site design, landscaping and irrigation plans, lighting plans, parking plans, and pedestrian areas, shall be reviewed for consistency with the PVCCSP and harmonious relationships with existing and proposed adjoining developments, avoiding monotonous repetition, but allowing, when feasible, for similarity of style or originality of design.

Project lighting will include security lights along the buildings and wall and pole-mounted lights in the parking areas. All Project-related lighting shall be required to conform to the PVCCSP Guidelines and the Perris Municipal Code.



Source: WEBB, 3-16-2022

2022

Mav

17

created .

Map

aprx

Conceptual.

nceptual/Project

Š

H:\2021\21-0032\GIS\Project

Not to Scale



Figure 3-9 – Development Plan Review No. 21-00005

Duke Warehouse at Patterson Avenue and Nance Street



Source: Herdman, A4, 3-18-2022

Figure 3-10 – Building Elevations





Not to Scale



Source: HERDMAN, A1, 3-18-2022

Figure 3-11 – Screen Wall and Line of Sight Duke Warehouse at Patterson Avenue and Nance Street

Not to Scale





Source: Hunter Landscape, 03-17-22



Figure 3-12 – Conceptual Landscape Plan

Duke Warehouse at Patterson Avenue and Nance Street



3.3.5 On- and Off-site Infrastructure

Water and Sewer

Domestic water, recycled water, and sewer (wastewater) collection and treatment services in the Project vicinity are provided by the Eastern Municipal Water District (EMWD).

No off-site water line improvements are proposed. Project site improvements consist of a looped 10inch diameter water line around the proposed building which would include two connections to the existing 12-inch diameter waterline in Patterson Avenue. There will also be a fire flow pump for fire flow demands.

There are no existing sewer lines adjacent to the Project site. As such, off-site improvements are required to serve the Project. There is an existing 15-inch diameter gravity sewer line in Harley Knox Boulevard. A new off-site 8-inch diameter gravity sewer line is proposed to be constructed by the Project Applicant in Nevada Avenue between the Project site and the existing sewer line in Harley Knox Boulevard.

There is an existing 8-inch diameter recycled water line just north of Markham Street on Patterson Avenue that extends approximately 190 feet north of the intersection. An 8-inch diameter recycled water line is proposed in Patterson Avenue between the existing line just north of Markham Street north to Nance Street. At Nance Street, a tee will be placed with stubs going north and west to extend just beyond the intersection. This recycled water line will serve the proposed Project site, but the environmental documentation and subsequent construction will be the responsibility of another developer under City Case No. DPR 22-00003.

The location of the proposed off-site sewer and recycled water lines are shown on **Figure 3-13 – Off-Site Improvements**.

Storm Drain and Drainage

With regard to drainage, the Project Applicant proposes on-site curb and gutter and subsurface storm drains that would direct all on-site stormwater and nuisance runoff in subsurface storm drains to underground chambers located in the southeastern portion of the site (see **Figure 3-10**). Following water quality treatment, discharged stormwater will flow to a proposed 48-inch diameter reinforced concrete pipe (RCP) storm drain that will connect into a proposed Lateral-B6.1 of the Perris Valley Master Drainage Plan (MDP) in Nevada Avenue. All high intensity flows will push out of the chambers from a raised outlet pipe and gravity flow to Lateral-B6.1. To convey nuisance runoff from three existing corrugated metal pipe (CMP) culverts under Patterson Avenue, a west collector channel is proposed. The channel will be 2 feet deep at 2:1 side slopes with a 4-foot bottom width. The channel will have a concrete bottom up to one foot above the channel invert and will convey flow to proposed Lateral-B6 in Patterson Avenue.

Two off-site storm drain facilities are proposed (see **Figure 3-13**). The two Perris Valley MDP drainage facilities will be constructed by the Project Applicant to provide flood protection for this Project and the surrounding area. A portion of MDP Lateral-B6 in Patterson Avenue is needed to protect the site from the tributary area between Patterson Avenue and I-215; it will be designed to ultimate tributary runoff conditions. MDP Lateral-B6.1 in Nevada Avenue is needed to drain the proposed Project.

Lateral-B6 is a Perris Valley MDP facility proposed to be a 48-inch RCP that transitions to a 24-inch RCP upstream. It will be installed in Patterson Avenue near the intersection with California Avenue and connect to the existing Lateral B Stage 3 facility, an 8-foot-wide by 7-foot-high to 8-foot-wide by 6-foot-high reinforced concrete box (RCB), within Harley Knox Boulevard. Lateral B Stage 3 is also referred to as the Caltrans RCB. Lateral-B6-1 is a 24-inch RCP that will convey interim runoff from the tributary between California Avenue and Old Oleander from a new inlet to Lateral-B6. Lateral-B6-2 is a new 18-inch RCP that will convey nuisance runoff collected by the on-site west collector channel to Lateral-B6. Lateral-B6-3 is a 30-inch RCP that will convey interim runoff from the tributary south of California Avenue from a new inlet to Lateral-B6.

Lateral-B6.1 is a Perris Valley MDP facility proposed to be a 48-inch RCP that connects to the existing Lateral B Stage 3 facility. Lateral B6.1 will be installed from the intersection of Nevada Avenue and Nance Street to the connection point beneath Harley Knox Boulevard.

The tributary drainage capacity of the two proposed MDP facilities, Laterals-B6 and B6.1, highly depends on the capacity of the existing Caltrans RCB running parallel to Harley Knox Boulevard. Currently, there is roughly 50 cubic feet per second (cfs) of capacity in the Caltrans RCB (See the *Preliminary Drainage Study* Included as Appendix H.1 to this DEIR and Section 5.9 – Hydrology and Water Quality for further details). The two MDP storm drains will add approximately 180 cfs of capacity during the ultimate condition.

However, the Riverside County Flood Control & Water Conservation District (RCFC&WCD) is currently leading the design of Perris Valley MDP facility Lateral-B Stage 4, which will cutoff roughly 300 cfs of tributary runoff, after accounting for confluences, from the existing Caltrans RCB. RCFC&WCD is also responsible for the environmental documentation (e.g., CEQA), and construction of the Lateral B-Stage 4 facility. The Lateral B-Stage 4 plan is proposing to construct a stub out for future connection to the existing Caltrans RCB. The proposed Project Applicant will be responsible for the construction of the off-site lateral extension between the Lateral B Stage 4 stub out and the existing Caltrans RCB, across APN(s) 294-220-007 and/or -010 to the existing Caltrans RCB where it turns south along Patterson Avenue. This lateral extension was evaluated under CEQA by RCFC&WCD in the 1991 Perris Valley Master Drainage Plan Initial Study and Negative Declaration (State Clearinghouse No. 91042072) (hereinafter referred to as the 1991 PV MDP CEQA). The 1991 PV MDP and the 1991 PV MDP CEQA document were approved on June 11, 1991 and are hereby incorporated by reference.

The upstream connection to MDP Lateral-B will provide an additional 300 cfs of capacity in the Caltrans RCB. This connection must be made for the Caltrans RCB to have capacity for unrestricted runoff from MDP Lateral-B6 and -B6.1 under ultimate conditions. However, in the interim condition, the timing of the runoff from the Project is such that the time for the Project's stormwater to drain down is significantly less than the time of concentration of waters upstream have to travel to reach the same connection point for Lateral-B6 and Lateral-B6.1.



0 500 1,000

_|Feet

A L B E R T A. WEBB A S S O C I A T E S

Duke Warehouse at Patterson Avenue and Nance Street

Traffic/Circulation

The Project developer would install curb and gutter, parkway, streetlights and a sidewalk along the Project site frontage on Patterson Avenue. Depending on the condition of the existing paved roadway at the time of construction, the Project developer may be required to repave along the frontage, up to the road centerline plus one travel lane on the southbound side. Signage and striping for the existing Class II bicycle lane will be maintained along the Project's frontage of Patterson Avenue. Nevada Avenue along the Project site's frontage will be improved with curb, gutter, parkway, streetlights and sidewalk and paved with 38 feet of asphalt. North of the Project site's frontage, 30-foot-wide roadway paving shall be continued to Harley Knox Boulevard.

Five driveways are proposed at the Project site: one off Nevada Avenue and four off of Patterson Avenue. Two of the driveways off Patterson Avenue are for passenger car access to the automobile parking lots, while the other two driveways are designated for trucks. The driveway off Nevada Avenue is for emergency access only. ADA path of travel is provided between passenger vehicle parking areas and the office areas. Raised planter islands are proposed at the automobile parking lot entrances along Patterson Avenue and a five (5)-foot wide landscaped curb is proposed between the automobile parking area and the truck drive aisle along the north side of the building to provide separation of the cars and trucks.

Trucks serving the proposed Project would be required to use Harley Knox Boulevard and Patterson Avenue to travel to and from the Project site. Signage shall be posted on-site directing truck drivers to use existing City truck routes on Harley Knox Boulevard. The information on the signage will be coordinated with City Planning and the City's Traffic Engineer during the plan check process.

Electric Utilities

Existing power poles along Patterson Avenue, Nance Street and Nevada Avenue within the Project site or off-site improvement areas will be relocated or moved underground to avoid any interference with the proposed building or improvements; power poles that do not interfere with the proposed improvements will be protected in place.

3.3.6 Sustainability Features

The Project will meet or exceed all applicable standards under California's Green Building Code (CalGreen) and the Building Energy Efficiency Standards contained in Title 24. The Project shall implement concepts of efficient design and material use that are consistent with LEED Certification Levels. This will be accomplished by incorporating, at a minimum, the following sustainability features or other features that are equally efficient:

Energy Efficiency

- Design building shells and components, such as windows, roof systems and electrical systems to meet California Title 24 Standards for nonresidential buildings.
- Design buildings to achieve U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) features for potential certification. This includes design considerations related to the building envelope, heating, ventilation, and air conditioning (HVAC), lighting, and power systems. Additionally, the architectural expression such as roofs and windows in the buildings will relate to conserving energy.

- Install energy efficient light-emitting diodes (LED) lighting on the site. Provide skylights for natural day light to reduce the lighting load, therefore saving energy. Lighting will incorporate motion sensors that turn them off when not in use.
- Meet City minimum landscape requirements and provide adequate landscape shade for the site to reduce energy use.
- Install light-colored roofing materials over office area spaces and light-colored paving materials.
- For future office space, install energy efficient HVAC systems (seasonal energy efficiency ratio (SEER) 13), appliances and equipment, and control systems that are Energy Star rated.
- For future office improvement, refrigerants and HVAC equipment will be selected to minimize or eliminate the emission of compounds that contribute to ozone depletion and global climate change. Ventilation and HVAC systems will be designed to meet or exceed the minimum outdoor air ventilation rates described in the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) standards and/or per California Title 24 requirements.
- For future office improvement, implement design features to increase the efficiency of the building envelope (i.e., the barrier between conditioned and unconditioned spaces). This includes providing R-19 roof insulation for conditioned space and R-22 between conditioned and unconditioned space to minimize heat transfer and minimize energy consumption.
- Provide greatly enhanced window glazing insulation for exterior walls at conditioned spaces (0.28 or less U-factor).
- Incorporate Energy Star rated space heating and cooling equipment, light fixtures, appliances, or other applicable electrical equipment.

Water Conservation and Efficiency

- Recycled water shall be used for landscape irrigation.
- Surface parking lots will be landscaped in accordance with City standards to reduce heat island effect.
- Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and sensors for landscaping according to the California Department of Water Resources Model Efficient Landscape Ordinance and Chapter 19.70 (Landscaping) of the Perris Municipal Code.
- Design buildings to be water-efficient. Install water-efficient fixtures in accordance with Section 5.303 of the California Green Building Standards Code Part 11.
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff in accordance with City Standards.
- Provide education about water conservation and available programs and incentives to the building operators to distribute to employees.

Solid Waste Measures

• Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1 of the California Green Building Standards Code Part 11.

- Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance with Section 5.410.1 of the California Green Building Standards Code Part 11.
- The property operator will provide readily available information provided by the City for employee education about reducing waste and available recycling services.

Transportation and Motor Vehicles

- The Project site will include preferred parking locations for clean air/vanpool vehicles in accordance with Section 5.106.5.2, Designated parking for clean air vehicles, of the California Green Building Standards Code Part 11.
- Limit idling time for commercial vehicles to no more than five minutes per Title 13 of the California Code of Regulations, Section 2485.
- Provide at least six percent of the total parking spaces to facilitate future installation of electric vehicle supply equipment in accordance with Section 5.106.5.3.2, Multiple Charging Space Requirements, of the California Green Building Standards Code Part 11.
- Provide up to two electric vehicle charging facilities to encourage the use of low or zeroemission vehicles.
- Signage shall be posted on-site directing truck drivers to use existing City truck routes on Harley Knox Boulevard.
- Maintain existing Class II bike lane on Patterson Avenue.
- Provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience in compliance with Section 5.106.4 of the California Green Building Standards Code Part 11 and standard City code requirements.

On-Site Equipment and Loading Docks

- The Project owner will inform building operators of existing requirements to turn off equipment, including heavy-duty equipment, motor vehicles, and portable equipment, when not in use for more than 5 minutes. Truck idling shall not exceed 5 minutes in time. All facilities will post signs (both interior- and exterior-facing signs, including signs directed at all dock and delivery areas) requiring that trucks shall not be left idling for more than 5 minutes pursuant to Title 13 of the California Code of Regulations, Section 2485, which limits idle times to not more than five minutes and to report violations to California Air Resources Board, the South Coast Air Quality Management District, and the building manager.
- Service equipment (i.e., yard trucks and forklifts) used within the site shall be electric or powered by other alternative fuels.

Construction

- Require Construction Equipment to Turn Off When Not in Use per Title 13 of the California Code of Regulations, Section 2449.
- Use regionally produced and/or manufactured building materials, where feasible, for Project construction.

• Use "green" building materials where feasible, such as those materials that are resource efficient and recycled and manufactured in an environmentally friendly way.

3.4 Land Use Applications

The proposed Project includes the following land use applications (previously described in detail in Sections 3.3.2, 3.3.3, and 3.3.4): Specific Plan Amendment Case No. 21-05267, Tentative Parcel Map (TPM) 38259 (Case No. 21-05086), and Development Plan Review (DPR) 21-00005).

- Specific Plan Amendment Case No. 21-05267 to amend the PVCCSP Circulation Plan to delete two planned streets: California Avenue and Nance Street between Patterson Avenue to the west and Nevada Avenue to the east.
- TPM 38259 (Case No. 21-05086) to merger thirty-eight (38) existing parcels into one parcel, vacate all or portions of the ROW of California Avenue and Nance Street within the Project site, and dedicate a portion of Patterson Avenue and Nevada Avenue ROW; and
- DPR 21-00005 to allow the development of the approximately 35.7-net-acre site with a 769,668 SF building with 749,668 SF for high-cube, non-refrigerated warehouse distribution uses and approximately 20,000 SF of supporting office space.

3.5 Utility Providers

Future development within the PVCCSP planning area, including the proposed Project site, may require utility services provided by these purveyors:

Purveyor	Type of Services
EMWD	water, sewer, recycled water
Verizon	telephone
Southern California Edison (SCE)	electricity
Southern California Gas Company	natural gas
CR&R Waste Services	solid waste disposal
Frontier Communications	cable television and internet

3.6 Project Objectives

Per State CEQA Guidelines Section 15124(b), an EIR needs to include a statement of the objectives of a project which help the City develop a reasonable range of alternatives. The Objectives need to outline the general purpose of the Project. The purpose of the proposed Project is to construct and operate a high-cube, non-refrigerated warehouse building. The Project Objectives are identified by the Project Applicant as follows:

- Develop and operate a logistics center that takes advantage of existing City infrastructure and is adjacent to similar industrial logistics and distribution center uses.
- Develop and operate a logistics center that is in close proximity to MARB/IPA, I-215/SR-60 and I-10, to support the distribution of goods throughout the region and that also limits traffic truck disruption to residential areas within the City and neighboring jurisdictions.
- Develop and operate a logistics center that takes advantage of visibility from I-215 that will attract quality tenants and will be competitive with other similar facilities in the region.

- Maximize efficient goods movement throughout the region by locating a logistics center in close proximity to the Ports of Los Angeles and Long Beach, enabling trucks servicing the site to achieve a minimum of two roundtrips per day.
- Develop and operate a logistics center that meets industry standards for operational design criteria.
- Implement the PVCCSP through development of a land use allowed by the Industrial land use designation and consistent with the development standards and criteria relevant to the site and proposed use.
- Positively contribute to the economy of the City through new capital investment, creation of new employment opportunities, including opportunities for highly trained workers, and expansion of the tax base.
- Provide local employment for residents of the City to improve jobs-housing balance within the City.

3.7 Discretionary Actions and Approvals

The DEIR serves as an informational document for use by public agencies, the general public, and decision makers. This DEIR discusses the impacts of development and operation pursuant to the proposed Project and related components and analyzes Project site alternatives. This DEIR will be used by the City of Perris and responsible agencies in assessing impacts of the proposed Project.

The following approvals and permits are required from the City of Perris to implement the proposed Project:

- Certification of the EIR with the determination that the EIR has been prepared in compliance with the requirements of CEQA;
- Specific Plan Amendment Case No. 21-05267 to amend the PVCCSP Circulation Plan to delete two planned streets: California Avenue and Nance Street between Patterson Avenue to the west and Nevada Avenue to the east.
- TPM 38259 (Case No. 21-05086) will merge thirty-eight (38) existing parcels into one parcel, and vacate all or portions of the ROW of California Avenue and Nance Street and dedicate a portion of Patterson Avenue and Nevada Avenue ROW; and
- DPR 21-00005 to allow the development of the approximately 35.7-net-acre site with a 769,668square foot (SF) building with 749,668 SF for high-cube, non-refrigerated warehouse distribution uses and approximately 20,000 SF of supporting office space.

Other non-discretionary actions anticipated to be taken by the City at the staff level as part of the proposed Project include:

- a) Review and approval of all off-site infrastructure plans, including street and utility improvements pursuant to the conditions of approval;
- b) Review all on-site plans, including grading and on-site utilities; and
- c) Approval of a Preliminary Water Quality Management Plan (WQMP) to mitigate post-construction runoff flows.

Approvals and permits that may be required by other agencies include:

- a) A National Pollutant Discharge Elimination System (NPDES) permit from the Regional Water Quality Control Board (RWQCB) to ensure that construction site drainage velocities are equal to or less than the pre-construction conditions and downstream water quality is not worsened;
- b) Compliance with the South Coast Air Quality Management District Indirect Source Rule (Rule 2305) for warehouse owners and operators;
- c) Approval of Water Supply Assessment and water and sewer improvement plans by the EMWD; and
- d) Permits or associated approval by other utility agencies, as necessary, for installation of new utility infrastructure or connections to existing facilities.

Section 4 – Environmental Effects Found Not Significant

4.1 Effects Found Not to be Significant during Preparation of the NOP

CEQA provides that an EIR shall focus on the potentially significant effects on the environment, discussing the effects with emphasis in proportion to their severity and probability of occurrence. During the preparation of the NOP, the City determined that the Project would have no impacts or less than significant impacts related to Agriculture and Forestry Resources, Mineral Resources, Population and Housing, and Wildfire. The basis for elimination of each relevant impact in these issue areas is documented in the appended NOP (Appendix A.1) and included below. During the public scoping meeting on February 2, 2022, public comments were received regarding impacts to population and housing; additional analysis is included below. These issue areas are not discussed further in this DEIR.

Agricultural and Forestry Resources

Pursuant to Public Resources Code Section 21060.1, agricultural land means Prime Farmland, Farmland of Statewide Importance, or Unique Farmland, as defined by the U.S. Department of Agriculture land inventory and monitoring criteria as modified for California. The State CEQA Guidelines Appendix G thresholds of significance used by the City of Perris for CEQA purposes states that a significant impact to agriculture could occur if a project was to convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to non-agricultural use. Based on the California Department of Conservation's 2018 Farmland Mapping and Monitoring Program, the Project site is designated as Farmland of Local Importance. (DOC) The Project area is not within an area subject to the California Land Conservation Act of 1965 (Williamson Act), is not zoned for agricultural or forestry uses, and does not include forestry resources. Therefore, the Project would have no impact on agriculture and forestry resources.

Mineral Resources

Figure OS-6 of the Riverside County General Plan and the California Department of Conservation's Mineral Land Classification for the area shows that the Project site is located within Mineral Resource Zone 3 (MRZ-3). (COR GP OS, p. OS-41.) MRZ-3 represents areas where the available geologic information indicates that mineral deposits exist or are likely to exist; however, the significance of the deposit cannot be evaluated from available data. In addition, the California Department of Conservation does not show oil, gas, or geothermal fields underlying the site; and no oil or gas wells are recorded on or near the site in the Division of Oil, Gas, and Geothermal Resources (DOGGR) Well Finder. (DOC Well Finder). No sites within the City of Perris city limits have been designated as locally important mineral resource recovery sites in the Perris GP 2030 or the Riverside County General Plan. Accordingly, no impact to the availability of a regionally or locally important mineral resource would occur. No impacts are anticipated.

Population and Housing

As indicated in the NOP (Appendix A.1), the Project site is currently largely undeveloped; and construction of the Project would not require the construction of replacement housing and would not displace any existing housing or residents. The Project does not involve the development of residential uses and would not directly increase the resident population, but the Project would create jobs and

Environmental Effects Found Not Significant

increase employment in the City of Perris. The extent to which the new jobs created by a Project are filled by existing residents is a factor that tends to reduce the growth-inducing effect of a Project. The Project would create short-term jobs during the construction phase. These short-term positions would be filled by workers who, for the most part, would already reside in the local area; therefore, construction of the Project would not generate a substantial temporary or permanent increase in population within the Project area. Accordingly, no impacts are anticipated.

Comments were received during the Project's scoping meeting regarding the impacts to population and housing. As shown above, and further demonstrated below, the proposed Project would not result in impacts to population and housing because the proposed Project would not induce substantial unplanned population in an area either directly or indirectly, nor would the proposed Project displace substantial number of existing people or housing necessitating the construction of replacement housing elsewhere.

Direct and indirect unplanned population growth impacts would not be substantial. The Project does not involve the development of residential uses that would directly increase the resident population of the City of Perris. However, the Project would create jobs during operational and construction activities. The extent to which the new jobs created by a Project are filled by existing residents is a factor that tends to reduce the growth-inducing effect of a Project. However, employment growth that would occur from Project implementation is within the growth estimates analyzed by the PVCCSP EIR (PVCCSP EIR, pp. 4.8-45–4.8-46). Additionally, the Southern California Association of Governments (SCAG) estimates that the population of Perris is expected to increase to about 121,000 by the year 2045. (SCAG, p. 39.) Therefore, construction and operation of the proposed Project in accordance with the PVCCSP will not significantly induce substantial unplanned population growth either directly or indirectly. Accordingly, no impacts are anticipated.

The Project would also not displace substantial numbers of people or housing. Since the Project site does not contain any existing residential uses and is currently largely undeveloped, implementation of the proposed Project, a warehouse, would not displace existing people or remove existing housing. As such, no replacement housing would be required. Therefore, neither construction or operation of the proposed Project will displace any existing homes or substantial numbers of people necessitating the construction of replace housing elsewhere. Accordingly, no impacts are anticipated.

Wildfire

According to Exhibit S-5, Wildfire Hazards, of the Perris GP 2030 Safety Element, the Project area is not located in or near an area identified as being a "Very High Fire Hazard Severity Zone". Additionally, according to the California Department of Forestry and Fire Protection's (Cal Fire) Fire and Resources Assessment Program (FRAP), the Project area is not located in a Very High Fire Hazard Severity Zone (VHFHSZ) of the City. The Project area is located within the limits of the City of Perris and is therefore not within a State Responsibility Area (SRA), which is the land where the State of California is financially responsible for the prevention and suppression of wildfires. Therefore, the Project would have no impacts related to wildfires.

Section 15128 of the State CEQA Guidelines states that an EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. This discussion can be found below in Section 4.2 Effects Found Not to be Significant as Part of the EIR Process below.

4.2 Effects Found Not to be Significant as Part of the EIR Process

Based on further review of the proposed Project it was also concluded that the Project, which does not involve residential uses, would not result in physical environmental impacts related to Public Services or Recreation. The basis for elimination of each relevant impact in these issue areas is documented below.

Public Services

In accordance with the State CEQA Guidelines, the Project's NOP was circulated for public review and comment, was transmitted to the agencies that provide public services to the site and a public scoping meeting before the Perris Planning Commission was held. No oral or written comments regarding public services were provided at the public scoping meeting for this EIR. Based on further review and evaluation of the issue area, the City of Perris has concluded that the Project would not result in potentially significant impacts to public services as discussed below.

- Fire Protection. While implementation of the Project would not involve new residential uses or uses that would increase the City's population, the operation of a new warehouse would increase the demand for fire protection, prevention, and emergency medical services at the currently undeveloped Project site. Cal Fire, under contract with Riverside County and operating as Riverside County Fire Department (RCFD), provides fire prevention and suppression to the City of Perris. RCFD Station No.1 located at 210 W. San Jacinto Avenue and RCFD Station No. 90 at 333 Placentia Avenue exclusively serve the City of Perris. RCFD Station No. 1 is approximately 4.94 miles south of the Project area. RCFD Station No. 90 is approximately 2.95 miles south of the Project area. Other RCFD stations respond to emergency service calls in the City on an as-needed basis. (Perris GP SE, p. 21.) (Google Earth) According to the Perris GP 2030 Safety Element, the RCFD's five fire stations ensure adequate coverage and timely response to all parts of the City. (Perris GP 2030 SE, p.21.) Due to the distance of the Project site to RCFD Station No. 90, it is anticipated that this fire station would provide first response to the Project. The development of the Project site would not cause fire staffing, facilities, or equipment to operate at a deficient level of service. Additionally, the proposed Project would be required to pay North Perris Road and Bridge Benefit District (NPRBBD) fees, inclusive of the City's Development Impact Fee (DIF), which provides a funding source for construction of fire facilities as a result of impacts related to future growth in the City. The Project development would not require the construction of new or expanded fire protection facilities; therefore, no physical impacts would result and the impact would be less than significant.
- Police Protection. While implementation of the Project would not involve new residential uses or uses that would increase the City's population, the operation of a new warehouse would increase the demand for police protection services at the currently undeveloped Project site. The Project would be designed and operated in compliance with the standards provided within the Perris Municipal Code, Riverside County Sheriff's Department (RCSD), and the PVCCSP for new development with regard to public safety. RCSD, under contract with the City of Perris and operating as the Perris Police Department, provides law enforcement services to the City. (Perris GP 2030 SE, p. 10.) The Perris Police Station is located at 137 N. Perris Boulevard and is located approximately 4.95 miles south of the Project area. (Google Earth) Sheriff response times vary by time of day and priority of the call. Although the Project would introduce new uses to the site, the Project Applicant would be required to pay into the City's NPRBBD, inclusive of the City's DIF, which provides a funding source for construction of police facilities as a result of impacts related to future growth in the City. The Project would not require the construction of new or expanded police

Environmental Effects Found Not Significant

protection facilities; therefore, no physical impacts would result and the impact would be **less than significant**.

- Schools. The Project area is located in the Val Verde Unified School District (VVUSD). This school district covers 67 square miles in Riverside County and is comprised of 21 schools serving pre-kindergarten through 12th grade (VVUSD 2021b). The Project area is within the service area for the following schools: May Ranch Elementary, March Middle School, and Rancho Verde High School. (VVUSD 2021a) The proposed Project would not directly create a source of students, as the Project does not involve the development of residential land uses. Therefore, no direct impact on school services or facilities would occur and there would be need for new or expanded school facilities. Additionally, appropriate school impact fees, as required by State law, shall be assessed and paid to the school district. With the payment of these required fees and with no additional students generated from the Project, no significant impacts to school services would result.
- **Parks.** The Perris Community Services Department provides community services and recreational and leisure time opportunities and is responsible for the planning, development, and maintenance of the City's parks and recreational facilities. The Project area currently does not contain any parkland or recreational facilities. The nearest park is Morgan Park located approximately 2.67 miles southeast of the Project area. Morgan Park includes the following amenities: barbecues, basketball court, group shelter, parking lot, picnic tables, playground, restrooms, snack bar, soccer field, and walking trail (Perris 2021). The Project does not involve the development of any type of residential land use or other use that would result in a direct increase in the City's population. Although the proposed Project may indirectly affect recreational facilities by creating new jobs in the area which may draw new residents to the area, as required by the City of Perris, the Project Applicant would be required to pay applicable DIFs, including fees for parks. The Project would not require the construction of new or expanded park facilities; therefore, no physical impacts would result and the impact would be **less than significant**.
- Other Public Facilities. Residents of the City of Perris are provided library services through the
 Riverside County Library System (RCLS). As identified in the PVCCSP Initial Study, development of
 allowed uses under the PVCCSP, including Light Industrial uses proposed as part of the Project,
 would not directly increase the demand for library or other public services as no new residential uses
 would be developed and there would be no direct increase in population. Although the proposed
 Project may indirectly affect public facilities by creating new jobs in the area which may draw new
 residents to the area, as required by the City of Perris, the Project Applicant would be required to
 pay applicable DIFs, including fees for community amenities and government facilities. The Project
 would not require the construction of new or expanded library facilities; therefore, no physical
 impacts would result and the impact would be less than significant.

Recreation

As identified above, the Perris Community Services Department is responsible for recreational facilities in the City. The Project would not include a residential use or other use that would directly increase the City's population and the demand for recreational facilities. Although the proposed Project may indirectly affect recreational facilities by creating new jobs in the area which may draw new residents to the area, it is anticipated that the majority of jobs will be filled by individuals already residing in the Project vicinity. Indirect impacts to park facilities will be offset through payment of the applicable Recreational Facilities DIFs. As identified in the PVCCSP Initial Study, the City requires that large projects provide an on-site recreational amenity. As required by Section 8.2 of the PVCCSP, the Project would provide employee amenities. As described in Section 3.0, Project Description, of this DEIR, the Project will incorporate two

outdoor patio and employee break areas adjacent to the offices proposed at the northwest and southwest corners of the building. Upon compliance with PVCCSP Section 8.2 and with payment of DIFs impacts to parks and other public recreational facilities will be **less than significant** and no mitigation is required.

Remainder of Page Intentionally Left Blank

Section 5 – Environmental Analysis

State CEQA Guidelines Sections 15126, 15126.2, and 15126.4 require consideration and discussion of significant environmental effects and mitigation measures recommended to minimize significant effects. All phases of a project must be considered when evaluating its impact on the environment: planning, acquisition, development, and operation (Section 15126) and an EIR shall identify and focus on the potentially significant environmental effects of the proposed Project (Section 15126.2).

Section 5 of this DEIR addresses each environmental effect that was determined to be potentially significant during preparation of the NOP prepared for this Project and mitigation measures recommended to minimize significant effects.

Please see the following referenced sections of this DEIR for more detailed discussion of the issue areas that were found to have potentially significant impacts during preparation of the NOP:

- Aesthetics (Section 5.1)
- Air Quality (Section 5.2)
- Biological Resources (Section 5.3)
- Cultural Resources (Section 5.4)
- Energy (Section 5.5)
- Geology and Soils (Section 5.6)
- Greenhouse Gas Emissions (Section 5.7)
- Hazards and Hazardous Materials (Section 5.8)
- Hydrology and Water Quality (Section 5.9)
- Land Use and Planning (Section 5.10)
- Noise (Section 5.11)
- Utilities and Service Systems (Section 5.12)
- Transportation (Section 5.13)
- Tribal Cultural Resources (Section 5.14)

No significant unavoidable impacts associated with the implementation of the proposed Project would occur.

5.1 Aesthetics

This section describes the existing aesthetic condition of the Project area and surrounding area. It also analyzes the visual character of the Project (such as building design and architecture, landscaping, and light and glare generation) and consistency with development standards and guidelines as outlined in the Perris Valley Commerce Center Specific Plan (PVCCSP). Descriptions of existing visual characteristics, both on site and in the vicinity of the Project area, are provided to assess the changes in visual character resulting from the Project. Information presented in this section is primarily based on the analyses of site photographs, reconnaissance, and Project design information prepared for the Project application and included in Section 3.0, Project Description, of this Draft Environmental Impact Report (DEIR). This section will analyze whether the Project will:

- A. Have a substantial adverse effect on a scenic vista;
- B. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- C. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings. (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality;
- D. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

There were two comments received in response to the Notice of Preparation (NOP) or at the February 2, 2022 EIR public scoping meeting regarding aesthetics. The commenters requested that native species plants and trees be included in the Project to make the site aesthetically pleasing. Additionally, one commenter expressed that the appearance of the industrial building be aesthetically pleasing. Both comments are addressed in this Section, as well as in Section 3.0, Project Description.

In addition to other documents, the following references were used in the preparation of this section of the DEIR:

- Caltrans, California Department of Transportation website: *Scenic Highways*, 2022. (Available at <u>https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways</u>, accessed on April 28, 2022.) [Cited as Caltrans 2022]
- City of Perris, *Draft Environmental Impact Report City of Perris General Plan 2030*, State Clearinghouse #2004031135, October 2004, certified April 26, 2005. (Available at <u>https://www.cityofperris.org/home/showpublisheddocument/451/637203139698630000</u>, accessed) [Cited as Perris GP 2030 EIR]
- City of Perris, *Perris Valley Commerce Center Specific Plan Initial Study*, August 2009. (Available at the City of Perris.) [Cited as PVCCSP IS]
- City of Perris, *Perris Valley Commerce Center Specific Plan Environmental Impact Report*, November 2011. (Available at <u>https://www.cityofperris.org/departments/development-</u><u>services/specific-plans</u>, accessed April 28, 2022.) [Cited as PVCCSP EIR]

Duke Warehouse at Patterson Avenue and Nance Street DEIR

- City of Perris, *Perris Valley Commerce Center Specific Plan Amendment No. 12*, Adopted January 10, 2012, and subsequently amended and approved January 11, 2022. (Available at https://www.cityofperris.org/Home/ShowDocument?id=2647, accessed on April 28, 2022.) Cited as PVCCSP]
- City of Perris Municipal Code. (Available at https://library.municode.com/ca/perris/codes/code_of_ordinances. accessed April 28, 2022.)
- Riverside County, *Riverside County Ordinance No. 655 Regulating Light Pollution*. Adopted June 7, 1988. (Available at <u>https://www.rivcocob.org/ords/600/655.htm</u>, accessed April 28, 2022.)
 [Cited as Ordinance No. 655]
- United States Census Bureau, *Quickfacts, Perris City, California.* (Available at https://www.census.gov/quickfacts/perriscitycalifornia, accessed May 9, 2022.) [Cited as USCB]

Setting

Project Area and Surrounding Area

The Project site encompasses approximately 35.7-net-acres located at the northeastern corner of Patterson Avenue and Nance Street, within the PVCCSP in the City of Perris, California. The area surrounding the Project site is dominated by industrial and commercial uses with some vacant land. Specifically, the Project site is bordered by an industrial warehouse to the south, commercial businesses to the north, vacant land and legal, non-conforming residential uses to the east, and commercial businesses and legal, non-conforming residential uses to the west. The visual character of the Project area and surrounding area is typical of areas transitioning from a rural agricultural area to industrial and other urban uses, consistent with development standards established through previously approved Specific Plans. As previously shown on **Figure 3-2, Aerial Photograph**, the Project site is unimproved and vacant, apart from three-parcels (APNs 314-153-019, -020 and -021), totaling approximately 2.7 acres, located in the northwest corner of the Project site. These three parcels are currently utilized for semi-truck trailer storage.

Under existing conditions, the Project area does not support any uses that create light or glare. Existing sources of light from the surrounding land uses primarily include security lighting associated with the industrial uses and commercial businesses, and headlights from trucks and passenger vehicles. There are no existing buildings or man- made features on site or near the Project area that are constructed of materials that cause glare.

The Project area is located southwest of the March Air Reserve Base/Inland Port Airport (MARB/IPA). Development of the Project area is required to comply with applicable regulations to ensure that MARB/IPA operations are not affected by light or glare from the proposed uses; this issue is addressed in Section 5.8, Hazards and Hazardous Materials, of this DEIR. The Project site has a General Plan Land Use Designation of Specific Plan – Perris Valley Commerce Center Specific Plan and is zoned PVCCSP. The Project site's PVCCSP land use designation is both General Industrial (GI) and Light Industrial (LI). As part of the approval process for the PVCCSP, an EIR (PVCCSP EIR) was prepared to assess Aesthetics-related impacts resulting from development of land uses proposed under the PVCCSP. This Project incorporates the recommendations of the PVCCSP EIR. The PVCCSP IS is Appendix A to the PVCCSP EIR.

Topographic/Vegetation

The Project area is situated in the Perris Valley between the San Jacinto and Santa Ana Mountains. The Project site is generally flat and dominated by fallow field croplands. The site is situated at an elevation approximately 1,499 feet above mean sea level in the southwest corner to 1,486 feet above mean sea level in the northeast corner. The existing topography slopes approximately one percent in the southwest to northwest direction. Vegetation types at the Project site consist primarily of fallow field croplands and disturbed habitat generally devoid of native vegetation. There are no trees or other vegetation types on the Project area that are prominent visual features.

Views

Light and Glare

Due to the absence of on-site development, no lighting sources currently exist within the Project site limits. As previously discussed, existing sources of the light in the Project vicinity primarily include exterior lighting from nearby industrial and commercial uses and vehicle headlights along existing roadways.

Glare is caused by light reflections from pavement, vehicles, and building materials such as reflective glass and polished surfaces. During daylight hours, the amount of glare depends on the intensity and direction of sunlight. Glare can create hazards to motorists and can be a nuisance for pedestrians and other viewers. The PVCCSP Standards and Guidelines related to colors and materials (PVCCSP Section 4.2.3.5) encourage the use of low-reflectance facades and prohibits metal siding where visible from the public. Allowed building materials generally include wood, brick, native stone, and tinted/textured concrete. Further, as identified in Section 12.1.3, Compatibility with MARB/IPA Land Use Compatibility Plan (LUCP), of the PVCCSP, any use that would cause sunlight to be reflected towards an aircraft engaged in a climb following takeoff or descent towards a landing at an airport is prohibited. There are no existing sources of glare within the Project site. The only existing use on the Project site (one, three-parcel lot in the northwest utilized for semi-truck trailer storage) is not constructed of materials that cause substantial glare.

Scenic Vistas

Scenic vistas can be defined as the view of an area that is visually or aesthetically pleasing. From various vantage points within the City, there are views of Lake Perris Dam to the northeast; the Bernasconi Hills to the east; Gavilan Hills and the Motte-Rimrock Reserve to the west; and MARB to the north. Development projects can potentially impact scenic vistas in two ways: (1) directly diminishing the scenic quality of the vista, or (2) by blocking the view corridors or "vistas" of scenic resources. The City of Perris is located within the Perris Valley, and the terrain is generally flat. According to the Perris General Plan 2030 EIR (Section 6.1, Aesthetics) (Perris GP 2030 EIR):

[B]ecause the bulk of developable land within the City of Perris is located on the flat, broad basin, virtually all future building construction consistent with land use and development standards set forth in [the General Plan] will obstruct views to the foothills from at least some vantage points. The criterion, however, relates to a scenic vista more narrowly defined as a view through an opening, between a row of buildings or trees, or at the end of a vehicular right-of-way. To this end, the east-west and north-south oriented roadway network and streetscapes that define them will frame and preserve scenic vistas from public rights-of-way to the distant horizons and foothills. Owing to the flatness of the basin, the view corridors extend for miles

along current and planned roadways preserving scenic vistas from the broad basin to the surrounding foothills.

Related Regulations

Federal

There are no Federal regulations that apply to the Project's aesthetics analysis.

State

California Scenic Highway Program

The California Scenic Highways Program was established in 1963 to "preserve and protect scenic highway corridors from change which would diminish any aesthetic value of lands adjacent to highways." The state laws governing the scenic highway program are found in the California Streets and Highways Code Section 260 et seq. No state-designated or eligible scenic highways exist within or near the Project site, and therefore, no state regulations are applicable to this Project.

Local Regulations

County of Riverside Ordinance No. 655

In the absence of a specific City regulation for the purpose of protecting astronomical observation and research, the City applies Riverside County Ordinance No. 655 to projects. On June 7, 1988, the Riverside County Board of Supervisors adopted Ordinance No. 655, which restricts the permitted use of certain light fixtures emitting light into the night sky that may have a detrimental effect on astronomical observation and research. This ordinance establishes two zones in which different lamp types are allowed or prohibited: Zone A is the area within a 15-mile radius of Palomar Observatory and Zone B is the area that extends from the outer limit of Zone A to 45 miles from Palomar Observatory. The Project area is located within Zone B. Riverside County Ordinance No. 655 also provides a list of general prohibitions that apply to both zones (Riverside County, 1988).

Perris Comprehensive General Plan 2030

The following are the applicable goal and measure from the Perris Comprehensive General Plan 2030 (Perris GP 2030) related to aesthetics:

Conservation Element

Goal VIII	Create a vision for energy and resource conservation and the use of green building design for the City, to protect the environment, improve quality of life, and promote sustainable practices.
Measure VIII.A.2	Use indigenous and/or drought-resistant planting and efficient irrigation systems with smart controls in all new refurbished commercial and industrial development projects. Also, restrict use of turf to 25 percent or less of the landscaped areas.

Perris Municipal Code

The Perris Municipal Code contains provisions relevant to aesthetics/visual character and lighting:

Section 7.34.060 – Construction noise:¹

It is unlawful for any person between the hours of 7:00 p.m. of any day and 7:00 a.m. of the following day, or on a legal holiday, with the exception of Columbus Day and Washington's birthday, or on Sundays to erect, construct, demolish, excavate, alter or repair any building or structure...

Section 19.02.110 - Lighting:

- (a) Commercial and industrial parking areas. Commercial and industrial parking areas shall have lighting which provides adequate illumination for safety and security. Parking lot lighting fixtures shall maintain a minimum of one-foot candlepower across the surface of the parking area. Lighting standards shall be energy efficient and in scale with the height and use of the structures on site. All lighting, including security lighting, shall be directed away from adjoining properties and the public right-of-way.
- (b) *Commercial structures.* Commercial structures shall incorporate exterior lighting to illuminate the exterior of the primary structure.

PVCCSP Standards and Guidelines and Mitigation Measures

The PVCCSP includes Standards and Guidelines relevant to aesthetics/visual character and lighting. These Standards and Guidelines summarized below are incorporated as part of the Project and are assumed in the analysis presented in this section. The Project is required to comply with these Standards and Guidelines. The chapters/section numbers provided correspond to the PVCCSP chapters/sections.

Project-specific and relevant mitigation measures from the PVCCSP EIR which address aesthetic impacts are included under Section 5.1.5.

On-Site Design Standards and Guidelines (Chapter 4.0 of PVCCSP)

4.1 Perris Valley Commerce Center On-Site Development Standards

In order to ensure the orderly, consistent, and sensible development of the PVCCSP, land use standards and design criteria have been created for each land use category, and are summarized in Table 4.0-1, Development Standards by Land Use, of the PVCCSP.

4.2 On-Site Standards and Guidelines

4.2.1 General On-Site Project Development Standards and Guidelines

- Uses and Standards Shall Be Developed in Accordance with the Specific Plan
- Uses and Standards Shall Be Developed in Accordance with City of Perris Codes
- Development Shall Be Consistent with the Perris Valley Commerce Center Specific Plan
- No Changes to Development Procedures Except as Outlined in the Specific Plan

¹ Municipal Code section 7.34.060 limits hours of construction, and thus limits the impact of temporary construction lighting.

City of Perris

- Visual Overlay Zones
- 4.2.2 Site Layout for Commerce Zones
 - **4.2.2.1 Building Orientation/Placement**: Building Frontages/Entrances; Distinct Visual Link; Create Diversity and Sense of Community; and Utilize Building for Screening
 - 4.2.2.4 Parking and Loading: Screening Parking Lot
 - **4.2.2.5 Screening**: Screen Loading Docks; Screening Methods; Screen Outdoor Storage Areas; Work Areas, etc.
 - 4.2.2.6 Outdoor Storage: No Outdoor Storage Permitted Other Than as Specified
 - **4.2.2.7 Water Quality Site Design**: Best Management Practice (BMP) Features in "Visibility Zone"

4.2.3 Architecture

- **4.2.3.1 Scale, Massing and Building Relief:** Scaling in Relationship to Neighboring Structures; Variation in Plane and Form; Project Identity; Do Not Rely on Landscaping; Distinct Visual Link; Break Up Tall Structures; Avoid Monotony; Avoid Long, Monotonous and Unbroken Building Facades; Provide Vertical or Horizontal Offsets; and Fenestration
- **4.2.3.2 Architectural Elevations and Details:** Primary Building Entries; Elements of a Building; Large Sites with Multiple Buildings; Discernible Base, Body and Cap; Visual Relief; and, Building Relief
- **4.2.3.3 Roofs and Parapets:** Integral Part of the Building Design; Overall Mass; Varied Roof Lines; Form and Materials; Avoid Monotony; Variation in Parapet Height; Flat Roof and Parapets; and Conceal Roof Mounted Equipment
- 4.2.3.5 Color and Materials: Facades; Building Trim and Accent Areas; Metal Siding; and High- Quality Natural Materials

4.2.4 Lighting

- **4.2.4.1 General Lighting:** Safety and Security; Lighting Fixtures Shield; Foot-candle Requirements Sidewalks/Building Entrances; and Outdoor Lighting
- **4.2.4.2 Decorative Lighting Standards:** Decorative Lights; Complimentary Lighting Fixtures; Monumentation Lighting; Compatible with Architecture; Up-Lighting; Down-Lighting; Accent Lighting; and High-Intensity Lighting
- **4.2.4.3 Parking Lot Lighting:** Parking Lot Lighting Required; Foot-candle Requirements Parking Lot; Avoid Conflict with Tree Planting Locations; Pole Footings; and Front of Buildings and Along Main Drive Aisle

4.2.5 Signage Program

• **4.2.5.1 Sign Program:** Multiple Buildings and/or Tenants; Major Roadway Zones/Freeway Corridor; Location; Direct On-Site Traffic Circulation; Monument Signs; Address Identification Signage; Neon Signage; and Prohibited Signs

4..2.6 Walls/Fences

Specific Purpose
- Materials
- Avoid Long Expanses of Monotone Fence/Wall Surfaces
- Most Walls Not Permitted within Street Side Landscaping Setback
- Height
- Gates Visible from Public Areas
- Prohibited Materials

4.2.7 Utilities

- Pad-mounted Transformers and Meter Box Locations
- Electrical, Telephone, CATV and Similar Service Wires and Cables
- Electrical Transmission Lines
- All Equipment Shall be Internalized

4.2.9 Visual Overlay Zone Development Standards and Guidelines

• **4.2.9.2 Major Roadway Visual Zones:** Quality Architectural Presence; Full-Building Articulation and Enhancement; Integrated Screenwall Designs; Enhanced Landscape Setback Areas; Enhanced Entry Treatment; Entry Point; Screening, Loading and Service Areas; Limit or Eliminate Landscaping Along Side or Rear Setbacks; Uplight Trees and Other Landscape; Landscaped Accent Along Building Foundation; Heavily Landscape Parking Lot; and Limited Parking Fields

Landscape Standards and Guidelines (Chapter 6.0 of the PVCCSP)

6.1 On-Site Landscape General Requirements

- Unspecified Uses
- Perimeter Landscape
- Street Entries
- Slopes
- Main Entries, Plaza, Courtyards
- Maintenance Intensive/Litter Producing Trees Discouraged
- Avoid Interference with Project Lighting/Utilities/Emergency Apparatus.
- Scale of Landscape
- Planters and pots
- MWD Trail Buffer
- 6.1.1 On-Site Landscape Screening
 - Plant Screening Maturity
 - Screenwall Painting
 - Trash Enclosures

6.1.2. Landscape in Parking Lots

- Minimum 50% Shade Coverage
- Planter Islands
- Parking Lot Screening
- One Tree per Six Parking Spaces
- Concrete Curbs, Mow Strips or Combination
- Planter Rows Between Opposing Parking Stalls or Diamond Planters

- Pedestrian Linkages
- 6.1.3 On-Site Plant Palette
- 6.2 Off-Site Landscape General Requirements
- 6.2.1 Streetscape Landscape
 - Secondary Arterial (with Striped Median)
- 6.2.3 MWD Trail Landscape Standards and Guidelines
 - Landscaping
 - Trash Receptacles
 - Trees
 - Segment 1 Greenbelt
 - Segment 2 Sinclair Terminus

Industrial Design Standards and Guidelines (Chapter 8.0 of the PVCCSP)

- 8.2 Industrial Development Standards and Guidelines
- 8.2.1 Industrial Site Layout
 - 8.2.1.1 Orientation/Placement: Industrial Operations.
 - 8.2.1.4 Employee Break Areas and Amenities: Outdoor Break Areas
 - 8.2.1.5 Screening: Truck Courts
- 8.2.2 Landscape
 - No Landscape in Screened Truck Courts

Airport Overlay Zone (Chapter 12.0 of the PVCCSP)

12.1.3 Compatibility with March ARB/IP ALUCP

• Lighting Plans

The PVCCSP EIR does not include mitigation measures relevant to the analysis of aesthetics impacts; however, it does include mitigation measures to address potential hazards to MARB/IPA operations that are also relevant to the analysis of light and glare impacts. These mitigation measures are incorporated as part of the Project and assumed in the analysis presented in this section.

- **MM Haz 3:** Any outdoor lighting installed shall be hooded or shielded to prevent either the spillage of lumens or reflection into the sky or above the horizontal plane.
- **MM Haz 5:** The following uses shall be prohibited:
 - a. Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final

approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.

- b. Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.
- c. Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area.
- d. Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
- e. All retention and water quality basins shall be designed to dewater within 48 hours of a rainfall event.

Design Considerations

Design considerations refer to ways in which the proposed Project will reduce potential impacts to aesthetics. The PVCCSP includes Standards and Guidelines relevant to the analysis of aesthetic impacts, which are summarized below and are incorporated as part of the proposed Project: The design of the building is modern industrial and includes concrete tilt-up wall construction with board-formed cement veneer and standard window glazing. The building height would be a maximum of 50 feet. The building is proposed to be painted in varying hues of gray and white and will include decorative elements of Bronze Reflective Glazing and Black Anodized Mullions. A 14-foot-tall pilaster wall is proposed along the east and west sides of the Project site, to screen the view of the truck parking areas and loading bays from Patterson Avenue and Nevada Avenue.

The Project includes approximately 168,406 SF of landscaping. On-site perimeter landscaping is proposed adjacent to Patterson Avenue and Nevada Avenue along the Project site's frontage, except at driveway locations, the Project's passenger vehicle parking areas, and along the northern and southern portions of the proposed building. The landscaping consists of drought-tolerant and climate appropriate trees, shrubs and ground cover that include native species and will meet or exceed standards set forth in the PVCCSP. The landscape plan is designed to provide visual appeal and screen the views of the passenger vehicle parking lots from public rights-of-way. The Project site includes two shaded outdoor patio areas for break areas and as employee amenities. Project lighting will include security lights along the buildings and wall and pole-mounted lights in the parking areas. All Project-related lighting shall be required to conform to the PVCCSP Guidelines, PVCCSP EIR mitigation measures **MM Haz 3** and **MM Haz 5**, and the Perris Municipal Code.

Thresholds of Significance

The City of Perris has not established local CEQA significance thresholds and defers to the thresholds of significance identified in Appendix G of the State *CEQA Guidelines*. Impacts related to this Project may be considered potentially significant if the proposed Project would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;

- In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Environmental Impacts before Mitigation

Threshold A: Would the Project have a substantial adverse effect on a scenic vista?

As previously described and shown in the site photographs presented in **Figure 3-3**, the proposed Project site is vacant and undeveloped, aside from the three parcels totaling 2.7 acres in the northwest corner utilized for semi-truck trailer storage. Therefore, the proposed Project site itself is not a scenic vista, nor does it currently block or diminish views of a scenic vista. The PVCCSP IS (Section 13, Aesthetics) concluded that the PVCCSP area is not located within a scenic vista, nor will the development under the PVCCSP, including the change in land uses, have an adverse effect on a scenic vista. Further, the PVCCSP IS concludes that the PVCCSP restricts building heights and includes architectural design and landscape guidelines that will meet the City's development standards, further reducing the potential for visual impacts.

The Project area is relatively flat and is located within the PVCCSP area, which was identified in the PVCCSP IS as not being within a scenic vista. Furthermore, as shown on **Figure 3-10 – Building Elevations**, the building height would be a maximum of 50 feet, consistent with City and PVCCSP standards. A 14-foot-tall pilaster wall is proposed along the east and west sides of the Project site, to screen the view of the truck parking areas and loading bays from Patterson Avenue and Nevada Avenue. **Figure 3-11 – Screen Wall and Line of Site** shows the typical elevations of the proposed screen wall and gates around the truck yard and line of site from Patterson Avenue at the northern office area and truck area. As shown in those figures, the Project will not have an impact on any scenic vistas.

Implementation of the Project would not result in a substantial adverse effect on a scenic vista and **impacts are less than significant and no mitigation is required**.

Threshold B: Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The Project site is not located within the vicinity of scenic highways and no scenic resources are located on the Project site (**Figure 3-3**). The nearest "Officially Designated" State Scenic highway is Highway 243, located approximately 25 miles east of the Project area. (Caltrans 2022.) As previously described and shown in the site photographs presented in **Figure 3-3**, the proposed Project site is vacant and undeveloped, aside from the three parcels totaling 2.7 acres in the northwest corner utilized for semi-truck trailer storage. The Project area is relatively flat and is located within the PVCCSP area. Therefore, implementation of the Project would not substantially degrade scenic resources within a state scenic highway. **No impact would occur and no mitigation is required**.

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

The US Census Bureau defines urbanized areas as those with a population of 50,000 or more people. According to the US Census Bureau, in 2019 the City of Perris's population was approximately 79,291 (USCB); this qualifies the City as an urbanized area.

The visual impacts of a project include both the objective visual resource change created by the project and the subjective viewer response to that change. Distance from a project, frequency of view, length of view, viewer activity, viewer perception, and viewing conditions contribute to the assessment of a visual impact. The perception of different viewer groups to the visual environment and its elements varies based on viewer activity and awareness. Activities such as commuting in traffic can distract an observer from many aspects of the visual environment. Off-site views for motorists are short-lived. Conversely, pleasure driving or relaxing in a scenic environment can encourage an observer to look at the view more closely and at greater length, thereby increasing the observer's attention to detail. Sensitivity is also determined by how much the viewer has at stake in the viewshed. Typically, people who reside or own property in an area are more sensitive to change than those just passing/commuting through an area.

Due to the relatively flat topography of the Project area and surrounding area, and existing development surrounding the Project area, views of the Project area are largely limited to vantage points adjacent to the site as well as from Interstate 215 to the west of the site. The photographs presented in **Figure 3-3** depict the existing visual character of the Project area and surrounding area. These photographs were taken from public vantage points adjacent to the Project area and are representative of public views from adjacent roadways. The photographs largely depict vacant land and weeds, as well as semi-truck trailer storage in the northwest corner of the Project site.

Development of the Project area would involve the construction and operation of the following uses on the currently vacant Project area: one warehouse building with associated truck trailer and automobile parking lots, landscaping, and infrastructure. Implementation of the Project would result in a permanent and obvious change in the visual character of the site from its current condition (i.e., mostly vacant land) to an urban setting with industrial warehouse/distribution uses. The site would be developed in compliance with the Standards and Guidelines outlined in the PVCCSP.

The portion of the proposed Project site located south of Nance Street has a PVCCSP land use designation of Light Industrial (LI) and the portion located north of Nance Street has a land use designation of General Industrial (GI). The proposed warehouse building would be constructed in these portions of the Project area. As further described in Section 3.3, Project Characteristics, of this EIR, the building is proposed to accommodate 749,668 SF for high-cube, non-refrigerated warehouse distribution uses and 20,000 SF for supporting office uses. As identified above, Section 4.2.3 of the PVCCSP provides on-site Standards and Guidelines specifically related to architecture. The proposed buildings are designed to comply with these requirements, including scale, massing, and building relief, architectural elevations and details, roofs and parapets, and color and materials. **Figure 3-10** in Section 3.0, Project Description, shows the conceptual building elevations for the Project. While the Project's final design may differ slightly from the conceptual elevations provided in these figures, they are sufficient to assess the effect that the Project's development may have on the aesthetic character of the Project area and its surrounding area. The proposed building would be a maximum of 50 feet in height.

Aesthetics

Duke Warehouse at Patterson Avenue and Nance Street DEIR

The maximum structure height for development within the both the GI and LI land use designation is 50 feet (PVCCSP Table 4.0-1).

The design of the building is modern industrial and includes concrete tilt-up wall construction with board-formed cement veneer and standard window glazing. The building height would be a maximum of 50 feet. The building is proposed to be painted in varying hues of gray and white and will include decorative elements of Bronze Reflective Glazing and Black Anodized Mullions. A 14-foot-tall pilaster wall is proposed along the east and west sides of the Project site, to screen the view of the truck parking areas and loading bays from Patterson Avenue and Nevada Avenue. The conceptual landscape plan for the Project is shown in Figure 3-12 in Section 3.0, Project Description, of this DEIR. As shown, and previously described in Section 5.1.3 above, the Project would include installation of the required landscaping and screening along Patterson Avenue and Nevada Avenue. Additionally, the Project includes approximately 168,406 SF of landscaping. The landscaping consists of drought-tolerant and climate appropriate trees, shrubs and ground cover that include native species and will meet or exceed standards set forth in the PVCCSP. The landscape plan is designed to provide visual appeal and screen the views of the passenger vehicle parking lots from public rights-of-way. The Project site includes two shaded outdoor patio areas for break areas and as employee amenities. Project lighting will include security lights along the buildings and wall and pole-mounted lights in the parking areas. All Projectrelated lighting shall be required to conform to the PVCCSP Guidelines and the Perris Municipal Code.

In summary, although the visual character of the Project area would change, the Project would be designed and constructed in compliance with applicable PVCCSP standards and would result in the development of the site in an attractive, well-designed manner using architectural elements, landscaping, and Project design. The streetscapes and screening adjacent to the Project area would be the primary visual focal point for motorists traveling adjacent to the Project site. Therefore, the development of the Project would not degrade the visual character or quality of public views of the Project area and its surroundings. Impacts are considered **less than significant** through compliance with the PVCCSP, **and no mitigation measures are required**.

Threshold D: Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

As previously identified, the Project area is currently undeveloped except for the three parcels, totaling 2.7 acres, currently used for semi-truck trailer storage. As such, there are no permanent sources of light that exist on the Project site. Existing sources of lighting in the surrounding area primarily include exterior lighting associated existing development, and street lights. There are no existing buildings or other man-made features on or near the Project site that are constructed of materials that cause substantial glare.

It should be noted that, to prevent conflicts with aircraft operations at the MARB/IPA, all lighting and building materials installed as part of the Project would comply with the requirements outlined in PVCCSP EIR mitigation measures **MM Haz 3** and **MM Haz 5** (identified above), which are incorporated into the Project. In summary, light fixtures are required to be hooded or shielded to prevent either the light spillover or reflection into the sky, and lights that direct a steady light or flashing light or cause sunlight to be reflected towards an aircraft during takeoff or final approach for landing are prohibited.

Light

Construction-Related

Project-related construction activities would comply with applicable provisions of the Perris Municipal Code. Notably, Perris Municipal Code Section 7.34.060 (Construction Noise) prohibits construction activity that may result in "disturbing, excessive, or offensive noise levels between the hours of 7:00 PM and 7:00 AM". Should construction activities need to occur outside of the hours permitted by the Municipal Code, the Project Applicant would be required to obtain authorization from the City. Nighttime lighting would be needed at certain times depending on the time of year and depending on the stage of construction. In the event that construction-related activities occur during nighttime hours on the Project site, temporary, overhead artificial lighting would be provided to illuminate the work area. Additionally, nighttime lighting of construction staging areas would be needed to provide security for construction equipment and construction materials. These types of temporary lighting is often unshielded and may shine onto adjacent properties and roadways. Due to the proximity of single-family residences to the Project area (including non-confirming residences to the east and west), such security lighting may cause a significant impact in the form of a nuisance to the residents. The nearest residences are legal, nonconforming uses located adjacent from the Project site, across from both Patterson Avenue and Nevada Avenue. As required by Project-specific mitigation measure **MM AES 1**, construction staging areas would be located as far as possible from the existing residences to the east and west of the Project area to minimize light intrusion. Project-specific mitigation measure MM AES 1 also requires that temporary nighttime lighting installed for security purposes be downward facing and hooded or shielded to prevent security lighting from spilling outside the staging area or from directly broadcasting security lighting into the sky or onto adjacent residential properties. With implementation of Project-specific mitigation measure **MM AES 1**, this impact would be reduced to a less than significant level.

Operational-Related

As described in Section 3.0, Project Description, development of the Project with industrial uses would introduce new permanent sources of light into the area in the form of building lighting, and parking lot lighting for nighttime operations, security, and safety. Project lighting will include security lights along the buildings and wall and pole-mounted lights in the parking areas. Additionally, street lighting would be installed along Nevada Avenue and Patterson Avenue as part of this Project.

All development in the PVCCSP area, which includes light generated from industrial buildings and parking lots, is required to adhere to lighting requirements contained in the PVCCSP. The PVCCSP requires compliance with Riverside County Ordinance No. 655 and Perris Municipal Code Section 19.02.110.

The Project would be required to comply with lighting requirements outlined in Section 4.2.4, Lighting, of the PVCCSP, which identifies that any illumination, including security lighting, shall utilize full-cutoff lighting fixtures that are directed away from adjoining properties and the public right-of-way. The PVCCSP also requires that parking area lighting associated with the Project be designed pursuant to the Perris Municipal Code Section 19.02.110, which includes requirements for installation of energy-efficient lighting as well as shielding of parking lot lights to minimize spillover onto adjacent properties and right-of-way.

These lighting requirements are uniformly applied to all development in the PVCCSP area. As such, adherence to these lighting requirements would be mandatory and enforceable through the review and

Aesthetics

Duke Warehouse at Patterson Avenue and Nance Street DEIR

approval of the project plans. Adherence to the PVCCSP Guidelines would ensure that the Project's lighting would not significantly affect adjacent uses. Therefore, operational lighting impacts would be **less than significant and no mitigation would be required**.

Glare

As discussed in Section 5.1.3 and shown in the building elevations presented in Section 3.3 of this EIR, the buildings would be constructed of concrete tilt-up panels with board-formed cement veneer and standard window glazing. The proposed buildings will be approximately 50 feet in height. Because the Project is complying with the requirements of the PVCCSP related to building materials, glare from the Project will not create a nuisance to on- and off-site viewers of the Project area or aircraft traveling to or from the MARB/IPA. The Project would not create a new source of substantial glare. This impact would be **less than significant and no mitigation is required**.

Recommended Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse Impacts. (State CEQA Guidelines § 15126.4) Mitigation measures were evaluated for their ability to reduce or eliminate impacts. The proposed Project is required to implement PVCCSP EIR mitigation measures **MM Haz 3** and **MM Haz 5**, as discussed in Section 5.1.2 in addition to the following Project-specific mitigation:

MM AES 1 Prior to the issuance of grading permits, the Property Owner/Developer shall provide evidence to the City that the Contractor Specifications require that: (1) construction staging areas shall be located as far as possible from residences east and west of the Project area; and, (2) any temporary nighttime lighting installed during construction for security or any other purpose shall be downward facing and hooded or shielded to prevent security light from spilling outside the staging area or from directly broadcasting security light into the sky or onto adjacent residential properties. Compliance with this measure shall be verified by the City of Perris' Building Division during construction.

Summary of Environmental Effects After Mitigation Measures Are Implemented

All Project-related lighting shall be required to conform to the PVCCSP Guidelines, including PVCCSP EIR mitigation measures **MM Haz 3** and **MM Haz 5**, and with Project-specific mitigation measure **MM AES 1**. With implementation of the mitigation measures identified above, the impacts to aesthetics posed by the Project would be **less than significant**.

5.2 Air Quality

The focus of the following discussion is related to the potential for the proposed Project to have impacts related to compliance with air quality standards, cumulative increases of criteria air pollutants, the exposure of sensitive receptors to substantial pollutant concentrations, and other emissions leading to odors. The discussion also includes the existing physical setting of the Project area, sensitive land uses in proximity of the Project site, the air quality regulatory framework, and long-term air quality attainment goals for the region.

The analysis in this section is based, in part, on the *Air Quality/Greenhouse Gas Analysis for the Duke Warehouse at Patterson Avenue and Nance Street (DPR No. 21 00005), City of Perris* (the AQ Study) (WEBB-A) prepared by Albert A. Webb Associates dated July 25, 2022. The AQ Study, which is included as Appendix B.1 to this DEIR, evaluated whether the expected criteria air pollutant emissions that would be generated as a result of construction and long-term operations (i.e., vehicle emissions) of the proposed Project would cause significant impacts to air quality. The AQ Study was prepared within the context of the California Environmental Quality Act (CEQA; California Public Resources Code Sections 21000 *et seq.*). The methodology follows the *CEQA Air Quality Handbook* (1993) prepared by the South Coast Air Quality Management District (SCAQMD) for quantification of emissions and evaluation of potential impacts to air resources. As recommended by SCAQMD and City staff, the California Emissions Estimator Model (CalEEMod[™]) version 2020.4.0 computer program was used to quantify Project-related emissions.

The Project site is located within the Perris Valley Commerce Center Specific Plan (PVCCSP). As required by the PVCCSP EIR mitigation measure **MM Air 15**, a health risk assessment was performed to assess the diesel particulate matter impacts from mobile-source traffic generated by the proposed Project on nearby sensitive land uses. Appendix B.2 contains the *Health Risk Assessment – Duke Warehouse at Patterson Avenue and Nance Street (DPR 21-00005)* to support the conclusions presented in this section.

In response to the Notice of Preparation (NOP), one comment letter was received related to air quality. The Californians Allied for a Responsible Economy (CARE CA) requested a Health Risk Assessment (HRA), analysis of high intensity uses, including heavy trucks in the vehicle miles travelled (VMT) analysis, incorporation of modern technology in its mitigation measures, and reliance on substantial evidence in the DEIR analysis. Verbal comments were also received at the February 2, 2022 EIR public scoping meeting regarding air quality, which included meeting SCAQMD standards, general concerns about air pollution, truck idling limits, alternative transportation options, and electric vehicle charging. These comments are addressed in this Section, as well as in Sections 3.0, Project Description, and 5.13, Transportation.

In addition to other documents, the following references were used in the preparation of this section of the DEIR:

- Albert A. Webb Associates, Air Quality/Greenhouse Gas Analysis for the Duke Warehouse at Patterson Avenue and Nance Street (DPR No. 21 00005), City of Perris, July 25, 2022. (Included as Appendix B.1 to this DEIR) [Cited as AQ Study]
- Albert A. Webb Associates, *Health Risk Assessment Duke Warehouse at Patterson Avenue and Nance Street DPR 21-00005) City of Perris.* January 2022. (Included as Appendix B.2 to this DEIR) [Cited as HRA]

- Albert A. Webb Associates, *Patterson-Nance Warehouse Project Traffic Impact Analysis (DPR 21-00005)*, January 2022. (Included as Appendix B.3 to this DEIR) [Cited as TIA]
- California Air Resources Board, *Air Quality and Land Use Handbook: A Community Perspective*, April 2005. (Available at <u>www.arb.ca.gov/ch/landuse.htm</u>, accessed February 3, 2022.) [Cited as CARB 2005]
- California Air Resources Board, *The California Almanac of Emissions and Air Quality 2013 Edition*, 2013. (Available at https://ww2.arb.ca.gov/our-work/programs/resource-center/technical-assistance/air-quality-and-emissions-data/almanac, accessed December 23, 2021.) [Cited as CARB 2013]
- California Air Resources Board, Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways, April 2017. (Available at <u>https://ww2.arb.ca.gov/sites/default/files/2017-</u> <u>10/rd technical advisory final.pdf</u>, accessed February 3, 2022.) [Cited as CARB 2017]
- Californa Building Standards Commission, California Green Building Standards code, Title 24, Part 11 with July 2021 Supplement. (Available at <u>https://codes.iccsafe.org/content/CAGBC2019JUL21S</u>, accessed February 4, 2022.) [Cited as CBSC]
- California Energy Commission, 2019 Building Energy Efficiency Standards Fact Sheet, March 2018. (Available at <u>https://www.energy.ca.gov/programs-and-topics/programs/building-energyefficiency-standards/2019-building-energy-efficiency</u>, accessed February 3, 2022.) [Cited as CEC 2019]
- California Energy Commission, 2022 Building Energy Efficiency Standards, December 2021. (Available at https://www.energy.ca.gov/programs-and-topics/programs/building-energyefficiency-standards/2022-building-energy-efficiency, accessed May 12, 2022.) [Cited as CEC 2021]
- City of Perris, *Perris Comprehensive General Plan 2030, Conservation Element*, adopted July 12, 2005, Sustainable Community Amendment adopted February 18, 2008. (Available at <u>https://www.cityofperris.org/departments/development-services/general-plan</u>, accessed February 17, 2022.) [Cited as Perris GP 2030]
- City of Perris, *Perris Valley Commerce Center Specific Plan Final Environmental Impact Report*, State Clearing house # 2009081086, November 2011, certified January 10, 2012. (Available at the City of Perris.) [Cited as PVCCSP EIR]
- Metropolitan Transportation Authority, 2004 Congestion Management Plan for Los Angeles County, Adopted July 22, 2004. (Available at <u>https://planning.lacity.org/eir/CrossroadsHwd/deir/files/references/B12.pdf</u>, accessed February 18, 2022.) [Cited as MTA]
- South Coast Air Quality Management District, 2003 Air Quality Management Plan, August 1, 2003. (Available at https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/2003-aqmp, accessed on March 2, 2022.) [Cited as 2003 AQMP]
- Southern Califronia Associateaion of Gevernments, 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016 RTP/SCS) April 2016. (Available at <u>https://scag.ca.gov/resources-prior-plans</u>, accessed on February 4, 2022.) [Cited as SCAG 2016]
- Southern Califronia Associateaion of Governments, 2020-2045 Regional Transportation Plan/ Sustainable Communities Strategy of the Southern California Association of Governments-Connect SoCal, September 2020 (Available at <u>https://scag.ca.gov/post/connect-socal-plan</u> accessed on February 4, 2023.) [Cited as SCAG 2020]

- South Coast Air Quality Management District, *Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and [Proposed] Brief of Amicus Curiae*, April 13, 2015. (Available at <u>https://www.courts.ca.gov/documents/9-s219783-ac-south-coast-air-quality-mgt-dist-041315.pdf</u>, February 4, 2022.) [Cited as SCAQMD 2015]
- South Coast Air Quality Management District, CEQA Air Quality Handbook, 1993. (Available at SCAQMD.) [Cited as SCAQMD 1993]
- South Coast Air Quality Management District, *Final 2016 Air Quality Management Plan*, March 2017.(Availale at http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp, accessed Februay 17, 2022) [Cited as SCAQMD 2016]
- South Coast Air Quality Management District, *Final Localized Significance Threshold* Methodology, Revised July 2008 (Available at http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf, accessed March 2, 2022.) [Cited as SCAQMD 2008b]
- South Coast Air Quality Management District, *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, May 6, 2005. (Available at <u>http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf</u>, accessed Febraury 3, 2021.) [Cited as SCAQMD 2005]
- South Coast Air Quality Management District, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions for CEQA Air Quality Analysis, August 2003. (Available at: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysishandbook/mobile-source-toxics-analysis, accessed February 4, 2022.) [Cited as SCAQMD 2003a]
- South Coast Air Quality Management District, *Historical Data by Year, 2020, 2019, 2018.* (Available at <u>http://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year</u>, accessed February 16, 2022.) [Cited as SCAQMD 2021a]
- South Coast Air Quality Management District, Mates V Estimated Risk Online Map. (Available at https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23?views=Navigate-the-map, accessed July 13, 2022.) [Cited as SCAQMD 2021b]
- South Coast Air Quality Management District, *Revision to the 1992 Carbon Monoxide Attainment Plan*, September 1994. (Available at SCAQMD.) [Cited as 1992 CO Plan]
- South Coast Air Quality Management District, Multiple Air Toxics Exposure Study (MATES-II), March 2000. (Available at <u>http://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-ii</u>, accessed February 3, 2022.) [Cited as SCAQMD 2000]
- South Coast Air Quality Management District, *Multiple Air Toxics Exposure Study (MATES-III)*, September 2008. (Available at <u>MATES III (aqmd.gov)</u>, accessed February 3, 2022.) [Cited as SCAQMD 2008a]
- South Coast Air Quality Management District, Multiple Air Toxics Exposure Study (MATES-IV), May 2015. (Available at <u>MATES IV (aqmd.gov)</u>, accessed February 3, 2022.) [Cited as SCAQMD 2014]
- South Coast Air Quality Management District, *Multiple Air Toxics Exposure Study* (MATES-V), August 2021. (Available at <u>http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v</u>, accessed July 14, 2022.) [Cited as SCAQMD 2021c]
- South Coast Air Quality Management District, White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution, August 2003. (Available at <u>http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-</u>

working-group/cumulative-impacts-white-paper.pdf, accessed Februaury 4, 2022.) [Cited as SCAQMD 2003b]

- U.S. Environmental Protection Agency, *Criteria Air Pollutants.* (Available at <u>https://www.epa.gov/criteria-air-pollutants</u>, accessed February 3, 2022.) (USEPA 2021)
- United States Environmental Protection Agency, Memorandum, Haul Road Workgroup Final Report Submission to EPA-OAQPS, March 2, 2012. (Available at <u>https://www.epa.gov/sites/production/files/2020-10/documents/haul_road_workgroup-</u> final_report_package-20120302.pdf, accessed February 17, 2022.) [Cited as USEPA 2012]
- Western Regional Climate Center, Southern California Cooperative Climatological Data Summaries 2021, (Available at <u>https://wrcc.dri.edu/summary/Climsmsca.html</u>, accessed on February 18, 2022.) [Cited as WRCC 2021]

5.2.1 Setting

The Project site is located in the northwestern portion of the City of Perris within the PVCCSP. The portion of the Project site located north of Nance Street has a PVCCSP land use designation of General Industrial (GI) and the southern portion of the Project site has a PVCCSP land use designation of Light Industrial (LI). The Project Applicant proposes to amend the PVCCSP Circulation Plan to reflect the deletion of two streets: California Avenue and Nance Street between Patterson Avenue to the west and Nevada Avenue to the east.

As part of the approval process for the PVCCSP, an EIR (PVCCSP EIR) was prepared to assess air quality-related impacts resulting from development of land uses proposed under the PVCCSP. The PVCCSP EIR concluded that potential air quality impacts would be significant even with mitigation and recognized that some individual projects would also have a significant impact to air quality. This Project incorporates the recommendations of the PVCCSP EIR.

Physical Setting

The proposed Project site is located within the South Coast Air Basin (the Basin), which is under the jurisdiction of the SCAQMD. The Basin consists of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. Regional and local air quality within the Basin is affected by topography, atmospheric inversions, and dominant onshore flows. Topographic features such as the San Gabriel, San Bernardino, and San Jacinto Mountains form natural horizontal barriers to the dispersion of air contaminants. The presence of atmospheric inversions limits the vertical dispersion of air pollutants. With an inversion, the temperature initially follows a normal pattern of decreasing temperature with increasing altitude; however, at some elevations, the trend reverses and temperature begins to increase as altitude increases. This transition to increasing temperature establishes the effective mixing height of the atmosphere and acts as a barrier to vertical dispersion of pollutants (SCAQMD 1993).

Dominant onshore flow provides the driving mechanism for both air pollution transport and pollutant dispersion. Air pollution generated in coastal areas is transported east to inland receptors by the onshore flow during the daytime until a natural barrier (the mountains) is confronted, limiting the horizontal dispersion of pollutants. The result is a gradual degradation of air quality from coastal areas to inland areas, which is most evident with the photochemical pollutants such as ozone formed under reactions with sunlight (SCAQMD 1993).

Climate

Terrain and geographical location determine climate in the Basin. The Project site lies within the terrain south of the San Gabriel and San Bernardino Mountains and is located between the San Jacinto and Santa Ana Mountains. The climate in the Basin is typical of southern California's Mediterranean climate, which is characterized by dry, warm summers and mild winters. Winters typically have infrequent rainfall, light winds, and frequent early morning fog and clouds that turn to hazy afternoon sunshine.

The following includes factors that govern micro-climate differences among inland locations within the Basin: 1) the distance of the mean air trajectory from the site to the ocean; 2) the site elevation; 3) the existence of any intervening terrain that may affect airflow or moisture content; and 4) the proximity to canyons or mountain passes. As a general rule, locations farthest inland from the ocean have the hottest summer afternoons, the lowest rainfall, and the least amount of fog and clouds. Foothill communities in the Basin have greater levels of precipitation, cooler summer afternoons and may be exposed to wind funneling through nearby canyons during Santa Ana winds. Terrain will generally steer local wind patterns (SCAQMD 1993).

The Project site is located within the City of Perris, east of the I-215 freeway, south of SR-60, and west of Lake Perris State Recreational Area (**Figure 3-1 – Regional Map**), within the eastern portion of the Basin. More specifically, the Project site is located South of Harley Knox Boulevard, north of Nance Street, east of Patterson Avenue, and west of Nevada Avenue.

Precipitation and Temperature

Annual average temperatures in the Basin are typically in the low to mid-60s (degrees Fahrenheit). Temperatures above 100 degrees are recorded for all portions of the Basin during the summer months (SCAQMD 1993).

The Western Regional Climate Center (WRCC) maintains monitoring stations and historical climate information for the western United States. The climatological station closest to the Project site is a National Weather Service (NWS) Cooperative station located in Perris. As shown in **Table 5.2-A– Perris Meteorological Data**, climatological data from the NWS at this station spanning from 1971-2000 shows December as the coldest month with an annual high average temperature of 61.5° F and an annual low average of 34.4° F and the July as the warmest month with an annual high average of 97.3° F and am annual low average of 59.4° F). (WRCC 2021.)

The rainy season in the Basin is November to April. Summer rainfall can occur as widely scattered thunderstorms near the coast and in the mountainous regions in the eastern Basin. Rainfall averages vary over the Basin. For example, the City of Riverside averages 9 inches of rainfall, while the City of Los Angeles averages 14 inches. Rainy days vary from 5 to 10 percent of all days in the Basin, with the most frequent occurrences of rainfall near the coast (SCAQMD 1993).

Over this same period of time, the climatological data from the Perris NWS Cooperative station shows an annual average precipitation of 6.37 inches. Seventy-nine (79) percent of the annual rainfall occurs during the November to February rain season. The highest monthly average rainfall occurs during December and January. However, year to year patterns in rainfall are unpredictable due to fluctuations in the weather. General meteorological data for the Perris area, as measured at the Perris weather station, are shown in **Table 5.2-A**.

Air Quality

	Temperature (°F)		Average Precipitation
Month	Average High	Average Low	(inches)
January	65.6	34.5	1.83
February	67.9	36.9	0.73
March	69.9	38.8	0.25
April	74.3	41.9	0.11
May	78.8	46.6	0.21
June	87.7	53.5	0.26
July	97.3	59.4	0.04
August	95.8	60.0	0.16
September	89.5	55.2	0.07
October	77.4	46.2	0.22
November	65.7	36.7	0.89
December	61.5	34.4	1.60
Annual Average	77.8	45.5	6.37

Table 5.2-A- Perris Meteorological Data

Source: WRCC 2021; 1971-2000 Monthly Climate Summary

Winds

The interaction of land (offshore) and sea (onshore) breezes control local wind patterns in the area. Daytime winds typically flow from the coast to the inland areas, while the pattern typically reverses in the evening, flowing from the inland areas to the ocean. Air stagnation may occur in the early evening and early morning during periods of transition between day and nighttime flows.

Approximately 5 to 10 times a year, the Project site vicinity experiences strong, hot, dry desert winds known as the Santa Ana winds. These winds, associated with atmospheric high pressure, originate in the upper deserts and are channeled through the passes of the San Bernardino Mountains and into the inland valleys. Santa Ana winds can last for a period of hours or days, and gusts of over 60 miles per hour have been recorded.

High winds, including Santa Ana winds, affect dust generation characteristics and create the potential for off-site air quality impacts, especially with respect to airborne nuisance and particulate emissions. Local winds in the Project area are also an important meteorological parameter because they control the initial rate of dilution of locally-generated air pollutant emissions.

Categories of Emission Sources

Air pollutant emissions sources are typically grouped into two categories: stationary and mobile sources. These emission categories are defined and discussed in the following subsections.

Stationary Sources

Stationary sources are divided into two major subcategories: point and area sources. Point sources consist of a single emission source with an identified location at a facility. A single facility could have multiple point sources located on-site. Stationary point sources are usually associated with manufacturing and industrial processes. Examples of point sources include boilers or other types of combustion equipment at oil refineries, electric power plants, etc. Area sources are small emission sources that are widely distributed but are cumulatively substantial because there may be a large number of sources. Examples include residential water heaters; painting operations; lawn mowers; agricultural fields; landfills; and consumer products, such as barbecue lighter fluid and hair spray (SCAQMD 1993).

Mobile Sources

Mobile sources are motorized vehicles, which are classified as either on-road or off-road. On-road mobile sources typically include automobiles and trucks that operate on public roadways. Off-road mobile sources include aircraft, ships, trains, and self-propelled construction equipment that operate off public roadways. Mobile source emissions are accounted for as both direct source emissions (those directly emitted by the individual source) and indirect source emissions, which are sources that by themselves do not emit air contaminants but indirectly cause the generation of air pollutants by attracting vehicles. Examples of indirect sources include office complexes, commercial and government centers, sports and recreational complexes, and residential developments (SCAQMD 1993).

Air Pollution Constituents

Criteria Pollutants

Air pollutants are classified as either primary, or secondary, depending on how they are formed. Primary pollutants are generated daily and are emitted directly from a source into the atmosphere. Examples of primary pollutants include carbon monoxide (CO), nitrogen dioxide (NO₂) and nitric oxide (NO)— collectively known as oxides of nitrogen (NO_x), sulfur dioxide (SO₂), particulates (PM-10 and PM-2.5) and various hydrocarbons (HC) or volatile organic compounds (VOC), which are also referred to as reactive organic gases (ROG). The predominant source of air emissions generated by the Project development is expected to be vehicle emissions. Motor vehicles primarily emit CO, NO_X, and VOC/ROG/HC (Volatile Organic Compounds/Reactive Organic Gases/Hydrocarbons).

Secondary pollutants are created over time and occur within the atmosphere as chemical and photochemical reactions take place. An example of a secondary pollutant is ozone (O_3), which is one of the products formed when NO_x reacts with HC, in the presence of sunlight. Other secondary pollutants include photochemical aerosols. Secondary pollutants such as ozone represent major air quality problems in the Basin.

The Federal Clean Air Act of 1970 established the National Ambient Air Quality Standards (NAAQS). Six "criteria" air pollutants were identified using specific medical evidence available at that time, and NAAQS were established for those chemicals. The State of California has adopted the same six chemicals as criteria pollutants but has established different allowable levels. The six criteria pollutants are: carbon monoxide, nitrogen dioxide, ozone, lead, particulates less than 10 microns in size, and sulfur dioxide. The following is a further discussion of the criteria pollutants, as well as volatile organic compounds.

- Carbon Monoxide (CO) A colorless, odorless toxic gas produced by incomplete combustion of carbon-containing substances. Concentrations of CO are generally higher during the winter months when meteorological conditions favor the build-up of primary pollutants (EPA 2016). Automobiles are the major source of CO in the Basin, although various industrial processes also emit CO through incomplete combustion of fuels. In high concentrations, CO can cause serious health problems in humans by limiting the red blood cells' ability to carry oxygen (SCAQMD 1993).
- Oxides of Nitrogen (NO_x) Those that are important in air pollution are nitric oxide (NO) and nitrogen dioxide (NO₂). NO is a colorless, odorless gas formed by a combination of nitrogen and oxygen when combustion takes place under high temperatures and pressures. NO₂ is a reddishbrown gas formed by the combination of NO with oxygen. Combustion in motor vehicle engines, power plants, refineries and other industrial operations, as well as ships, railroads, and aircraft

are the primary sources of NO_x . NO_2 at atmospheric concentrations is a potential irritant that can cause coughing in healthy people; can alter respiratory responsiveness and pulmonary functions in people with preexisting respiratory illness; and potentially lead to increased levels of respiratory illness in children (EPA 2021).

- Ozone (O₃) A colorless, toxic gas that irritates the lungs and damages materials and vegetation. During the summer's long daylight hours, plentiful sunshine provides the energy needed to fuel photochemical reactions between NO₂ and VOC which result in the formation of O₃. Conditions that lead to high levels of O₃ are adequate sunshine, early morning stagnation in source areas, high surface temperatures, strong and low morning inversions, greatly restricted vertical mixing during the day, and daytime subsidence that strengthens the inversion layer (all of which are characteristic of western Riverside County). Ozone represents the worst air pollution-related health threat in the Basin as it affects people with preexisting respiratory illness, as well as reduces lung function in healthy people. Studies have shown that children living within the Basin experience a 10–15 percent reduction in lung function (SCAQMD 1993).
- Atmospheric Particulate Matter (PM) Made up of fine solid and liquid particles, such as soot, dust, aerosols, fumes, and mists. PM-10 consists of particulate matter that is 10 microns or less in diameter, and PM-2.5 consists of particulate matter of 2.5 microns or less in size. Both PM-10 and PM-2.5 can be inhaled into the deepest part of the lung, attributing to health effects. The presence of these fine particles by themselves cause lung damage and interfere with the body's ability to clear its respiratory tract. Said particles can also act as a carrier of other toxic substances (SCAQMD 1993).

Sources that contribute to particulate matter pollution include: road dust, windblown dust, agriculture, construction, fireplaces and wood burning stoves, and vehicle exhaust. Specifically, SCAQMD data indicates that the largest component of PM-10 particles in the area comes from dust (unpaved roads, unpaved yards, agricultural lands, and vacant land that has been disked). PM-2.5 particles are mostly manmade particles resulting from combustion sources. According to the SCAQMD, one component of PM-2.5 pollution in Riverside comes from ammonium nitrate (NH₄NO₃) particulates. NO_x, emitted throughout the Basin by vehicles, reacts with ammonia produced from livestock and horses to form ammonium nitrate. Organic carbon particles generated from paints, degreasers, and vehicles are another component of PM-2.5 pollution. The last notable constituent of PM-2.5 sources is elemental carbon, which is used as a surrogate for diesel particulates (EPA 2021).

- Sulfur dioxide (SO₂) A colorless, pungent gas formed primarily by the combustion of sulfurcontaining fossil fuels. SO₂ can result in temporary breathing impairment in asthmatic children and adults engaged in active outdoor activities. When combined with PM, SO₂ can cause symptoms such as shortness of breath and wheezing; and, with long-term exposure, it can lead to the exacerbation of existing cardiovascular disease and respiratory illnesses (EPA 2021). Although SO₂ concentrations have been reduced to levels well below state and federal standards, further reductions in SO₂ emissions are needed because SO₂ is a precursor to sulfate and PM-10.
- Lead (Pb) Lead concentrations once exceeded the state and federal air quality standards by a wide margin, but have not exceeded state or federal air quality standards at any regular monitoring station since 1982. Health effects associated with lead include neurological

impairments, mental retardation, and behavioral disorders. At low levels, lead can damage the nervous systems of fetuses and result in lowered IQ levels in children (EPA 2021). Though special monitoring sites immediately downwind of lead sources recorded very localized violations of the state standard in 1994, no violations have been recorded at these stations since 1996. Unleaded gasoline has greatly contributed to the reduction in lead emissions in the Basin. Since the proposed Project will not involve leaded gasoline, or other sources of lead emissions, this criteria pollutant is not expected to be a factor with Project implementation.

• Reactive Organic Gases/Volatile Organic Compounds (ROG/VOC) - It should be noted that there are no state or federal ambient air quality standards for VOCs because they are not classified as criteria pollutants. VOCs are regulated; however, a reduction in VOC emissions reduces certain chemical reactions, which contribute to the formation of ozone. VOCs are also transformed into organic aerosols in the atmosphere, contributing to higher PM-10 and lower visibility levels. Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations of VOC because of interference with oxygen uptake. In general, ambient VOC concentrations in the atmosphere, even at low concentrations, are suspected to cause coughing, sneezing, headaches, weakness, laryngitis, and bronchitis. Some hydrocarbon components classified as VOC emissions are thought or known to be hazardous. Benzene, for example, is a hydrocarbon component of VOC emissions that is known to be a human carcinogen (SCAQMD 2005).

Toxic Air Contaminants

Toxic air contaminants (TACs) are chemicals generally referred to as "non-criteria" air pollutants which may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health. TACs are generally present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at very low concentrations. For those TACs that cause cancer, there is no concentration that does not present some low-level risk. In other words, there is no threshold below which adverse health impacts are not expected to occur. This contrasts with the criteria pollutants for which acceptable levels of exposure can be determined, and for which the state and federal governments have set ambient air quality standards. The majority of the estimated health risk from TACs can be attributed to relatively few compounds, the most important being PM from diesel-fueled engines, known as diesel particulate matter (DPM). In addition to DPM, benzene and 1,3-butadiene are also significant contributors to overall ambient public health risk in California.

Both the SCAQMD and the California Air Resources Board (CARB) have monitoring networks within the Basin that measure ambient concentrations of certain TACs which are associated with important health-related effects and are present in appreciable concentrations in the Basin. The SCAQMD uses this information to determine health risks for a particular area. CARB publishes annual statewide, air basin, and location-specific summaries of the concentration levels of several TACs and their resulting cancer risks. The most recent summary is the CARB Air Quality Almanac for 2013; however, this version did not include a discussion of TACs. The 2009 version of the Almanac is the most recent version which presents the relevant concentration and cancer risk data for the ten TACs that present the most substantial health risk in California based on available data. These TACs are: acetaldehyde, benzene, 1,3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene. DPM is not directly measured but is indirectly estimated based on fine particulate matter measurements and special studies on the chemical speciation of ambient fine particulate data, along with receptor modeling techniques.

Air Quality

Exhaust emissions from diesel mobile sources dropped by 32 percent from 2000 to 2010 due to more stringent emissions standards and introduction of cleaner burning diesel fuel. (CARB 2013). Reductions in cancer risk are expected to continue into the future as new emission controls are implemented to further reduce DPM emissions, which are the major component total airborne cancer risk.

The SCAQMD has conducted a detailed TAC emission inventory, air sampling, and dispersion modeling study called the "Multiple Air Toxics Exposure Study in the South Coast Air SoCAB" (MATES-II, SCAQMD 2000), MATES-III (SCAQMD 2008a), MATES-IV (SCAQMD 2014), and MATES-V (SCAQMD 2021c) (collectively, "MATES Studies").

The MATES Studies provided information on the importance of various TACs in terms of their relative health risks, as well as their spatial distribution across the Basin. The MATES-V information can be used to characterize the "background" health risks from both regional and local TAC emission sources based on the available toxics emission inventory for the year 2018 and a comprehensive modeling effort. The risk assessment approach was consistent with guidelines established by the Office of Environmental Health Hazard Assessment (OEHHA). The MATES-V program interactive map results indicate that the existing cancer risk attributable to TACs in the Project site vicinity is approximately 365 in one million. (SCAQMD 2021b) Two key updates were implemented in MATES-V. First, MATES-V estimated cancer risks resulting from both inhalation and non-inhalation pathways whereas previous MATES Studies calculated cancer risks from inhalation pathways only. The cumulative cancer risk accounting for inhalation and non-inhalation pathways is approximately eight percent higher than the inhalation-only calculation for the MATES-V data. Second, MATES-V also includes information on the chronic noncancer health impacts from inhalation and non-inhalation pathways for the first time. The cumulative chronic hazard index accounting for the inhalation and non-inhalation pathways is approximately twice the inhalation-only calculation for the MATES-V data. Cancer risks and chronic non-cancer health impacts from MATES-II through -IV measurements were also re-examined using current OEHHA and California Environmental Protection Agency (EPA) risk assessment methodologies and modern statistical methods to examine the trends over time. (SCAQMD 2021c, pp. ES-2, ES-5.)

As in previous MATES iterations, DPM is the largest contributor to overall air toxics cancer risk. However, the average levels of DPM in MATES-V are 53% lower at the 10 monitoring sites compared to MATES-IV and 86% lower since MATES-II based on monitored data. Based on other SCAQMD analyses of projected DPM emissions in future years, significant decreases in DPM health impacts are expected within the next 5-10 years. These reductions reflect recent and continued efforts by the SCAQMD, CARB and USEPA that reduce DPM emissions, especially from mobile sources. (SCAQMD 2021c, p. ES-6.)

The MATES-V concludes that air toxics cancer risk continues to decline throughout the Basin with a 40% decrease in risk since MATES-IV and an 84% decrease since MATES-II, based on measurement data at the fixed monitoring locations. The estimated Basin-wide population-weighted cancer risk calculated from the modeling data leads to a similar conclusion with a 54% decrease since MATES-IV. (SCAQMD 2021c, p. ES-16.)

Diesel Emissions

Diesel engines utilize compression, contrary to standard gasoline engines which use conventional spark plugs, to ignite fuel. Engines that use compression typically run at higher temperatures than gasoline engines, thereby causing the oxygen and nitrogen present in air during intake, to form NO_x. To combat NO_x production in a diesel engine, the engine temperature can be reduced however, increased amounts of particulate matter (PM) and hydrocarbons (HC) are produced as byproducts of the now uncombusted fuel. Hydrocarbons, once in the atmosphere, react with NO_x to produce ozone (O₃), among other pollutants.

Diesel exhaust composition is dependent on many factors: fuel composition, engine type, lubricating oils, and emission control systems. Diesel exhaust is a complex mixture of thousands of gases and fine particles. The gaseous fraction of diesel exhaust is comprised of typical combustion gases such as oxygen, carbon dioxide, nitrogen, and water vapor. However, air pollutants such as carbon monoxide, sulfur oxides (SO_x), NO_x, volatile hydrocarbons, and low-molecular weight polycyclic aromatic hydrocarbons (PAH) and PAH-derivatives are also components of the gaseous fraction. Additionally, some of the gaseous components, such as benzene, are known carcinogens.

The particle fraction of diesel exhaust is comprised of aggregates of carbon particles with inorganic and organic substances adhered to them. The inorganic fraction of diesel exhaust particles consists of solid carbon (or elemental carbon) particles ranging in size from 0.01 to 0.08 microns in diameter. The organic fraction consists of soluble organic compounds such as aldehydes, alkanes, alkenes, PAH, and PAH derivatives. The total component of a diesel particle (inorganic + organic) is in the fine particle range of 10 microns in size or less (width of a human hair), but 92 percent of these diesel particles are even smaller, at less than 1 micron in diameter. Diesel particles can remain airborne for up to 10 days because of their small size. Therefore, they do not fall out or precipitate easily, and remain an air quality problem for some time after being emitted. Scientists use elemental carbon as a surrogate since there is no current technology available to monitor directly for diesel particles. The addition of diesel particulate toxicity dramatically increases carcinogenic risk and DPM accounts for approximately 50 percent of total cancer risk according to the most recent SCAQMD MATES-V study (SCAQMD 2021c, p. 2-63).

It is important to understand that the cancer risks estimated by the CARB related to mobile-source diesel exhaust and health risk assessment studies represent the probability that a person develops cancer; the estimated risks do not represent mortality rates.

Sources and Effects of Criteria Air Pollutants

Sources and typical effects of criteria pollutants are summarized in **Table 5.2-B – Primary Sources and** Effects of Criteria Pollutants

The correlation between project-specific emissions and potential health impacts is complex and the SCAQMD has determined that attempting to quantify health impacts from projects that are not regional in scale (e.g., Basin-wide) may not be appropriate because it may be misleading and unreliable for various reasons including modeling limitations as well as where in the atmosphere the air pollutants interact and form (SCAQMD 2015). To date, the SCAQMD has not provided methodology to assess the specific correlation between mass emissions generated and the effect on health. However, if a project in the Basin exceeds the SCAQMD regional significance thresholds, the project could contribute to an increase in health effects in the basin until the attainment standard(s) are met in the Basin.

Monitored Air Quality

The Project site is located within SCAQMD Source Receptor Area (SRA) 24. The most recent published data for SRA 24 is presented in **Table 5.2-C– Air Quality Monitoring Summary from 2018–2020 (SRA 24)**. This data indicates that the baseline air quality conditions in the Project area include occasional events of very unhealthful air. However, the frequency of smog alerts has dropped significantly in the last decade. Atmospheric concentrations of ozone and particulate matter are the two most significant air quality concerns in the Project area. Locally, no second stage alert (0.35 ppm/hour) has been called by the SCAQMD in over twenty years. In fact, the last second stage alert was in Upland in 1988.

Air Quality

Table 5.2-B – Primary Sources and Effects of Criteria Pollutants

Pollutant	Primary Effects
Ozone (O3)	 Respiratory Symptoms Worsening of lung diseases leading to premature death Damage to lung tissue Crop, forest and ecosystem damage Damage to a variety of materials, including rubber, plastics, fabrics, paint and metals.
PM-2.5 (particulate matter less than 2.5 microns in aerodynamic diameter)	 Premature death Hospitalization for worsening of cardiovascular disease Hospitalization for respiratory disease Asthma-related emergency room visits Increased symptoms, increased inhaler usage
PM-10 (particulate matter less than 10 microns in aerodynamic diameter)	 Premature death & hospitalization, primarily for worsening of respiratory disease Reduced visibility and material soiling
Nitrogen Oxides (NOx)	Lung irritationEnhanced allergic responses
Carbon monoxide (CO)	 Chest pain in patients with heart disease Headache Light-headedness Reduced mental alertness
Sulfur dioxide (SO2)	 Worsening of asthma: increased symptoms, increased medication usage, and emergency room visits
Lead	 Impaired mental functioning in children Learning disabilities in children Brain and kidney damage
Hydrogen Sulfide (H₂S)	Nuisance odor (rotten egg smell)At high concentrations: headache & breathing difficulties
Sulfate	 Same as PM-2.5, particularly worsening of asthma and other lung diseases Reduces visibility
Sulfate	 Same as PM-2.5, particularly worsening of asthma and other lung diseases Reduces visibility
Vinyl Chloride	 Central nervous system effects, such as dizziness, drowsiness & headaches Long-term exposure: liver damage & liver cancer
Visibility Reducing Particles	 Reduced airport safety, scenic enjoyment, road safety, and discourages tourism
Toxic Air Contaminants About 200 chemicals have been listed as toxic air contaminants	 Cancer Reproductive and development effects Neurological effects

Source: https://ww2.arb.ca.gov/resources/common-air-pollutants

Table 5.2-C- Air Quality Monitoring Summary from 2018-2020 (SRA 24)

	Pollutant/Standard	Monitoring Years		
		2018	2019	2020
	Ozone (O₃):			
s be	California Standard:			
Day ede	1-Hour - 0.09 ppm	31	26	34
0. E	8-Hour - 0.07 ppm	67	64	74
Ζŵ	Federal Primary Standards:			
	8-Hour - 0.070 ppm	67	64	55
	Max 1-Hour Conc. (ppm)	0.117	0.118	0.125
	Max 8-Hour Conc. (ppm)	0.103	0.095	0.097
	Carbon Monoxide (CO)ª:			
	California Standard:			
ays dec	1-Hour - 20 ppm	0	0	0
ee D	8-Hour - 9.0 ppm	0	0	0
No.	Federal Primary Standards:			
	1-Hour - 35 ppm	0	0	0
	8-Hour - 9.0 ppm	0	0	0
	Max 1-Hour Conc. (ppm)	2.2	1.5	1.9
	Max 8-Hour Conc. (ppm)	2.0	1.2	1.4
	Nitrogen Dioxide (NO ₂) ^a :			
s/s	California Standard:			
Day	1-Hour - 0.18 ppm (180 ppb)	0	0	0
o. I	Federal Standard:			
Ζŵ	Annual Arithmetic Mean (53.4 ppb)	14.3	13.5	13.6
	Max. 1-Hour Conc. (ppb)	55.4	56.0	66.4
6 T	Sulfur Dioxide (SO ₂) ^a :			
ays	California Standards:			
Õě	1-Hour – 0.25 ppm (250 ppb)	0	0	0
No	Federal Primary Standards:			
— ш	1-Hour – 0.075 ppm (75 ppb)	0	0	0
	Max. 1-Hour Conc. (ppb)	1.7	1.8	2.2
d s	Suspended Particulates (PM-10):			
ays	California Standards:			
D O	24-Hour - 50 μg/m ³	3	4	6
N NO	Federal Primary Standards:			
	24-Hour – 150 μg/m³	0	0	0
	Annual Arithmetic Mean (μg/m ³)	29.7	25.3	35.9
	Max. 24-Hour Conc. (μg/m³)	64	97	77
lys Jed	Fine Particulates (PM-2.5) a:			
Da	Federal Primary Standards:			
No.	24-Hour – 35µg/m ³	5	4	4
	Federal/State Annual Arithmetic Mean (12 µg/m ³)	12.48	11.13	12.63
	Max. 24-Hour Conc. (µg/m ³)	48.9	46.70	41.00

 Notes: -- indicates no data available; ppm = parts per million; ppb = parts per billion; μg/m³ = micrograms/cubic meter

 a Metro Riverside County 1 air monitoring station (SRA 23) data summaries used because this pollutant not monitored for SRA 24.

 Source: SCAQMD 2021a

Air Quality

Duke Warehouse at Patterson Avenue and Nance Street DEIR

Attainment Status

The EPA has established NAAQS for the six criteria pollutants described in **Table 5.2-C** to protect human health, with an adequate margin of safety. Likewise, the California EPA (Cal EPA) has developed statewide thresholds for each of the criteria pollutants. If the concentration of one or more criteria pollutants within a geographic area is found to exceed the established statewide or NAAQS threshold level for one of the criteria pollutants, the area is considered to be in nonattainment for that pollutant.

SRA 24 and the proposed Project site are located within a portion of the Basin that is designated as nonattainment for PM-10 by the state, as well as nonattainment for ozone and PM-2.5 under both the state and federal standards (see **Table 5.2-D– Attainment Status**). As a result, SCAQMD is required to develop an Air Quality Management Plan (AQMP) for the Basin to bring the area into attainment for all criteria pollutants.

Critoria Air Bollutant	Attainment Designation		
	State	Federal	
1-Hour Ozone	Nonattainment	Nonattainment (Extreme)	
8-Hour Ozone	Nonattainment	Nonattainment (Extreme)	
Carbon monoxide (1-Hour and 8-Hour)	Attainment	Attainment (Maintenance)	
Nitrogen dioxide	Attainment	Attainment (Maintenance)	
Sulfur dioxide	Attainment	Unclassifiable/Attainment	
PM-10	Nonattainment	Attainment (Maintenance)	
PM-2.5	Nonattainment	Nonattainment (Serious)	
Source: http://www.agmd.gov/doog/dofoult.gov/closp.gir.plang/gir.guality.management.plang/pagag.googg			

Table 5.2-D- Attainment Status

Source: <u>http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf?sfvrsn=2</u>

Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution, as identified by the SCAQMD, may include children, the elderly, and people with cardiovascular and chronic respiratory diseases. Sensitive receptors may include residences, schools, playgrounds, athletic facilities, childcare centers, long-term healthcare facilities, rehabilitation centers, convalescent centers, and retirement homes. (SCAQMD 2005) Sensitive receptors in the Project vicinity primarily include existing residences to the west and east of the Project site that are legal, non-conforming uses.

5.2.2 Related Regulations

The Federal and State Ambient Air Quality Standards (AAQS) establish the context for the local AQMP and for determination of the significance of a project's contribution to local or regional pollutant concentrations. Federal and State AAQS are presented in **Table 5.2-C**. The AAQS represent the level of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other diseases or illness, and persons engaged in strenuous work or exercise, all referred to as "sensitive receptors." SCAQMD defines a "sensitive receptor" as a land use or facility such as schools, childcare centers, athletic facilities, playgrounds, retirement homes, and convalescent homes (SCAQMD 1993).

Federal

Clean Air Act (CAA)

The EPA is the lead Federal Agency charged with the implementation and enforcement of the Clean Air Act (CAA). As part of this effort, the EPA is responsible for the establishment of national ambient air quality standards (referred to herein as the "Federal Standards" or NAAQS). They are designed to protect those 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.

The CAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The CAA Amendments dictate that states containing areas violating the NAAQS must revise their SIPs to include extra control measures to reduce air pollution. California's SIP includes strategies and control measures to attain the NAAQS by deadlines established by the CAA. The SIP is periodically modified to reflect the latest emissions inventories, plans and rules and regulations of the various agencies with jurisdiction over the state's air basins. The EPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA.

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

State Regulations

California Air Resources Board (CARB)

In addition to being subject to the requirements of CAA, air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA). CARB, which became part of the CalEPA in 1991, is responsible for administering the CCAA and establishing the California Ambient Air Quality Standards (CAAQS). The CCAA, as amended in 1992, requires all air districts in the state to achieve and maintain the CAAQS, which are generally more stringent than the federal standards and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles.

CARB has broad authority to regulate mobile air pollution sources, such as motor vehicles. It is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. CARB established passenger vehicle fuel specifications, which became effective in March 1996. CARB oversees the functions of local air pollution control districts and air quality management districts, which, in turn, administer air quality activities at the regional and county levels. The state standards are summarized in **Table 5.2-B**.

The CCAA requires CARB to designate areas within California as either attainment or non-attainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as non-attainment for a pollutant if air quality data shows that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a state standard and are

Air Quality

not used as a basis for designating areas as non-attainment. CAAQS attainment status is shown in **Table 5.2-D**.

California also regulates TACs through its air toxics program, mandated in Chapter 3.5 (Toxic Air Contaminants) of the Health and Safety Code (H&SC Sections 39660, et seq.) and Part 6 Air Toxics "Hot Spots" Information and Assessment (H&SC Sections 44300, et seq.). CARB, working in conjunction with the Office of Environmental Health Hazard Assessment (OEHHA), identifies toxic air contaminants. Air toxic control measures may then be adopted to reduce ambient concentrations of the identified toxic air contaminant below a specific threshold based on its effects on health, or to the lowest concentration achievable through use of best available control technology for toxics (T-BACT). The program is administered by the CARB. Air quality control agencies, including the SCAQMD, must incorporate air toxic control measures into their regulatory programs or adopt equally stringent control measures as rules within six months of adoption by the CARB. (SCAQMD 2005)

Diesel Risk Reduction Plan

In 1998, the CARB listed diesel particulate as a TAC. The CARB, a sub-agency of the CalEPA, took the lead on addressing diesel emissions in the State of California. The first step to significantly reduce diesel emissions occurred in September 2000 when the CARB approved the "Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles" or Diesel Risk Reduction Plan. The two main goals of the Diesel Risk Reduction Plan are: 1) to get new diesel fueled engines to use state-of-the-art emission controls as well as low-sulfur diesel fuel and, 2) for existing diesel engines to be retrofitted with emission control features. Effects of meeting these goals set by the CARB would be reducing the health effects experienced by Californians from diesel exhaust.

Under the CARB's Diesel Risk Reduction Program, mobile diesel emissions have their own set of reduction programs, as opposed to stationary diesel sources (generators) which are addressed separately under the Reduction Plan. One of the incentive programs for mobile diesel sources is the Carl Moyer Program which is a clean engine incentive program. This program provides money in the form of grants to cover the incremental portion of the cost to purchase cleaner burning engines or retrofitting existing ones.

Other programs include a program designed to develop and implement strategies to reduce emissions from new on-road heavy-duty diesel engines. The primary method of implementing this program will be through the development of emission control regulations and test procedures for those new engines. The California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Diesel Engines and Vehicles were amended on September 1, 2017 and reduce emission from new on-road heavy-duty diesel engines.

Strategies for reducing diesel emissions from existing on-road heavy duty engines are mainly implemented through three sections of this program: retrofit assessment, heavy-duty testing and field support, and retrofit implementation. CARB staff have developed a regulation to reduce diesel particulate matter and other emissions from existing on-road heavy-duty diesel powered vehicles operating in California. These regulations were adopted by the CARB in December 2008 and last amended in December 2014. By 2023, nearly all trucks and buses will need to have 2010 model year engines or equivalent.

Air Quality and Land Use Handbook

In addition to the above listed programs and regulations, the CARB's Air Quality and Land Use Handbook (CARB 2005) provides recommendations for siting new sensitive land uses. These recommendations include a 1,000-foot buffer between new sensitive land uses and 500-foot buffer from freeways or urban roads with 100,000 vehicles per day. The Handbook also recommends avoiding the placement of new sensitive land uses within 1,000 feet of a distribution center (accommodating more than 100 trucks per day, 40 trucks with transport refrigeration units (TRUs), or where TRUs operate more than 300 hours a week) and to take into account the configuration of existing distribution centers and avoid locating residences and other sensitive land uses near entry and exit points. These are recommendations, not mandates, and land use decisions ultimately lie with the local agency which needs to balance other considerations.

In April 2017, CARB published a technical advisory, Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways: Technical Advisory, to supplement CARB's Air Quality and Land Use Handbook: A Community Health Perspective (CARB 2017). This technical advisory is related to infill development but provides information on strategies to reduce exposures to traffic emissions near highvolume roadways to assist land use planning and decision-making in order to protect public health and promote equity and environmental justice. Key strategies include traffic management measures, site design features, and indoor high efficiency filtration.

California Energy Code (California Code of Regulations, Title 24)

Energy Conservation Standards for new residential and commercial buildings were originally adopted by the California Energy Resources Conservation and Development Commission in June 1977 (Title 24 California Code of Regulations (CCR) Part 6). In general, Title 24 requires the design of building shells and building components to conserve energy. The standards are updated periodically to allow for consideration and possible incorporation of new energy efficiency technologies and methods. The 2012 Appliance Efficiency Regulations (Title 20 CCR Sections 1601-1608) became effective in 2013. The regulations include standards for both federally-regulated appliances and non-federally regulated appliances.

The current 2019 Building Energy Efficiency Standards offer builders better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses. The 2019 Building Energy Efficiency Standards will reduce energy use by seven and 30 percent for residential and non-residential buildings, respectively (CEC 2019). In December 2021, the 2022 Building Energy Efficiency Standards was approved and encourages efficient electric heat pumps, establishes electric-ready requirements for new homes, expands solar photovoltaic and battery storage standards, strengthens ventilation standards, and more. The 2022 standards take effect January 1, 2023. (CEC 2021)

California Green Building Code

Part 11 of the California Building Standards Code in Title 24 of the California Code of Regulations is also known as the CALGreen Code. The development of the CALGreen Code is intended to: (1) cause a reduction in greenhouse gas emissions from buildings; (2) promote environmentally responsible, cost-effective, healthier places to live and work; (3) reduce energy and water consumption; and (4) respond to the directives by the Governor. The following sections of the CALGreen Code are applicable to this Project (CBSC):

- Bicycle parking. Comply with Sections 5.106.4.1 and 5.106.4.2; or meet local ordinance or the University of California Policy on Sustainable Practices, whichever is stricter.
 - 5.106.4.1 Short-term bicycle parking. If the project is anticipated to generate visitor 0 traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack.
 - 5.106.4.2 Long-term bicycle parking. For buildings with over 10 tenant-occupants, provide secure bicycle parking for 5 percent of motorized vehicle parking capacity, with a minimum of one space. Acceptable parking facilities shall be convenient from the street and may include: 1. Covered, lockable enclosures with permanently anchored racks for bicycles; 2. Lockable bicycle rooms with permanently anchored racks; and 3. Lockable, permanently anchored bicycle lockers. Note: Additional information on recommended bicycle accommodations may be obtained from Sacramento Area Bicycle Advocates.
- Designated parking for clean air vehicles. In new projects or additions or alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles. The Project will comply with section 5.106.5.2, Designated parking for clean air vehicles, by including clean air/ van pool stalls for the applicable amount of parking stalls provided for individual projects. (Chapter 5, Division 5.1, Section 106.5.2).
- Electric Vehicle (EV) Charging. Construction shall facilitate future installation and use of EV chargers. Electric vehicle supply equipment (EVSE) shall be installed in accordance with the California Electrical Code. The Project will comply with section 5.106.5.3.1 and Section 5.106.3.2
- **Multiple charging space requirements.** When multiple charging spaces are required per Table 5.106.5.3.3 of Cal Green (provided below as Table 5.2-E - CALGreen Code Electric Vehicle Charging Space Calculation) raceways are required to be installed at the time of construction and shall be installed in accordance with the California Electrical Code. Construction plans and specifications shall include, but are not limited to, the following (Section 5.106.5.3.2).:
 - 1. The type and location of the EVSE.
 - 2. The raceway(s) shall originate at a service panel or a subpanel(s) serving the area and shall terminate in close proximity to the proposed location of the charging equipment and into listed suitable cabinet(s), box(es), enclosure(s) or equivalent.
 - 3. Plan design shall be based upon 40-ampere minimum branch circuits.
 - 4. Electrical calculations shall substantiate the design of the electrical system, to include the rating of equipment and any on-site distribution transformers and have sufficient capacity to simultaneously charge all required electric vehicles (EVs) at its full rated amperage.
 - 5. The service panel or subpanel(s) shall have sufficient capacity to accommodate the required number of dedicated branch circuit(s) for the future installation of the EVSE.
- EV Charging space calculation. The CALGreen Code provides the number of parking spaces required for future installation of EVSEs, as reflected in Table 5.2-E, below. These future charging

spaces qualify as designated parking as described in Section 5.106.5.2 Designated parking for clean air vehicles.

Total Number of Actual Parking Spaces	Number of Required EV Charging Spaces
0-9	0
10-25	2
26-50	4
51-75	7
76-100	9
101-150	13

18

10 percent of total¹

Table 5.2-E - CALGreen Code Electric Vehicle Charging Space Calculation

Source: CBSC; Table 5.106.5.3.3 Notes:

^{1.} Calculation for spaces shall be rounded up to the nearest whole number

151-200

201 and over

• **Filters.** In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air that provides at least a Minimum Efficiency Reporting Value (MERV) of 8. Specified filters shall be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.

Regional

South Coast Air Quality Management District (SCAQMD)

The 1977 Lewis Air Quality Management Act merged four air pollution control districts to create the SCAQMD to coordinate air quality planning efforts throughout Southern California. It is responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain state and federal ambient air quality standards. Programs include air quality rules and regulations that regulate stationary sources, area sources, point sources, and certain mobile source emissions. The SCAQMD is also responsible for establishing stationary source permitting requirements and for ensuring that new, modified, or relocated stationary sources do not create net emission increases.

The SCAQMD monitors air quality over its jurisdiction of 10,743 square miles, including the Basin, which covers an area of 6,745 square miles and is bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino and San Jacinto Mountains to the north and east; and the San Diego County line to the south. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside (which includes the City of Perris), and San Bernardino counties. The SCAQMD also regulates the Riverside County portion of the Salton Sea Air Basin and Mojave Desert Air Basin. The SCAQMD has

developed a variety of plans and rules aiming to improve air quality within the Basin, as discussed below.¹

Air Quality Management Plan

All areas designated as non-attainment under the CCAA are required to prepare plans showing how they will meet the air quality standards. The SCAQMD prepares the Air Quality Management Plan (AQMP) to address CAA and CCAA requirements by identifying policies and control measures.

The SCAQMD updated its AQMP for the Basin in 2016, which included a new approach focusing on available, proven, and cost-effective alternatives to traditional strategies, while seeking to achieve multiple goals in partnership with other entities promoting reductions in greenhouse gases and toxic risk, as well as efficiencies in energy use, transportation, and goods movement. The most effective way to reduce air pollution impacts on the health of the nearly 17 million residents within the Basin, including those in disproportionally impacted and environmental justice communities that are concentrated along transportation corridors and goods movement facilities, is to reduce emissions from mobile sources, the principal contributor to air quality challenges within the Basin. For that reason, the SCAQMD has been and will continue to be closely engaged with CARB and the USEPA who have primary responsibility for these sources. The 2016 AQMP recognized the critical importance of working with other agencies to develop funding and other incentives that encourage the accelerated transition of vehicles, buildings, and industrial facilities to cleaner technologies in a manner that benefits not only air quality, but also local businesses and the regional economy. These "win-win" scenarios are key to implementation of the 2016 AQMP with broad support from a wide range of stakeholders. The 2016 AQMP includes integrated strategies and measures to meet the National Ambient Air Quality Standards (NAAQS). (SCAQMD 2016.)

The control measures and related emission reduction estimates included in the 2016 AQMP are based on emissions projections for a future development scenario derived from land use, population, and employment estimates defined in consultation with local governments. To do this, the AQMP utilizes the population and growth estimates compiled by the Southern California Association of Governments (SCAG) in their 2016 Regional Transportation Plan/Sustainable Community Strategy (2016 RTP/SCS), the most recent RTP/SCS at the time (SCAQMD 2016).

SCAG's population and employment projections are based on the City's growth projections provided by cities, including from cities' general plans (SCAG 2016). Thus, since the 2016 AQMP is consistent with the 2016 RTP/SCS, the 2016 AQMP is also consistent with the growth assumptions cities include in their general plans. The latest RTPS is the 2020-2045 Regional Transportation Plan/Sustainable Community Strategy known as SoCal Connect. (SCAG 2020.) Should a project demonstrate compliance with local land use plans and/or population projections, then the AQMP would have taken into account such uses when it was developed and the project would not conflict with implementation of such a plan.

Rule 220

SCAQMD Rule 220 gives the Executive Officer the power to exempt a source from prohibitions outlined in SCAQMD Regulations IV and XI, Prohibitions and Source Specific Standards respectively, if they can make the finding that the installation of controls and/or process changes required to achieve compliance with the subject prohibitory rule will result in a net adverse impact on air quality. One of the conditions of

¹ SCAQMD Rulebook can be accessed at: <u>http://www.aqmd.gov/home/regulations/rules/scaqmd-rule-book</u>.

the permits on exemptions issued under Rule 220 is that alternative controls and/or process changes which will result in the greatest practical net emission reduction be included for project operation.

Rule 402

SCAQMD Rule 402 (Nuisance) prohibits the discharge of air contaminants in such quantities that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, but does not apply to odors emanating from agricultural operations necessary for growing of crops or the raising of fowl or animals.

Rule 403

The Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. The potential requirements include the application of water or chemical stabilizers to disturbed soils at least twice a day, covering all haul vehicles before transport of materials, restricting vehicle speeds on unpaved roads to 15 mph, and sweeping loose dirt from paved site access roadways used by construction vehicles. In addition, it is required to establish a vegetative ground cover on disturbance areas that are inactive within 30 days after active operations have ceased. Alternatively, an application of dust suppressants can be applied in sufficient quantity and frequency to maintain a stable surface. Rule 403 also requires grading and excavation activities to cease when winds exceed 25 mph.

Rule 481

SCAQMD Rule 481 applies to all spray painting and spray coating operations and equipment and requires all spray coating equipment to be (1) operated inside an approved control enclosure, (2) applied using high velocity-low pressure (HVLP), electrostatic and/or airless spray equipment, or (3) applied using an alternative method which has an equal effectiveness to either of the two approved methods.

Rule 1108

SCAQMD Rule 1108 applies to cutback and emulsified asphalt used at project sites.

Rule 1143

SCAQMD Rule 1143 aims to reduce emissions of VOCs from the use, storage, and disposal of consumer paint thinners and multi-purpose solvents commonly used in thinning of coating materials, cleaning of coating application equipment and other solvent cleaning operations by limiting their VOC content. Additionally, Rule 1143 requires several best management practices to reduce VOCs during use and application of paint thinners and other solvents. For example, this Rule requires containers to be closed when not in use. This Rule also establishes requirements for appropriate labelling and disclosure of contents for containers and storage areas of these corrosive, flammable substances.

Rule 1186

SCAQMD Rule 1186 is intended to reduce the amount of particulate matter entrained in the ambient air as a result of vehicular traffic on paved and unpaved public roads, and at livestock operations. This includes requirements for local governments that contract for street sweeping services to utilize only certified street sweeping equipment.

Air Quality

Rule 1113

SCAQMD Rule 1113 governs the sale of architectural coatings and limits the volatile organic content (VOC) content in paints and paint solvents. This rule will dictate the VOC content of paints available for use during the construction of the buildings.

Rule 1303

SCAQMD Rule 1303 prohibits issuance of permits for any relocation or for any new or modified source which results in an emission increase of any nonattainment air contaminant, any ozone depleting compound, or ammonia unless a best available control technology (BACT) is employed for the new or relocated source as specified by the Clean Air Act or other regulations.

Rule 2305

SCAQMD Rule 2305, the Warehouse Indirect Source Rule, requires the owners and operators of warehouses greater than 100,000 square feet to directly reduce NO_x and particulate matter emissions, or to otherwise facilitate emission and exposure reductions of these pollutants in nearby communities. The warehouse rule is a menu-based points system requiring warehouse operators to annually earn a specified number of points. These points can be earned by completing actions from a menu that can include acquiring and using natural gas, Near-Zero Emissions and/or Zero-Emissions on-road trucks, zero-emission cargo handling equipment, solar panels or zero-emission charging and fueling infrastructure, or other options. The SCAQMD expects this rule to reduce emissions from warehouse uses by 10-15 percent. When developed, the proposed warehouse would be subject to this rule, thus further reducing the emissions of the proposed Project.

Other Regulations

Also, some statewide regulations proposed to reduce one form of pollutant have the added benefit of reducing other forms of pollution. For example, when CARB approved the Heavy-Duty Vehicle Greenhouse Gas Reduction Measure in 2008 and the most recent amendments in December 2014 to reduce greenhouse gas emissions from heavy-duty trucks, it also reduces NO_X emissions. This measure requires a compliance schedule for trucks to be certified under the USEPA SmartWay Program, which reduces fuel consumption by improving fuel efficiency through improvements to tractor and trailer aerodynamics and low-rolling resistance tires.

On February 1, 2005, a requirement limiting the idling of diesel-fueled commercial vehicles to five minutes at any location pursuant to Section 2485 of Chapter 10 within Title 13 of CCR was adopted. Similarly, Section 2449 prohibits construction equipment and truck idling times shall be prohibited in excess of five minutes on site.

Off-road diesel vehicles are also regulated under CARB for both in-use (existing) and new engines. Offroad diesel vehicles include construction equipment. There have been four sets of off-road standards implemented by CARB, known as Tiers. Tier 1 standards began in 1996. Tier 2 and 3 were adopted in 2000 and were more stringent than the first tier. Tier 2 and 3 standards were completely phased in by 2006 and 2008, respectively. In December 2004, CARB adopted the Tier 4 or fourth phase of emission standards for late model year engines. These emission standards are nearly identical to those finalized by the USEPA in May 2004. These standards, which commenced in 2011, are estimated to decrease PM and NO_x emissions by 90 percent below pre-2011 levels.

Since most off-road vehicles today have no emission controls and can last 30 years or longer, CARB approved a regulation in 2007 to reduce emissions from existing off-road diesel vehicles used in

construction and other industries. This regulation establishes emission rates targets that decline over time to accelerate turnover to newer, cleaner engines and require exhaust retrofits to meet these targets. The regulation took effect on the larger fleets first, with average compliance dates in 2010, while medium and small fleet requirements achieved compliance in 2013 and 2015, respectively. This regulation also includes the Surplus Off-Road Opt-in for NO_x (SOON) program. The local air districts may opt into the SOON program to reduce NO_x emissions beyond what is required by the regulation. Staff at the SCAQMD proposed Rule 2449 which would implement the SOON program. This rule was adopted by the SCAQMD in 2008. Opting into this program was anticipated to achieve a 12 ton per day reduction in NO_x by 2014.

Local Regulations

Perris Comprehensive General Plan 2030

The following are applicable goals, measures and policies from the Perris Comprehensive General Plan 2030 (Perris GP 2030) related to a sustainable community and by extension to air quality:

Conservation Element

Goal VIII	Create a vision for energy and resource conservation and the use of green building design for the City, to protect the environment, improve quality of life, and promote sustainable practices.
Policy VIII.A	Adopt and maintain development regulations that encourage water and resource conservation.
Measure VIII.A.2	Use indigenous and/or drought-resistant planting and efficient irrigation systems with smart controls in all new refurbished commercial and industrial development projects. Also, restrict use of turf to 25 percent or less of the landscaped areas.
Measure VIII.A.4	Use gray water, and water conserving appliances and fixtures within all new commercial and industrial developments.
Measure VIII.A.5	Use permeable paving materials within developments to deter water runoff and promote natural filtering of precipitation and irrigation waters.
Measure VIII.A.7	Create and maintain reclaimed water systems to provide reclaimed water for irrigation of municipal and commercial landscaping.
Measure VIII.A.8	Explore the use of private water well systems for all potable and/or landscaping water use for larger commercial and industrial projects.
Policy VIII.B	Adopt and maintain development regulations that encourage recycling and reduced waste generation by construction projects.
Measure VIII.B.1	Initiate and maintain incentive programs to encourage and reward developments that employ energy and resource conservation and green building practices similar to the City's current recycling program.
Measure VIII.B.3	Require the installation of recycling bins and provide space for storage and collection of recyclables within development sites.
Goal IX	Encourage project designs that support the use of alternative transportation facilities.

Section 5.2	City of Perris
Air Quality	Duke Warehouse at Patterson Avenue and Nance Street DEIR
Policy IX.A	Encourage land uses and new development that support alternatives to the single occupant vehicle.
Measure IX.A.1	Encourage installation of shared vehicle parking and support facilities within new and refurbished commercial and industrial developments, i.e., dual fuel vehicles and charging systems on-site, carpool parking, and bus stop shelters.
Measure IX.A.2	Install bicycle paths and create secure and accessible bicycle storage for visitors and occupants within new and refurbished commercial and industrial developments.
Measure IX.A.4	Encourage building and site designs that facilitate pedestrian activity, such as locating buildings close to the street and providing direct connections to public walkways and neighboring land uses.
Measure IX.A.5	The City shall require all new public and private development to include bike and walking paths wherever feasible.
Goal X	Encourage improved energy performance standards above and beyond the California Title 24 requirements.
Policy X.A	Establish density bonuses, expedited permitting, and possible tax deduction incentives to be made available for developers who exceed current Title 24 requirements for new development.
Policy X.B	Encourage the use of trees within project design to lessen energy needs, reduce the urban heat island effect, and improve air quality throughout the region.
Policy X.C	Encourage strategic shape and placement of new structures within new commercial and industrial projects.
Measure X.C.1	Promote energy conservation by taking advantage of natural site features such as natural lighting and ventilation, sunlight, shade and topography during the site plan process.
Measure X.C.2	When possible, locate driveways and parking on the east and north sides of buildings to reduce heat buildup during hot afternoons.
Healthy Communi	ty Element
Goal HC-2	Community Design – Facilitate local efforts to improve the opportunities and choices for a healthy and active lifestyle.
Policy HC 2.6	Encourage land use and urban design to promote physical activity, provide access to nutritious foods, and reduce air pollution.
Goal HC-6	Healthy Environment – Support efforts of local businesses and regional agencies to improve the health of our region's environment.
Policy HC 6.1	Support regional efforts to improve air quality through energy efficient technology, use of alternative fuels, and land use and transportation planning.
Policy HC 6.2	Support regional water quality efforts that balance water conservation, use of recycled water, and best practices in watershed management.
Policy HC 6.3	Promote measures that will be effective in reducing emissions during construction activities.

- Perris will ensure that construction activities follow existing South Coast Air Quality Management District (SCAQMD) rules and regulations
- All construction equipment for public and private projects will also comply with California Air Resources Board's vehicle standards. For projects that may exceed daily construction emissions established by the SCAQMD, Best Available Control Measures will be incorporated to reduce construction emissions to below daily emission standards established by the SCAQMD
- Project proponents will be required to prepare and implement a Construction Management Plan which will include Best Available Control Measures among others. Appropriate control measures will be determined on a project by project basis, and should be specific to the pollutant for which the daily threshold is exceeded.

Perris Municipal Code

The Perris Municipal Code does not contain provisions relevant to air quality.

PVCCSP Standards and Guidelines and Mitigation Measures

There are no specific standards or guidelines related to air quality identified within the PVCCSP. However, the PVCCSP EIR includes various mitigation measures to ensure that Projects located within the PVCCSP planning area identify air quality impacts from construction and operation and mitigate any potential impacts appropriately. Project-specific and relevant mitigation measures from the PVCCSP EIR which address both potential regional and local air quality impacts are included under Section 5.2.5.

By preparing this analysis, the Project has complied with the following applicable PVCCSP EIR mitigation measures:

- **MM Air 1:** To identify potential implementing development project-specific impacts resulting from construction activities, proposed development projects that are subject to CEQA shall have construction-related air quality impacts analyzed using the latest available URBEMIS model, or other analytical method determined in conjunction with the SCAQMD. The results of the construction-related air quality impacts analysis shall be included in the development project's CEQA documentation. To address potential localized impacts, the air quality analysis may incorporate SCAQMD's Localized Significance Threshold analysis or other appropriate analyses as determined in conjunction with SCAQMD. If such analyses identify potentially significant regional or local air quality impacts, the City shall require the incorporation of appropriate mitigation to reduce such impacts.
- **MM Air 10**: To identify potential implementing development project-specific impacts resulting from operational activities, proposed development projects that are subject to CEQA shall have long-term operational-related air quality impacts analyzed using the latest available URBEMIS model, or other analytical method determined by the City of Perris as lead agency in conjunction with the SCAQMD. The results of the operational-related air quality impacts analysis shall be included in the development project's CEQA documentation. To address potential localized impacts, the air quality analysis may incorporate SCAQMD's Localized Significance Threshold analysis, CO Hot Spot

Section 5.2	City of Perris
Air Quality	Duke Warehouse at Patterson Avenue and Nance Street DEIR
	analysis, or other appropriate analyses as determined by the City of Perris in conjunction with SCAQMD. If such analyses identify potentially significant regional or local air quality impacts, the City shall require the incorporation of appropriate mitigation to reduce such impacts.
MM Air 15:	To identify potential implementing development project-specific impacts resulting from the use of diesel trucks, proposed implementing development projects that include an excess of 10 dock doors for a single building, a minimum of 100 truck trips per day, 40 truck trips with TRUs per day, or TRU operations exceeding 300 hours per week, and that are subject to CEQA and are located adjacent to sensitive land uses; shall have a facility-specific Health Risk Assessment performed to assess the diesel particulate matter impacts from mobile-source traffic generated by that implementing development project. The results of the Health Risk Assessment shall be included in the CEQA documentation for each implementing development project.
MM Air 18:	Prior to the approval of each implementing development project, the Riverside Transit Agency (RTA) shall be contacted to determine if the RTA has plans for the future provision of bus routing within any street that is adjacent to the implementing development project that would require bus stops at the project access points. If the RTA has future plans for the establishment of a bus route that will serve the implementing development project, road improvements adjacent to the project site shall be designed to accommodate future bus turnouts at locations established through consultation with the RTA. RTA shall be responsible for the construction and maintenance of the bus stop facilities. The area set aside for bus turnouts shall conform to RTA design standards, including the design of the contact between sidewalks and curb and gutter at bus stops and the use of ADA-compliant paths to the major building entrances in the project.
Coordination In an email da	with RTA as required by PVCCSP EIR mitigation measure MM Air 18 has been completed. ted February 1, 2022, the RTA indicated that no bus stop is required at the Project site.
The PVCCSP construction a	EIR included the following mitigation measures to be implemented to reduce emissions for activities at development sites within the PVCCSP planning area:

- **MM Air 2:** Each individual implementing development project shall submit a traffic control plan prior to the issuance of a grading permit. The traffic control plan shall describe in detail safe detours and provide temporary traffic control during construction activities for that project. To reduce traffic congestion, the plan shall include, as necessary, appropriate, and practicable, the following: temporary traffic controls such as a flag person during all phases of construction to maintain smooth traffic flow, dedicated turn lanes for movement of construction trucks and equipment on- and off-site, scheduling of construction activities that affect traffic flow on the arterial system to off-peak hour, consolidating truck deliveries, rerouting of construction to improve traffic flow.
- **MM Air 3**: To reduce fugitive dust emissions, the development of each individual implementing development project shall comply with SCAQMD Rule 403. The developer of each implementing project shall provide the City of Perris with the SCAQMD-approved dust control plan, or other sufficient proof of compliance with Rule 403, prior to grading permit issuance. Dust control measures shall include, but are not limited to:

- requiring the application of non-toxic soil stabilizers according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for 20 days or more, assuming no rain),
- keeping disturbed/loose soil moist at all times,
- requiring trucks entering or leaving the site hauling dirt, sand, or soil, or other loose materials on public roads to be covered,
- installation of wheel washers or gravel construction entrances where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip,
- posting and enforcement of traffic speed limits of 15 miles per hour or less on all unpaved potions of the project site,
- suspending all excavating and grading operations when wind gusts (as instantaneous gust) exceed 25 miles per hour,
- appointment of a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM-10 generation,
- sweeping streets at the end of the day if visible soil material is carried onto adjacent paved public roads and use of SCAQMD Rule 1186 and 1186.1 certified street sweepers or roadway washing trucks when sweeping streets to remove visible soil materials,
- replacement of ground cover in disturbed areas as quickly as possible.
- **MM Air 4**: Building and grading permits shall include a restriction that limits idling of construction equipment on site to no more than five minutes.
- **MM Air 5**: Electricity from power poles shall be used instead of temporary diesel or gasolinepowered generators to reduce the associated emissions. Approval will be required by the City of Perris' Building Division prior to issuance of grading permits.
- **MM Air 6**: The developer of each implementing development project shall require, by contract specifications, the use of alternative fueled off-road construction equipment, the use of construction equipment that demonstrates early compliance with off-road equipment with the CARB in-use off-road diesel vehicle regulation (SCAQMD Rule 2449) and/or meets or exceeds Tier 3 standards with available CARB verified or US EPA certified technologies. Diesel equipment shall use water emulsified diesel fuel such as PuriNOx unless it is unavailable in Riverside County at the time of project construction activities. Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Perris' Building Division prior to issuance of a grading permit.
- **MM Air 7:** During construction, ozone precursor emissions from mobile construction equipment shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Perris' Building Division. Equipment maintenance records and equipment design specification data

Section 5.2	City of Perris
Air Quality	Duke Warehouse at Patterson Avenue and Nance Street DEIR
	sheets shall be kept on-site during construction. Compliance with this measure shall be subject to periodic inspections by the City of Perris' Building Division.
MM Air 8:	Each individual implementing development project shall apply paints using either high volume low pressure (HVLP) spray equipment with a minimum transfer efficiency of at least 50 percent or other application techniques with equivalent or higher transfer efficiency.
MM Air 9:	To reduce VOC emissions associated with architectural coating, the project designer and contractor shall reduce the use of paints and solvents by utilizing pre-coated materials (e.g. bathroom stall dividers, metal awnings), materials that do not require painting, and require coatings and solvents with a VOC content lower than required under Rule 1113 to be utilized. The construction contractor shall be required to utilize "Super-Compliant" VOC paints, which are defined in SCAQMD's Rule 1113. Construction specifications shall be included in building specifications that assure these requirements are implemented. The specifications for each implementing development project shall be reviewed by the City of Perris' Building Division for compliance with this mitigation measure prior to issuance of a building permit for that project.
The PVCCSP operation by I	EIR included the following mitigation measures in order to reduce emissions from project new implementing development projects within the PVCCSP planning area:
MM Air 11:	Signage shall be posted at loading docks and all entrances to loading areas prohibiting

- all on-site truck idling in excess of five minutes.
- **MM Air 12**: Where transport refrigeration units (TRUs) are in use, electrical hookups will be installed at all loading and unloading stalls in order to allow TRUs with electric standby capabilities to use them.
- **MM Air 13**: In order to promote alternative fuels, and help support "clean" truck fleets, the developer/successor-in-interest shall provide building occupants and businesses with information related to SCAQMD's Carl Moyer Program, or other state programs that restrict operations to "clean" trucks, such as 2007 or newer model year or 2010 compliant vehicles and information including, but not limited to, the health effect of diesel particulates, benefits of reduced idling time, CARB regulations, and importance of not parking in residential areas. If trucks older than 2007 model year would be used at a facility with three or more dock-high doors, the developer/successor-in-interest shall require, within one year of signing a lease, future tenants to apply in good-faith for funding for diesel truck replacement/retrofit through grant programs such as the Carl Moyer, Prop 1B, VIP [On-road Heavy Duty Voucher Incentive Program], HVIP [Hybrid and Zero- Emission Truck and Bus Voucher Incentive Project], and SOON [Surplus Off-Road Opt-in for NOx] funding programs, as identified on SCAQMD's website (http://www.aqmd.gov). Tenants would be required to use those funds, if awarded.
- **MM Air 14**: Each implementing development project shall designate parking spaces for highoccupancy vehicles and provide larger parking spaces to accommodate vans used for ride sharing. Proof of compliance would be required prior to the issuance of occupancy permits.
- **MM Air 19**: In order to reduce energy consumption from the individual implementing development projects, applicable plans (e.g., electrical plans, improvement maps) submitted to the City shall include the installation of energy-efficient street lighting throughout the Project
site. These plans shall be reviewed and approved by the applicable City Department (e.g., City of Perris' Building Division) prior to conveyance of applicable streets.

MM Air 20: Each implementing development project shall be encouraged to implement, at a minimum, an increase in each building's energy efficiency 15 percent beyond Title 24, and reduce indoor water use by 25 percent. All reductions will be documented through a checklist to be submitted prior to issuance of building permits for the implementing development project with building plans and calculations.

5.2.3 Design Considerations

Design considerations refer to ways in which the proposed Project will reduce potential impacts to air quality. The PVCCSP includes Standards and Guidelines relevant to the analysis of air quality impacts which are summarized below and are incorporated as part of the proposed Project; as such, they are assumed in the analysis presented in this section.

The Project will meet or exceed all applicable standards under California's Green Building Code (CalGreen) and Title 24. The Project shall implement concepts of efficient design and material use that are consistent with LEED Certification Levels. The Project Applicant has committed to achieve LEED "Certified" status for the building.

Energy Efficiency

- Design building shells and components, such as windows, roof systems and electrical systems to meet California Title 24 Standards for nonresidential buildings.
- Design buildings to achieve U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) features for potential certification. This includes design considerations related to the building envelope, heating, ventilation, and air conditioning (HVAC), lighting, and power systems. Additionally, the architectural expression such as roofs and windows in the buildings will relate to conserving energy.
- Install energy efficient light-emitting diodes (LED) lighting on the site. Provide skylights for natural day light to reduce the lighting load, therefore saving energy. Lighting will incorporate motion sensors that turn them off when not in use.
- Meet City minimum landscape requirements and provide adequate landscape shade for the site to reduce energy use.
- Install light-colored roofing materials over office area spaces and light-colored paving materials.
- For future office space, install energy efficient HVAC systems (seasonal energy efficiency ratio (SEER) 13), appliances and equipment, and control systems that are Energy Star rated.
- For future office improvement, refrigerants and HVAC equipment will be selected to minimize or eliminate the emission of compounds that contribute to ozone depletion and global climate change. Ventilation and HVAC systems will be designed to meet or exceed the minimum outdoor air ventilation rates described in the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) standards and/or per California Title 24 requirements.

- For future office improvement, implement design features to increase the efficiency of the building envelope (i.e., the barrier between conditioned and unconditioned spaces). This includes providing R-19 roof insulation for conditioned space and R-22 between conditioned and unconditioned space to minimize heat transfer and minimize energy consumption.
- Provide greatly enhanced window glazing insulation for exterior walls at conditioned spaces (0.28 or less U-factor).
- Incorporate Energy Star rated space heating and cooling equipment, light fixtures, appliances, or other applicable electrical equipment.

Water Conservation and Efficiency

- Recycled water shall be used for landscape irrigation.
- Surface parking lots will be landscaped in accordance with City standards to reduce heat island effect.
- Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and sensors for landscaping according to the California Department of Water Resources Model Efficient Landscape Ordinance and Chapter 19.70 (Landscaping) of the Perris Municipal Code.
- Design buildings to be water-efficient. Install water-efficient fixtures in accordance with Section 5.303 of the California Green Building Standards Code Part 11.
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff in accordance with City Standards.
- Provide education about water conservation and available programs and incentives to the building operators to distribute to employees.

Solid Waste Measures

- Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1 of the California Green Building Standards Code Part 11.
- Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance with Section 5.410.1 of the California Green Building Standards Code Part 11.
- The property operator will provide readily available information provided by the City for employee education about reducing waste and available recycling services.

Transportation and Motor Vehicles

- The Project site will include preferred parking locations for clean air/vanpool vehicles in accordance with Section 5.106.5.2, Designated parking for clean air vehicles, of the California Green Building Standards Code Part 11.
- Limit idling time for commercial vehicles to no more than five minutes per Title 13 of the California Code of Regulations, Section 2485.

- Provide at least six percent of the total parking spaces to facilitate future installation of electric vehicle supply equipment in accordance with Section 5.106.5.3.2, Multiple Charging Space Requirements, of the California Green Building Standards Code Part 11.
- Provide up to two electric vehicle charging facilities to encourage the use of low or zeroemission vehicles.
- Signage shall be posted on-site directing truck drivers to use existing City truck routes on Harley Knox Boulevard.
- Maintain existing Class II bike lane on Patterson Avenue.
- Provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience in compliance with Section 5.106.4 of the California Green Building Standards Code Part 11 and standard City code requirements.

On-Site Equipment and Loading Docks

- The Project owner will inform building operators of existing requirements to turn off equipment, including heavy-duty equipment, motor vehicles, and portable equipment, when not in use for more than 5 minutes. Truck idling shall not exceed 5 minutes in time. All facilities will post signs (both interior- and exterior-facing signs, including signs directed at all dock and delivery areas) requiring that trucks shall not be left idling for more than 5 minutes pursuant to Title 13 of the California Code of Regulations, Section 2485, which limits idle times to not more than five minutes and to report violations to California Air Resources Board, the South Coast Air Quality Management District, and the building manager.
- Service equipment (i.e., yard trucks and forklifts) used within the site shall be electric or powered by other alternative fuels.

Construction

- Require Construction Equipment to Turn Off When Not in Use per Title 13 of the California Code of Regulations, Section 2449.
- Use regionally produced and/or manufactured building materials, where feasible, for Project construction.
- Use "green" building materials where feasible, such as those materials that are resource efficient and recycled and manufactured in an environmentally friendly way.

5.2.4 Thresholds of Significance

The City of Perris has not established local CEQA significance thresholds and defers to the thresholds of significance identified in State CEQA Guidelines Appendix G and the thresholds of significance established by the SCAQMD. Impacts related to this Project may be considered potentially significant if the proposed Project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; and
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

5.2.5 Environmental Impacts before Mitigation

Threshold A: Would the Project conflict with or obstructing of implementation of the applicable air quality plan?

The AQMP for the Basin sets forth a comprehensive program designed to bring the Basin into compliance with all federal and state air quality standards. The control measures and related emission reduction estimates included in the AQMP are based on emissions projections for a future development scenario derived from land use, population, and employment estimates defined in consultation with local governments. To do this, the AQMP utilizes the population and growth estimates compiled by SCAG in their 2016 RTP/SCS (SCAQMD 2016). As stated previously, SCAG's population and employment projections for the City are based on the City's growth projections (SCAG RTP/SCS 2016), which are outlined in the Perris GP 2030. Thus, since the 2016 AQMP is consistent with the 2016 RTP/SCS, the 2016 AQMP is also consistent with the growth assumptions in the Perris GP 2030. Accordingly, if a project demonstrates compliance with local land use plans and/or population projections, then the AQMP would have taken into account such uses when it was developed and the project would not conflict with implementation of such a plan.

The Project site is located within the PVCCSP planning area. The portion of the Project site located north of Nance Street has a PVCCSP land use designation of General Industrial (GI) and the southern portion of the Project site has a PVCCSP land use designation of Light Industrial (LI). The Project Applicant proposes a high-cube, non-refrigerated warehouse/distribution center, a permitted use under both the GI and LI PVCCSP land use designations. Therefore, this land use and associated air quality emissions would have been accounted for in the SCAQMD's 2016 AQMP

The Perris GP 2030 EIR also considered urbanization of land, in general, will have a growth inducing impact and found that development consistent with the Perris GP 2030 reflects the logical, geographic expansion of development within western Riverside County. Thus, the Project is substantially similar to other development within the PVCCSP area in the Project vicinity and is not inconsistent with the land uses assumed in their growth forecasts.

Consistency with the 2016 AQMP is also a function of consistency with applicable AQMP control measures. The AQMP includes specific control measures to reduce air pollutant emissions in order to

Air Quality

meet federal and state air quality standards. The control measures contained within the 2016 AQMP will still apply to new development, and through this compliance, the future development on the Project parcels will not obstruct implementation of the 2016 AQMP. Such control measures include, for example, further VOC reductions from architectural coatings, and reductions from commercial space heating. Moreover, the mobile source control measures in the 2016 AQMP were based on a variety of control technologies that focus on accelerated retrofits or replacement of existing vehicles or equipment, acceleration of vehicle turnover through voluntary vehicle retirement programs, and greater use of cleaner fuels. The measures also encourage greater deployment of zero-emission vehicle and equipment technologies such as plug-in hybrids, battery-electric, and fuel cells. (SCAQMD 2016). The control measures are implemented by applicable agencies and the development that will result from the proposed Project will be subject to all applicable measures.

Therefore, because the proposed Project is compliant with local and use plans and growth projections, the proposed Project would not conflict with or obstruct implementation of the AQMP. The impact would be **less than significant and no mitigation is required**.

Threshold B: Would the Project 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?

As previously shown in **Table 5.2-D**, the portion of the Basin within which the Project site is located is designated as a non-attainment area for PM-10 under State standards and for ozone and PM-2.5 under both State and Federal standards. Ozone is not directly emitted into the atmosphere; rather, it forms via a reaction of VOC and NO_x in the atmosphere. Therefore, in evaluating this threshold it is also important to consider these emissions and their potential to contribute to ozone pollution in the region even if the region is not in non-attainment for these constituent pollutants.

The SCAQMD considers the thresholds for project-specific impacts and cumulative impacts to be the same. Therefore, projects that exceed project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. (SCAQMD 2003b) Based on the SCAQMD's regulatory jurisdiction over regional air quality, it is reasonable to rely on its thresholds to determine whether there is a cumulative air quality impact.

Air quality impacts can be divided into short-term and long-term impacts. Short-term impacts are usually related to construction and grading activities. Long-term impacts are usually associated with build-out conditions and long-term operations of a project. Both short-term and long-term air quality impacts can be analyzed on a regional and localized level. Regional air quality thresholds examine the effect of project emissions on the air quality of the Basin, while localized air quality impacts examine the effect of project emissions on the neighborhood around the Project site. The following information was derived from the AQ Study which is found in Appendix B.1 of this DEIR.

The construction and operation analysis was performed using CalEEMod[™] (California Emissions Estimation Model, Version 2020.4.0), the official statewide land use computer model designed to provide a uniform platform for estimating potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations of land use projects under CEQA. The model quantifies direct emissions from construction and operations (including vehicle use), as well as indirect emissions, such as emissions from energy use. The mobile source emission factors used in the model, EMFAC2017, includes the Pavley standards and Low Carbon Fuel standards into the mobile source

emission factors. The model also identifies Project design features, regulatory measures, and mitigation measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from the selected measures.

SCAQMD's Regional Significance Threshold (RST) Analysis

The thresholds shown in **Table 5.2-F-SCAQMD CEQA Regional Significance Thresholds** below are from the SCAQMD's CEQA Handbook and are the standard regional thresholds for determining significance under CEQA sanctioned by the SCAQMD. These regional significance thresholds were developed by the SCAQMD based on the estimated daily emissions of a major stationary source.

Emission Threshold	Units	VOC	NO _x	СО	SOx	PM-10	PM-2.5
Construction	lbs/day	75	100	550	150	150	55
Operations	lbs/day	55	55	550	150	150	55

Table 5.2-F-SCAQMD CEQA Regional Significance Thresholds

Short-Term Impacts – RST Analysis

Short-term emissions associated with construction of the Project will consist of fugitive dust and other particulate matter, as well as exhaust emissions generated by construction-related vehicles. Short-term impacts will also include emissions generated during construction as a result of operation of personal vehicles by construction workers, asphalt degassing and architectural coating (painting) operations.

Project-related short-term emissions were evaluated using the CalEEMod version 2020.4.0 computer program. The model evaluated emissions resulting from grading, building construction, paving, and architectural coating. The total construction period is expected to require approximately eleven months beginning no earlier than September 2022. The default parameters within CalEEMod were used and these default values reflect a worst-case scenario, which means that Project emissions are expected to be equal to or less than the estimated construction emissions. In addition to the default values used, the following assumptions relevant to construction were used to model short-term construction emissions:

- To evaluate Project compliance with SCAQMD Rule 403 for fugitive dust control, the Project will utilize the mitigation option of watering the Project site three times daily which achieves a control efficiency of 61 percent for PM-10 and PM-2.5 emissions. Two (2) one-way vendor trips were specifically included during grading and paving activities to account for water truck trips.
- Vendor trips from concrete trucks utilized during building construction were based on CalEEMod defaults.
- The VOC content of interior and exterior architectural coatings were changed to 50 grams per liter, pursuant to SCAQMD Rule 1113.
- The Project site earthwork quantities will balance; no soil import or export is required.
- Off-site infrastructure improvements will also be required for recycled water, sewer and storm
 drain connections as well as roadway improvements to Patterson Avenue and Nevada Avenue
 along the Project frontage that include parkway landscaping and sidewalks. Additionally,
 portions of Patterson Avenue and Nevada Avenue are assumed to be paved or re-paved. The
 underground facilities are assumed to be within the footprint of the roadway improvements. At
 the time the modeling was prepared, the off-site improvements were assumed to disturb
 approximately 3.58 acres total. However, the current off-site improvements to be constructed by

Air Quality

the Project Applicant reflect a total disturbance area of 3.53 acres, which is slightly lower and therefore provides a slightly more conservative analysis.²

The construction equipment estimated to be used for each activity is identified in the AQ Study. **Table 5.2-G – Estimated Daily Construction Emissions** summarizes the estimated construction emissions.

	Peak Daily Emissions (lb/day)					
Activity	VOC	NOx	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Thresholds	75	100	550	150	150	55
Grading-2022	8.65	92.69	68.72	0.16	10.21	5.23
Building Construction-2022	5.12	31.24	50.33	0.15	10.95	3.67
Building Construction-2023	4.63	26.90	47.52	0.15	10.74	3.48
Paving-2023	89.88	2.07	7.68	0.02	1.71	0.53
Architectural Coatings-2023	1.48	10.30	15.16	0.02	0.69	0.52
Maximum ^a	95.99	92.69	70.36	0.19	13.14	5.23
Exceeds Threshold?	Yes	No	No	No	No	No

Table 5.2-G – Estimated Daily Construction Emissions

Source: AQ Study, Table 2.

Notes: ^a Maximum emissions are the greater of either grading or building construction alone in 2022, or the sum of building construction, paving and architectural coating in 2023 since these activities overlap. Maximum emissions are shown in bold. Numbers may not match due to rounding within the model.

Evaluation of **Table 5.2-G** indicates that criteria pollutant emissions from construction activities will not exceed any of the SCAQMD regional daily thresholds during Project construction, except for the SCAQMD regional daily threshold for VOC resulting from architectural coatings (painting). Implementation of PVCCSP EIR mitigation measure **MM Air 9** will reduce VOC emissions associated with architectural coating. Please see the discussion under the headings *RST Analysis Conclusion*, below and **Table 5.2-M** – **Mitigated Estimated Daily Construction Emissions**, for impacts after implementation of mitigation.

Long-Term Impacts – RST Analysis

Long-term emissions are evaluated for Project buildout. The Project is assumed to be operational in 2023. Mobile emissions refer to on-road motor vehicle emissions at Project buildout, which include passenger vehicles and delivery trucks. These emissions are estimated by using the trip generation rates provided in the *Patterson-Nance Warehouse Project Traffic Impact Analysis (DPR 21-00005).* (Appendix K.2). Additionally, an average truck trip length of approximately 40 miles was assumed, which is recommended by the City and based on SCAQMD's *Final Staff Report for Proposed Rule 2305 and Rule 316.*³. On-site service equipment (i.e., forklifts and yard trucks) are assumed to be electric and therefore

² The 3.53 acres of off-site improvements footprint includes the off-site storm drain lateral extension between the Lateral B Stage 4 stub out and the existing Caltrans facility, across APN(s) 294-220-007 and/or -010 to Patterson Avenue. This lateral extension was evaluated under CEQA by the Riverside County Flood Control & Water Conservation District in the 1991 Perris Valley Master Drainage Plan Initial Study and Negative Declaration (State Clearinghouse No. 91042072).

³ South Coast Air Quality Management District, Board Meeting Agenda No. 27, May 7, 2021, Attachment I, Final Staff Report, Proposed Rule 2305 – Warehouse Indirect Source Rule - Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program and Proposed Rule 316 – Fees for Rule 2305. (Available at <u>http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10</u>, accessed January 2022.)

Section 5.2 Air Quality

do not have any direct emissions of criteria pollutants. Project design features were also incorporated into the model that increase Project site accessibility and reduce mobile emissions.

Area source emissions from the Project include stationary combustion emissions of natural gas used for space and water heating (shown in a separate row as energy), yard and landscape maintenance, and an average building square footage to be repainted each year. CalEEMod computes area source emissions based upon default factors and land use assumptions. CalEEMod defaults were used and reflect 2019 Title 24 standards. Separate emissions were computed for both the summer and winter.

Project-related operational emissions were computed and the results are presented below in **Table 5.2-H – Estimated Daily Project Operation Emissions (Summer)** and **Table 5.2-I – Estimated Daily Project Operation Emissions (Winter)**.

	Peak Daily Emissions (lb/day)					
Activity	VOC	NOx	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Thresholds	55	55	550	150	150	55
Area	17.62	0.00	0.18	0.00	0.00	0.00
Energy	0.05	0.42	0.35	0.00	0.03	0.03
Mobile	5.14	17.78	65.40	0.20	17.33	4.81
Total	22.81	18.20	65.93	0.20	17.36	4.84
Exceeds Threshold?	No	No	No	No	No	No

Table 5.2-H – Estimated Daily Project Operation Emissions (Summer)

Source: AQ Study, Table 3

Note: Emissions reported as zero are rounded and not necessarily equal to zero.

Table 5.2-I– Estimated Daily Project Operation Emissions (Winter)

	Peak Daily Emissions (lb/day)					
Activity	VOC	NOx	СО	SO ₂	PM-10	PM-2.5
SCAQMD Daily Thresholds	55	55	550	150	150	55
Area	17.62	0.00	0.18	0.00	0.00	0.00
Energy	0.05	0.42	0.35	0.00	0.03	0.03
Mobile	4.64	18.86	57.06	0.19	17.33	4.81
Total	22.31	19.28	57.59	0.19	17.36	4.84
Exceeds Threshold?	No	No	No	No	No	No

Source: AQ Study, Table 4

Note: Emissions reported as zero are rounded and not necessarily equal to zero.

Evaluation of the modeling results presented in the above table indicates that criteria pollutant emissions from operation of the proposed Project will not exceed the SCAQMD regional daily thresholds.

RST Analysis Conclusion

Based on the RST for the proposed Project, short-term emissions will exceed the daily regional thresholds set by SCAQMD for VOC emissions before mitigation. No criteria pollutants will exceed the regional thresholds with the incorporation of mitigation measure PVCCSP EIR mitigation measure **MM Air 9**, described below, to reduce short-term Project construction VOC emissions. Although the

remaining construction emissions are below the SCAQMD daily construction thresholds, the Project is also required to comply with PVCCSP EIR mitigation measures **MM Air 2** through **MM Air 8**. Please see the discussion under the headings RST Analysis Conclusion, below and **Table 5.2-M – Mitigated Estimated Daily Construction Emissions**, for impacts after implementation of mitigation.

The long-term operation of the Project will not exceed SCAQMD regional daily thresholds for any pollutant during summer or winter. Nevertheless, the Project would be required to comply with PVCCSP EIR mitigation measures **MM Air 11** through **MM Air 14** and **MM Air 19** through **MM Air 20**.

Conclusions

Based on the RST analysis for the proposed Project, the short-term construction emissions will not exceed the regional thresholds with the incorporation of PVCCSP EIR mitigation measure **MM Air 9** to reduce short-term Project construction VOC emissions. Although the remaining construction emissions are below the SCAQMD daily construction thresholds, the Project is also required to comply with PVCCSP EIR mitigation measures **MM Air 2** through **MM Air 8**.

The long-term operation of the Project will not exceed SCAQMD regional daily thresholds for any pollutant during summer or winter. Nevertheless, the Project would be required to comply with PVCCSP EIR mitigation measures **MM Air 11** through **MM Air 14** and **MM Air 19** through **MM Air 20**.

As such, the Project will not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment and no additional mitigation is required beyond those required by PVCCSP EIR mitigation measures listed above. Impacts are **less than significant with implementation of mitigation**.

Threshold C: Would the Project expose sensitive receptors to substantial pollutant concentration?

SCAQMD's Localized Significance Threshold (LST) Analysis

As part of the SCAQMD's environmental justice program, staff at the SCAQMD developed localized significance threshold (LST) methodology (SCAQMD 2008b) that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts (both short-term and long-term). LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA).

The pollutants analyzed under the LST methodology are CO, NO_x, PM-10, and PM-2.5. (SCAQMD 2008b). Of these pollutants, the "attainment pollutants" (CO and NO_x) are derived using an air quality dispersion model to back-calculate the daily emissions that would cause or contribute to a violation in ambient air quality for the SRA within which the Project site is located (SRA 24). The non-attainment PM-10 and PM-2.5 pollutant measurements are derived using an air quality dispersion model to back-calculate the emissions that would be necessary to worsen the existing violation in SRA 24, using the allowable change in concentration thresholds approved by the SCAQMD. Therefore, the tabulated LSTs represent the maximum mass emissions from a project that would not cause or contribute to an exceedance of state or federal ambient air quality standards (AAQS) for the above pollutants, and were developed based on ambient concentrations of these pollutants for each SRA in the Basin.

Air Quality

Duke Warehouse at Patterson Avenue and Nance Street DEIR

The localized assessment methodology limits the emissions in the analysis to those generated from onsite activities. SCAQMD has provided LST lookup tables to allow users to readily determine if the daily emissions for proposed construction or operational activities could result in significant localized air guality impacts for projects five acres or smaller. The LST threshold and tables can be used as a screening tool to determine if dispersion modeling would be necessary. The SCAQMD's Fact Sheet for Applying CalEEMod to Localized Significance Thresholds is used to determine the maximum site acreage that is actively disturbed based on the construction equipment fleet and equipment hours as estimated in CalEEMod. Based on this SCAQMD guidance and the Project's equipment list during grading (above), the Project site will disturb approximately eleven acres per day during grading. LST thresholds are provided for one-, two-, and five-acre sites. Therefore, the five-acre LST was used to compare the on-site emissions estimated by CalEEMod to provide a conservative analysis. This approach is conservative as it assumes that all on-site emissions associated with Project construction occur within a concentrated five-acre area. The same amount of emissions generated would be distributed over a larger surface area and would therefore result in a lower concentration at the nearest sensitive receptors. As such, the LST for the five-acre site provides a conservative, screening-level analysis.

The LST thresholds are estimated for each SRA using the maximum daily disturbed area (in acres) and the distance of the Project site to the nearest sensitive receptors (in meters). Sensitive receptors in the Project vicinity primarily include existing legal, non-conforming residential properties and/or businesses containing a residential structure located adjacent to the Project site on Patterson Avenue and Nevada Avenue. These residential uses are legal, non-conforming because these properties have PVCCSP land use designations of either LI or GI. Therefore, a receptor distance of 25 meters (85 feet) was used to ensure a conservative analysis.

Short-Term LST Analysis

The results of the short-term LST analysis are summarized in **Table 5.2-J – LST Results for Construction Emissions**, below.

	Peak Daily Emissions (lb/day)					
Activity	NOx	CO	PM-10	PM-2.5		
LST for 5-acre site at 25						
meters	270	1,577	13	8		
Grading-2022	92.50	67.30	9.80	5.12		
Building Construction-2022	16.77	17.44	0.86	0.81		
Building Construction-2023	15.44	17.31	0.75	0.70		
Paving-2023	10.19	14.58	0.51	0.47		
Paving-2023	10.19	14.58	0.51	0.47		
Architectural Coatings-2023	1.74	2.41	0.09	0.09		
Maximum ^a	92.50	67.30	9.80	5.12		
Exceeds Threshold?	No	No	No	No		

Table 5.2-J – LST Results for Construction Emissions

Source: AQ Study, Table 5

Note: ^a Maximum emissions are the greater of either grading or building construction alone in 2022, or the sum of building construction, paving and architectural coating in 2023 since these activities overlap. Maximum emissions are shown in bold

As indicated in the above table, Project-related short-term construction emissions do not exceed any of the SCAQMD-established LSTs for 5-acre sites in SRA 24.

Long-Term LST Analysis

According to the LST methodology, LSTs only apply to the operational phase if a project includes stationary sources or attracts mobile sources that may spend long periods of time idling at the site, such as warehouse/transfer facilities. Therefore, because the proposed Project will operate as a logistics center and has the potential to attract mobile sources that can reasonably be assumed will idle at the site, a long-term LST analysis was prepared for this Project. Although the Project exceeds five acres, per SCAQMD, the LST lookup tables can be used as a screening tool to determine if dispersion modeling would be necessary. Therefore, the Project's on-site emissions from CalEEMod and LST Look-Up Tables for the 5-acre site were utilized as a screening-level analysis.

CalEEMod version 2020.4.0 was utilized to estimate the Project's emissions from trucks traveling on the Project site. An on-site distance of 0.97 miles was conservatively assumed to be traveled for each one of the Project's truck trips identified in the Traffic Impact Analysis. The output is attached to this memo and summarized below. Idling emissions from trucks at loading docks is not available in CalEEMod; therefore, PM-10 and PM-2.5 idling emissions were calculated separately. Although PVCCSP EIR mitigation measure **MM Air 11** limits onsite idling to 5 minutes per truck per day, the analysis assumes an unmitigated scenario where each truck trip idles for 15-minutes per day, which conservatively overestimates idling emissions The results were added to the total PM-10 and PM-2.5 emissions from CalEEMod and presented in the table below. The closest sensitive receptors to the Project operations are the existing legal, non-conforming residential properties and/or businesses containing a residential structure located adjacent to the Project site on Patterson Avenue and Nevada Avenue. Therefore, a receptor distance of 25 meters (85 feet) was used to ensure a conservative analysis. The results are summarized below. The results are summarized in **Table 5.2-K – LST Results for Operational Emissions**, below.

	Peak Daily Emissions (lb/day)					
Activity	NOx	CO	PM-10 ^a	PM-2.5 ^a		
LST for 5-acre site at 25						
meters	270	1.577	4	2		
		.,	-	_		
On-Site Emissions	3.45	2.67	0.19	0.08		

Table 5.2-K – LST Results for Operational Emissions

Source: AQ Study, Table 6.

Note: The greater of summer or winter emissions from CalEEMod is shown. ^aCalEEMod output emissions added to idling emissions.

Therefore, as indicated in the table above, Project-related long-term operational emissions will not exceed any SCAQMD operational LST for SRA 24.

LST Analysis Conclusion

Based on the LST analysis, neither the short-term construction nor long-term operation of the Project will exceed SCAQMD LST at sensitive receptors within the Project vicinity for any criteria pollutants. No mitigation is required for LST impacts.

Air Quality

CO Hot Spots

In order to ensure that the State and Federal ambient air quality standards for CO are not violated, the SCAQMD recommends that projects with a potential to generate heavy volumes of traffic, and which can lead to high levels of CO, use hot spot modeling to determine the potential to create a CO "Hot Spot". A carbon monoxide (CO) "hot spot" is a localized concentration of CO that is above the state or federal 1-hour or 8-hour ambient air quality standards (AAQS). Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles. Based on the information presented below, a site-specific CO "hot spot" analysis is not needed to determine whether the addition of Project related traffic will contribute to an exceedance of either the state or federal AAQS for CO emissions in the Project area.

The analysis prepared for CO attainment in the South Coast Air Basin by the SCAQMD can be used to assist in evaluating the potential for CO exceedances. CO attainment was thoroughly analyzed as part of the SCAQMD's 2003 Air Quality Management Plan (2003 AQMP) and the Revised 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan). As discussed in the 1992 CO Plan, peak carbon monoxide concentrations in the South Coast Air Basin are generally due to unusual meteorological and topographical conditions, and not due to the impact of particular intersections (2003 AQMP Appendix V, p. V-4-32). Considering the region's unique meteorological conditions and the increasingly stringent CO emissions standards, CO modeling was performed as part of the 1992 CO Plan and subsequent plan updates and air quality management plans.

In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included: Long Beach Blvd. and Imperial Highway (Lynwood); Wilshire Blvd. and Veteran Ave. (Westwood); Sunset Blvd. and Highland Ave. (Hollywood); and La Cienega Blvd. and Century Blvd. (Inglewood). These analyses did not predict a violation of CO standards. The busiest intersection evaluated in the 1992 CO Plan and subsequent 2003 AQMP was that at Wilshire Blvd. and Veteran Ave., which has a daily traffic volume of approximately 100,000 vehicles per day (2003 AQMP Appendix V, Table 4-7). The Los Angeles County Metropolitan Transportation Authority (MTA) evaluated the LOS in the vicinity of the Wilshire Blvd./Veteran Ave. intersection and found it to be level E at peak morning traffic and Level F at peak afternoon traffic (MTA, Exhibit 2-5 and 2-6). This hot spot analysis was conducted at intersections subject to extremes in vehicle volumes and vehicle congestion, and did not predict any violation of CO standards.

Considering existing traffic, plus cumulative traffic plus Project-related traffic, the TIA prepared for this Project calculated that the highest average daily trips would be 22,970 at the intersection of Patterson Avenue and Harley Knox Boulevard as described above (Appendix K.2), which is lower than the values studied by SCAQMD in their 1992 CO Plan and 2003 AQMP. Therefore, none of the roadway segments in the vicinity of the proposed Project site would have daily traffic volumes exceeding those at the intersections modeled in the 2003 AQMP, nor would there be any reason unique to the meteorology to conclude that this intersection would yield higher CO concentrations if modeled in detail. Thus, the Project would not result in CO hot spots.

Diesel Particulate Health Risks

Health risk assessments are commonly used to estimate the health risks to the surrounding community from projects that will be a source of diesel emissions and hence increase the amount of diesel particulate matter (DPM) in the area. Those individuals who are sensitive to air pollution include children, the elderly, and persons with preexisting respiratory or cardiovascular illness. For purposes of CEQA, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24 hours, such as residences, hospitals, or convalescent facilities. Commercial and industrial facilities are not included in the definition because employees do not typically remain onsite for 24 hours.

The CARB Air Quality and Land Use Handbook contains recommendations that will "help keep California's children and other vulnerable populations out of harm's way with respect to nearby sources of air pollution" (CARB 2005), including recommendations for distances between sensitive receptors and certain land uses. The Handbook states that its recommendations are advisory and should not be interpreted as "buffer zones." CARB recognizes the opportunity for more detailed site-specific analyses and there is no "one size fits all" solution to land use planning. The Handbook recommends avoiding siting new sensitive land uses within 1,000 feet of a distribution center. The proposed Project is a single warehouse building, which will result in an increase in the number of diesel trucks in the vicinity of the Project site. Furthermore, the closest sensitive receptors are the legal, non-conforming residential uses on properties that have PVCCSP land use designations of either LI or GI, located adjacent to the east and west side of the Project site. Therefore, a health risk assessment (HRA) was prepared for the Project to assess the potential health risk to the surrounding land uses (Appendix B.2).

Methodology

The HRA was performed using the AERMOD model and in accordance with the SCAQMD's Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis (SCAQMD 2003a). SCAQMD recommends using the USEPA's AERMOD model for mobile source emissions impact assessments by modeling the individual roadways as multiple adjacent volume sources, consistent with the USEPA Haul Road Workgroup Recommendations (USEPA 2012). The HRA followed these recommendations.

Risks associated with the Project's sources of DPM (i.e., loading areas on truck travel to and from the site) were determined at the nearest receptor impact locations, including the residences to the east and west of the Project site (see **Figure 5.2-1– HRA Discrete Receptor Locations**). Local dispersion modeling parameters are consistent with other projects in the South Coast Air Basin.

Eight (8) separate discrete receptors located at sensitive receptors (Receptor 1-3) and off-site worker receptors (Receptor 4 – Receptor 8) within the Project vicinity were modeled (**Figure 5.2-1**). All receptor locations were modeled at the nearest property boundary to provide a conservative analysis. As noted above, all sensitive receptors (Receptor 1 – Receptor 3) are legal, non-conforming residential uses on property with a PVCCSP land use designation of either Ll or Gl. Receptor 1 is west of the Project side on the southwest corner of California Avenue and Patterson Avenue, Receptor 2 is east of the Project site, along Nevada Avenue near Nance Street, and Receptor 3 is southeast of the Project site, along Nance Street. All off-site worker receptors are commercial/industrial uses on property with a PVCCSP land use designation of either to the Project sites' northern boundary, and Receptor 6 are commercial/industrial uses adjacent to the Project sites' southern boundary. (HRA, p. 14.)

• The residents at the sensitive receptor locations are assumed to remain outdoors (or have continual contact with outside air) at home for 24-hours a day, 365 days a year, for 70 continuous years.

Environmental Health Hazard Assessment (OEHHA) which assume different exposure periods and

pathways for residential uses and workers. These assumptions are listed below:

• The worker multi-pathways include only inhalation, soil ingestion, and dermal exposure for an exposure period of 25 years to determine the health risks associated with Project construction on workers in the nearby industrial and distribution facilities.

The SCAQMD thresholds of significance for TAC evaluated herein are a maximum incremental cancer risk of 10 in one million and a non-cancer hazard index of 1.0 or greater.

Remainder of Page Intentionally Left Blank



WEBB

0

250

500

750 __Feet Air Quality

Cancer Risks

Cancer risks are based upon mathematical calculations which estimate the probability of the number of people who will develop cancer after exposure to DPM. This probability is generally expressed in terms of the number of people who will develop cancer per one million people who are exposed. It is important to understand that this cancer risk represents the probability that a person develops some form of cancer; the estimated risk does not represent actual mortality rates.

The cancer risks from DPM occur exclusively through the inhalation pathway; therefore, the maximum individual cancer risk (MICR) can be estimated from the following equation:

*MICR_{DPM} = CP_{DPM} * DI_{DPM}

where,

- **MICR**_{DPM} Cancer risk from diesel particulate matter (DPM); the probability of an individual developing cancer as a result of exposure to DPM.
- **CP**_{DPM}¹ Cancer Potency factor for DPM (mg/kg-day)⁻¹; estimated probability that a person will contract cancer as a result of inhalation of a DPM concentration of 1mg per kilogram of bodyweight continuously over a period of 70 years CP_{DPM} value of 1.1 (mg/kg-day)⁻¹

Dose through inhalation (mg/kg-day)

- obtained by multiplying Cair x ASF x ED x FAH x DBR x (EF/70) x 10⁻⁶
 - C_{air} is the Annual Average 24 hour per day concentration of DPM in air (μg/m³) (calculated by AERMOD).
 - ASF is the age specific factor.
 - ED is the exposure duration in years.
 - FAH is the fraction of time at home.
 - o DBR is the daily breathing rate
 - To be most protective, the DBR was adjusted for each age group, ²EF is the exposure factor
 - Most sensitive value of 0.96 used.³
 - Off-site receptor value of 0.68 was used.
- * Table of data used in calculations can be found in Appendix A of the HRA.
- 1. From Table 8.1 of the 2015 SCAQMD Permit Application Package "M" (For Use in Conjunction with the Risk Assessment Procedures for Rules 1401 and 212 Version 8.0 [SCAQMD 2015]).
- 2. From Table 9.1 of 2015 SAQMD Permit Application Package "M".
- 3. From Table 9.1 of 2015 SCAQMD Permit Application Package "M".

The specific calculations and assumptions used to determine the cancer risks are included in the HRA located in Appendix B.2 of this DEIR.

The Project-generated cancer risk at discrete receptor locations modeled are summarized in **Table 5.2-L – Project Generated Cancer Risk (2023) at Discrete Receptors**, below.

Receptor	Cancer Risk (per million)
Sensitive Receptors	
1	2.4
2	3.2
3	2.0
Off-site Worker Receptors	
4	0.2
5	0.2
6	0.2
7	0.3
8	0.2

Гаble 5.2-L – Project-Generatec	Cancer Risk	(2023) at	Discrete	Receptors
---------------------------------	-------------	-----------	----------	-----------

Source: HRA, Table 4

As shown in **Table 5.2-L** above, none of the sensitive receptors within the Project vicinity are exposed to cancer risks from DPM that exceed the SCAQMD threshold of 10 excess cancer cases per one million people. The highest estimated excess cancer risk to sensitive receptors is 3.2 in one million, located at Receptor 2, the property boundary of a sensitive receptor. The area of highest risk to modeled off-site worker receptors, at a level of 0.3 per million, are at Receptor 7.

Therefore, excess cancer risks to both industrial/commercial and sensitive receptors are considered less than significant and no mitigation is required.

Non-Cancer Risks

Non-cancer risks can be described as acute (short-term, generally one-hour peak exposures) or chronic (long-term exposure) health impacts. SCAQMD recognizes and uses the acute and chronic reference exposure levels (REL) developed by OEHHA for determining non-cancer health impacts of toxic substances. Exceeding the acute or chronic REL does not necessarily indicate that an adverse health impact will occur; however, levels of exposure above the REL have an increasing but undefined probability of resulting in an adverse health impact, particularly in sensitive individuals. For Diesel Particulate Matter (DPM), there is no value for the acute REL and the chronic REL is $5 \,\mu g/m^3$.

Therefore, non-cancer health risks are expected when people are exposed to short-term DPM concentration greater than 5 μ g/m³. Since the hazard index is the ratio between the DPM concentration at each receptor (estimated using AERMOD) and the chronic REL, then non-cancer health risks are significant if the hazard index exceeds 1.0. This threshold for significance is sanctioned by SCAQMD and CARB explicitly to determine the non-cancerous health impacts attributable to projects that introduce new sources of diesel exhaust emissions in an area.

Air Quality

Duke Warehouse at Patterson Avenue and Nance Street DEIR

The relationship for the non-cancer health effects of DPM is given by the following equation:

$HI_{DPM} = C_{DPM} / REL_{DPM}$

where,

HIDPM	Hazard Index; an expression of the potential for non-cancer health effects.
С _{DPM}	Annual average DPM concentration in μ g/m ³ .
REL _{DPM}	Reference exposure level (REL) for DPM; the DPM concentration at which no adverse health effects are anticipated.

The maximum DPM concentration of $0.1734 \ \mu g/m^3$ occurs near the on-site loading area near western loading area. Using the equation above, the hazard index is 0.0347, which is approximately three percent of the allowable threshold of 1. Therefore, non-cancer risks are considered less than significant and no mitigation measures are required.

Conclusion

None of the cancer or non-cancer thresholds are exceeded as a result of Project operation for workers or sensitive uses within the proposed Project vicinity. Additionally, the proposed Project will not form any CO hot spots in the Project area and will not exceed SCAQMD's applicable LST. Therefore, the Project will not result in the exposure of sensitive receptors to substantial pollutant concentrations during Project operation, and impacts are considered **less than significant**. No mitigation is required.

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

The proposed Project presents the potential to result in other emissions, such as those leading to odors in the form of diesel exhaust during construction in the immediate vicinity of the proposed Project site. The closest sensitive receptors to the Project construction site are the existing legal, non-conforming residential properties and/or businesses containing a residential structure located adjacent to the Project site on Patterson Avenue and Nevada Avenue. However, odors generated during construction will be short-term and will not result in a long-term odorous impact to the surrounding area.

Additionally, the CARB has developed an Air Quality and Land Use Handbook to outline common sources of odor complaints, including: sewage treatment plants, landfills, recycling facilities, and petroleum refineries (SCAQMD 2005). The Project Applicant proposes to operate the building as a non-refrigerated warehouse distribution facility, which is not included on CARB's list of facilities that are known to be prone to generate odors. Therefore, impacts are **less than significant**. No mitigation is required.

5.2.6 Recommended Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (State CEQA Guidelines Sections 15126.4). Mitigation measures were evaluated for their ability to reduce or eliminate impacts. The proposed Project is required to implement PVCCSP EIR mitigation measures **MM Air 2** through **Air 9** for construction impacts and **MM Air 11** through **MM Air 14, MM Air 19, and MM Air 20** for operation impacts. No Project-specific mitigation is required beyond those required by the PVCCSP EIR mitigation measures listed above.

5.2.7 Summary of Environmental Effects After Mitigation Measures Are Implemented

Implementation of PVCCSP EIR mitigation measure **MM Air 9** will reduce the Project's short-term construction-related emissions of VOC. PVCCSP EIR mitigation measure **MM Air 9** has quantitative reductions associated with it available in CalEEMod. The mitigated emissions are shown in **Table 5.2-M** – **Mitigated Estimated Daily Construction Emissions**, below, and indicate that VOC emissions from architectural coatings (painting) activities will be reduced below the SCAQMD regional significance thresholds.

Peak Daily Emissions (lb/day) VOC PM-2.5 NOx CO SO₂ PM-10 Activity SCAQMD Daily Construction 75 100 550 150 150 55 Thresholds Grading-2022^a 8.65 92.69 68.72 0.16 10.21 5.23 Building Construction-2022^a 5.12 31.24 50.33 0.15 10.95 3.67 26.90 47.52 0.15 10.74 3.48 4.63 Building Construction-2023^a 23.51 2.07 7.68 0.02 1.71 0.53 Architectural Coatings-2023 1.48 10.30 15.16 0.02 0.69 0.52 Paving-2023^a **Maximum^b** 29.62 92.69 70.36 0.19 13.14 5.23 **Exceeds Threshold?** No No No No No No

Table 5.2-M – Mitigated Estimated Daily Construction Emissions

Source: AQ Study, Table 10

Notes: ^a Maximum emissions are from Table 5.2-G.

^bMaximum emissions are the greater of either grading or building construction alone in 2022, or the sum of building construction, paving and architectural coating in 2023 since these activities overlap. Maximum emissions are shown in bold.

With implementation of PVCCSP EIR mitigation measure **MM Air 9**, VOC emissions associated with painting activities will be reduced below the short-term threshold. Additionally, PVCCSP EIR mitigation measures **MM Air 2** through **MM Air 8** will further reduce the Project's construction emissions. However, there is no quantitative reduction associated with them.

Based on the LST analysis of the proposed Project, neither the short-term construction nor the longterm operation of the Project will result in localized air quality impacts to sensitive receptors in the Project site vicinity for NO_x, CO, PM-10 or PM-2.5. The Project will not generate a CO hot spot and the Project will not expose workers or residents in the immediate Project vicinity to cancer and non-cancer risk in excess of SCAQMD thresholds. Additionally, the Project will not conflict with or obstruct implementation of the AQMP.

5.3 Biological Resources

The focus of the following analysis is related to whether the proposed Project will have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species; or will conflict with any adopted or approved local, regional, or state conservation plan. This section will analyze whether the Project will:

- A. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service;
- B. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- C. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- E. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance
- F. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan.

No comments related to biological resources were received in response to the Notice of Preparation (NOP) and the Scoping meeting held on February 2, 2022.

The following references were used in the preparation of this section of the DEIR:

- Cadre Environmental, General MSHCP Habitat Assessment/Consistency Analysis and Regulatory Constraints Assessment for 35.65-Acre Duke Patterson & Nance Warehouse Project Site, City of Perris, California, July 16, 2022. (Included as Appendix C.1 to this DEIR) [Cited as Cadre (a)]
- Cadre Environmental, *MSHCP Focused Burrowing Owl Surveys for the 35.65-Acre Duke Patterson & Nance Warehouse Project Site, City of Perris, California,* July 16I, 2022. (Included as Appendix C.2 to this DEIR) [Cited as Cadre (b)]
- Cadre Environmental, Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Biological Resources Compliance Analysis for the 7.65-acre Duke Realty Perris Valley Channel Lateral B Stage 4 Connection, City of Perris/unincorporated Riverside County, California, May 7, 2022. (Included as Appendix C.3 to this DEIR) [Cited as Cadre (c)]
- City of Perris, Perris Comprehensive General Plan 2030, Conservation Element, Adopted July 12, 2005; Sustainable Community Amendment, Adopted February 18, 2008. (Available at <u>www.cityofperris.org/city-hall/general-plan/Conservation Element 01-08-09.pdf</u>, accessed March 3, 2022.) [Cited as Perris GP 2030)

Biological Resources

- City of Perris, *Perris Valley Commerce Center Specific Plan Amendment No. 12*, Adopted January 10, 2012, and subsequently amended and approved January 11, 2022. (Available at https://www.cityofperris.org/home/showpublisheddocument/2647/637799977032200000, accessed March 3, 2022.) [Cited as PVCCSP]
- City of Perris, Perris Valley Commerce Center Specific Plan Final Environmental Impact Report, State Clearing house # 2009081086 November 2011, certified January 10, 2012. (Available at the City of Perris and at <u>https://www.cityofperris.org/home/showpublisheddocument/13874/637455522381730000</u>, accessed March 3, 2022.) [Cited as PVCCSP EIR]
- County of Riverside, *Western Riverside County Multiple Species Habitat Conservation Plan*, Adopted June 17, 2003. (Available at <u>http://wrc-rca.org/about-rca/multiple-species-habitat-conservation-plan/</u>, accessed March 3, 2022.) [Cited as MSHCP]
- Regional Conservation Authority, RCA MSHCP Information App. (Available at http://wrcrca.maps.arcgis.com/apps/webappviewer/index.html?id=2ba3285ccc8841ed978d2d8
 25e74c5fa, accessed March 3, 2022.) [Cited as RCA Info. App]

The following discussion is a summary of the General MSHCP Habitat Assessment/Consistency Analysis and Regulatory Constraints Assessment for the 35.65-Acre Duke Patterson & Nance Warehouse Project Site, City of Perris, California ("Habitat Assessment") prepared for the proposed Project by Cadre Environmental July 16, 2022 (Cadre(a)). Additionally, the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Biological Resources Compliance Analysis for the 7.65-acre Duke Reality Perris Valley Channel Lateral B Stage 4 Connection was prepared by Cadre Environmental on May 7, 2022 (Cadre (c))and is summarized herein.

5.3.1 Setting

The Habitat Assessment presents the findings of a biological resources Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) compliance analysis for the 35.65-acre (55.60-acre offsite impact area) Duke Patterson and Nance Warehouse Project site. The Project site is located within the City of Perris, western Riverside County, California. Specifically, the Project site is located within Assessor Parcel Numbers (APNs) 314-160-003 to -012, 314-153-015 to -030, 314-153-032 to -040, 314-153-042, -044, -046, portion of 314-153-048, and -031: Offsite and Right of Ways include 294-200-007 and portion of 314-153-031, -048, -050, -052, -072, and -077, 294-220-0010, 294-200-002 and -003. The purpose of this section is to document the existing biological resources, identify general vegetation types, and assess the potential biological and regulatory constraints associated with the proposed development and ensure compliance with the Western Riverside County MSHCP.

The Project site is located within United States Geological Survey (USGS) 7.5' Series Steele Peak and Perris Quadrangles, Township 4 South, Range 4 West, Section 1. Specifically, the Project site extends east of Patterson Avenue, west of Nevada Avenue and is bisected by Nance Street. The Project site is located within the area subject to the MSHCP Mead Valley Area Plan. The Project site is not located within an MSHCP Criteria Area, Cell Group, or Linkage Area. (Cadre (a), p. 1.) As further detailed in Section 5.2.2 – Related Regulations, the MSHCP is intended to ensure long-term survival of 146 species of plants and animals through creation of a network of permanent open space to conserve a variety of natural communities. To this end, compliance with the provisions of the MSHCP requires the preparation of habitat assessments for certain species and requires projects to demonstrate compliance with certain provisions contained therein.

Vegetation

The entire Project site was surveyed on March 4, 2021 and the Perris Valley Master Drainage Plan (MDP) Lateral-B Stage 4 extension on May 6, 2021 by Cadre. The surveys included complete coverage of the Project site, with special attention focused toward sensitive species or those habitats potentially supporting sensitive flora or fauna that would be essential to efficiently implementing the terms and conditions of the Western Riverside County MSHCP. Aerial photography of the Project site and vicinity was utilized to accurately locate and survey the property. General plant communities were preliminarily mapped directly on the aerial photo using visible landmarks in the field, which are depicted on **Figure 5.3-1 – Project Site Vegetation Communities Map and 5.3-2 – Off-Site Lateral-B Stage 4 Vegetation Communities Map**. Representative photographs of the Project site's natural resources and existing conditions taken during the field survey are shown on **Figure 3-3 – Project Site Photographs**.

The Project site is generally flat and currently dominated by fallow field croplands. As shown on Figure **5.3-1**, disturbed and developed regions of the Project site include the offsite alignments of Patterson Avenue, Nevada Avenue, and Nance Street. The majority of the Project site is characterized as fallow field croplands dominated by false barley (Hordeum murinum), ripgut grass (Bromus diandrus), foxtail chess (Bromus madritensis ssp. rubens), wild oat (Avena fatua), stinknet (Oncosiphon piluliferum), redstemmed filaree (Erodium cicutarium), white-stemmed filaree (Erodium moschatum), tocalote (Centaurea melitensis), yellow star-thistle (Centaurea solstitialis), horseweed (Erigeron canadensis), Russian thistle (Salsola tragus), and common fiddleneck (Amsinckia menziesii). (Cadre (a), pp. 9-10.) As shown on Figure 5.3-2, the MDP Lateral-B Stage 4 extension alignment is dominated by disturbed and non-native grassland vegetation communities. The majority of this area is characterized as disturbed habitat and is generally devoid of vegetation and is currently being utilized for commercial vehicle storage and staging. The disturbed vegetation includes rigput greass (Bromus diandrus), foxtail chess (Bromus madritensis ssp. rubens), wild oat grass (Avena fatua), prickly lettuce (Lactuca serriola), black mustard (Brassica nigra), and stinknet (Oncosiphon piluliferum). The non-native greassland vegetation includes ripgut grass, foxtail chess, wild oat grass, stinknet and foxtail barley (Hordeum murinum). (Cadre (c), pp. 8-9.)

Special Status Plants

Special-status habitat types are those vegetation communities that support rare, threatened, or endangered plant or wildlife species or are diminishing and are of special concern to resource agencies. The MSHCP provides protection for a variety of sensitive vegetation communities and additional surveys may be required for a site if suitable habitat is documented onsite and/or if the property is located within a predetermined MSHCP Survey Area.

The MSHCP has determined that all of the sensitive species potentially occurring onsite have been adequately covered (MSHCP Table 2-2 Species Considered for Conservation Under the MSHCP Since 1999, 2004). However, additional surveys may be required for narrow endemic plants and/or criteria area plant species if suitable habitat is documented onsite and/or if the property is located within a predetermined "Survey Area" (Cadre (a), p. 16.). The Project site does not occur within a predetermined Survey Area for MSHCP criteria area or narrow endemic plant species and, therefore, no such surveys are required. (Cadre (a), p. 16; Cadre (c), p.15.) (See **Figure 5.3-3 – MSHCP Survey Areas**).



Sources: CADRE, MSHCP Resource Compliance Analysis, 2022, Attachment D.



Figure 5.3-1 – Project Site Vegetation Communities Map Duke Warehouse at Patterson Avenue and Nance Street





Sources: CADRE, 2022 Biological Resource Compliance Analysis PVSDC Lateral B Stage 4, Attachment D



Figure 5.3-2 – Off-Site Lateral-B Stage 4 Extension Vegetation Communities Map

Duke Warehouse at Patterson Avenue and Nance Street





Sources: CADRE, MSHCP Resource Compliance Analysis, 2022, Attachment D.



Figure 5.3-3 – MSHCP Survey Areas Duke Warehouse at Patterson Avenue and Nance Street



Wildlife

General wildlife surveys were not conducted during the general biological habitat assessment. However, animals identified during the reconnaissance survey by sight, call, tracks, nests, scat, remains, or other signs were recorded in field notes. (Cadre (a), p. 6; Cadre (c), p. 6.) As shown on **Figure 5.3-3**, the majority of the Project site occurs within an MSHCP burrowing owl survey area and a habitat assessment was conducted for the species to ensure compliance with MSHCP guidelines for the species. Wildlife populations documented onsite or within the vicinity of the Project site during the site visits include, but are not limited to: red-tailed hawk (*Buteo jamaicensis*), Anna's hummingbird (*Calypte anna*), mourning dove (*Zenaida macroura*), cliff swallow (*Petrochelidon pyrrhonota*), Phainopepla (*Phainopepla nitens*), American crow (*Corvus brachyrhynchos*), western kingbird (*Tyrannus verticalis*), Say's phoebe (*Sayornis saya*), western meadowlark (*Sturnella neglecta*), house finch (*Carpodacus mexicanus*), great egret (*Ardea alba*), desert cottontail (*Sylvilagus audubonii*), northern mocking bird (*Mimus polyglottos*), and California ground squirrel (*Otospermophilus beecheyi*). (Cadre (a), p. 10; Cadre (c), p. 9.)

The Project site does not occur within an MSHCP Survey Area for amphibians or mammals and no suitable habitat for the least Bell's vireo, southwestern willow flycatcher, or western yellow-billed cuckoo was detected within or adjacent to the Project site. (Cadre (a), p. 17; Cadre (c), p. 16.) Non-native vegetation at the Project site may provide habitat for nesting birds. The majority of the Project site occurs within the MSHCP Survey Area for the burrowing owl (BUOW) and suitable BUOW burrows potentially used for refugia and/or nesting, including foraging habitat, was documented within and adjacent to the Project site. (Cadre (a), p. 17; Cadre (c), p. 16.) Thus, focused MSHCP BUOW surveys were conducted to determine the presence, absence, and status of this species within and adjacent to the Project site.

The proposed Project site is also within the area covered by the Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan (HCP) and as such the Project Applicant will be required to comply with the provisions of the SKR HCP to offset potential impacts to SKR. (Cadre (a), p. 17; Cadre (c), p. 16.)

Jurisdictional Resources

Jurisdictional resources include riparian, riverine, and vernal pool areas which are afforded special protections by the Santa Ana Regional Water Quality Control Board (RWQCB), California Department of Fish and Wildlife (CDFW), or United States Army Corps of Engineers (USACE), as well as from Section 6.1.2 of the MSHCP.

No MSHCP riparian, riverine, or vernal pool resources were documented within or immediately adjacent to the Project site. Additionally, no features regulated by the Santa Ana RWQCB, CDFW, or USACE were documented within or immediately adjacent to the Project site. (Cadre (a), pp. 2-3; Cadre (c), pp. 17-18.)

5.3.2 Related Regulations

Federal Regulations

Federal Endangered Species Act

The Federal Endangered Species Act (ESA) (16 U.S.C. Sections 1531 et seq.) prohibits "take" (harm or harassment [including to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct] of individuals of a protected species and, under certain circumstances, the destruction of habitat) of a Federally listed Endangered or Threatened species and will require incidental

take permits or authorization. All proposed development projects within the County are required to avoid known occurrences of listed plants and habitat for listed wildlife species or otherwise mitigate potential impacts to these species through the requirements of Section 6 of the Multiple Species Habitat Conservation Plan (MSHCP, pp. 6-1 - 6-118).

Migratory Bird Treaty Act

The Federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Sections 3503, 3503.5, and 3800 prohibit the take, possession, or destruction of any birds, their nests, or eggs. Many areas in the Project vicinity (exceptions include portions of the "developed" areas) provide foraging habitat for many raptor species, including special-status raptors. The loss of raptor habitat is covered and mitigated for through participation with the MSHCP. Direct impacts to raptors (and other migratory birds), including their active nests, are prohibited through the MBTA and California Fish and Game Code. As such, vegetation removals should be conducted outside of the nesting season; however, if not feasible then nesting bird surveys should be conducted prior to any vegetation removals. The proposed Project will be required to comply with the MTBA and California Fish and Game Code, which prohibits the take of migratory and native bird species or their nests considered to utilize the site.

Federal Clean Water Act

Pursuant to Section 404 of the Clean Water Act (CWA), the USACE regulates discharges of dredged and/or fill material into waters of the United States. "Waters of the United States" are defined in USACE regulations at 33 C.F.R. Part 328.3(a). Navigable waters of the United States are those waters of the United States that are navigable in the traditional sense. Waters of the United States is a broader term than navigable waters of the United States and includes adjacent wetlands and tributaries to navigable waters of the United States and other waters where the degradation or destruction of which could affect interstate or foreign commerce.

State Regulations

California Endangered Species Act

California Endangered Species Act (Fish and Game Code Sections 2050 et seq.) (CESA) establishes that it is the policy of the state to conserve, protect, restore, and enhance Threatened or Endangered species and their habitats. CESA mandates that state agencies should not approve projects which would jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy. CESA requires state lead agencies to consult with the CDFW during the CEQA process to avoid jeopardy to threatened or endangered species. CESA prohibits any person from taking or attempting to take a species listed as endangered or threatened (Fish and Game Code Section 2080). Section 2080 provides the permitting structure for CESA. The "take" of a state listed endangered or threatened species or candidate species will require incidental take permits as authorized by the CDFW.

California Fish and Game Code

The CDFW, under Section 1600 of the Fish and Game Code, regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream, or lake, which supports fish or wildlife. The CDFW defines a stream, including creeks and rivers, as "a body of water that flows at least periodically or intermittently through a bed or channel having surface or subsurface flow that supports or has supported riparian vegetation." Lakes under the jurisdiction of the CDFW may also include man-made features.

Regional Regulations

Stephens' Kangaroo Rat Habitat Conservation Plan

The Project site is located within the boundary of the adopted SKR HCP implemented by the Western Riverside County Habitat Conservation Agency (RCHCA). The SKR HCP mitigates impacts from development on the SKR by establishing a network of preserves and a system for managing and monitoring them. Through implementation of the SKR HCP, more than \$45 million has been dedicated to the establishment and management of a system of regional preserves designed to ensure the persistence of SKR in the plan area. This effort has resulted in the permanent conservation of approximately 50% of the SKR-occupied habitat remaining in the HCP area. Through direct funding and in-kind contributions, SKR habitat in the regional reserve system is managed to ensure its continuing ability to support the species. The proposed Project's Applicant will pay the applicable SKR HCP mitigation fee.

Western Riverside Multiple Species Habitat Conservation Plan

The MSHCP serves as a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP), pursuant to Section (a)(1)(B) of the federal Endangered Species Act of 1973, as well as a Natural Communities Conservation Plan (NCCP) under the State NCCP Act of 2001. The plan "encompasses all unincorporated Riverside County land west of the crest of the San Jacinto mountains to the Orange County line, as well as the jurisdictional areas of the Cities of Temecula, Murrieta, Lake Elsinore, Canyon Lake, Norco, Corona, Riverside, Moreno Valley, Banning Beaumont, Calimesa, Perris, Hemet, and San Jacinto." The overall biological goal of the MSHCP is to conserve covered species and their habitats, as well as maintain biological diversity and ecological processes while allowing for future economic growth within a rapidly urbanizing region. (MSHCP, pp. 1-1-1-4.)

Federal and state wildlife agencies approved permits required to implement the MSHCP on June 22, 2004. Implementation of the plan will conserve approximately 500,000 acres of habitat, including land already in public or quasi-public ownership and about 153,000 acres of land in private ownership that will be purchased or conserved through other means. The money for purchasing private land will come from development mitigation fees as well as state and federal funds.

The MSHCP includes a program for the collection of development mitigation fees, policies for the review of projects in areas where habitat must be conserved, and policies for the protection of riparian areas, vernal pools, and narrow endemic plants. It also includes a program for performing plant, bird, reptile, and mammal surveys.

The intent of the MSHCP is to ensure the survival of a range of plants and animals and avoid the cost and delays of mitigating biological impacts on a project-by-project basis. It allows the incidental take of currently listed species and their habitat from development and covered improvement projects. It also allows the incidental take of species that might be listed in the future.

Local Regulations

City of Perris Ordinance No. 1123

The City of Perris established a local development mitigation fee for funding the preservation of natural ecosystems in accordance with the MSHCP. Ordinance No. 1123 establishes a local development mitigation fee for funding the preservation of natural ecosystems in accordance with the MSHCP. Commercial and Industrial facilities are assessed a fee of \$16,358 per acre.

Perris Comprehensive General Plan 2030

The following are applicable goals, measures and policies from the Perris Comprehensive General Plan 2030 (Perris GP 2030) related to biological resources:

Conservation Element

Goal II	Preservation of areas with significant biotic communities.
Policy II.A	Comply with state and federal regulations to ensure protection and preservation of significant biological resources.
Measure II.A.2	Public and private projects, located in areas with potential for moderate or high plant and wildlife sensitivity, require biological surveys as part of the development review process.
Measure II.A.3	Public and private projects that are also subject to federal or State approval with respect to impacts to Water of the U.S. and/or Streambeds, require evidence of completion of the applicable federal permit process prior to the issuance of a grading permit.
Goal III	Implementation of the Multi-Species Habitat Conservation Plan (MSHCP).
Policy III.A	Review all public and private development and construction projects and any other land use plans or activities within the MSHCP area, in accordance with the conservation criteria procedures and mitigation requirements set forth in the MSHCP.

PVCCSP Standards and Guidelines and Mitigation Measures

There are no PVCCSP Standards and Guidelines applicable to the analysis of biological resources. The PVCCSP EIR includes mitigation measures for potential impacts to biological resources. Applicable mitigation measures incorporated into the proposed Project are identified below and are assumed in the analysis presented in this section.

MM Bio 1: In order to avoid violation of the MBTA and the California Fish and Game Code, sitepreparation activities (removal of trees and vegetation) for all PVCC implementing development and infrastructure projects shall be avoided, to the greatest extent possible, during the nesting season (generally February 1 to August 31) of potentially occurring native and migratory bird species.

If site-preparation activities for an implementing project are proposed during the nesting/breeding season (February 1 to August 31), a pre-activity field survey shall be conducted by a qualified biologist prior to the issuance of grading permits for such project, to determine if active nests of species protected by the MBTA or the California Fish and Game Code are present in the construction zone. If active nests are not located within the implementing project site and an appropriate buffer of 500 feet of an active listed species or raptor nest, 300 feet of other sensitive or protected bird nests (non-listed), or 100 feet of sensitive or protected songbird nests, construction may be conducted during the nesting/breeding season. However, if active nests are located during the pre- activity field survey, no grading or heavy equipment activity shall take place within at least 500 feet of an active listed species or raptor nest, 300 feet of an active listed species or raptor nest, 300 feet of an active listed species or protected (under MBTA or California Fish and Game Code) bird nests (non-

listed), or within 100 feet of sensitive or protected songbird nests until the nest is no longer active.

MM Bio 2: Project-specific habitat assessments and focused surveys for burrowing owls would be conducted for implementing development or infrastructure projects within burrowing owl survey areas. A pre-construction survey for resident burrowing owls would also be conducted by a qualified biologist within 30 days prior to commencement of grading and construction activities within those portions of implementing project sites containing suitable burrowing owl habitat and for those properties within an implementing project site where the biologist could not gain access. If ground disturbing activities in these areas are delayed or suspended for more than 30 days after the pre-construction survey, the area shall be resurveyed for owls. The pre-construction survey and any relocation activity would be conducted in accordance with the current Burrowing Owl Instruction for the Western Riverside MSHCP.

If active nests are identified on an implementing project site during the pre- construction survey, the nests shall be avoided or the owls actively or passively relocated. To adequately avoid active nests, no grading or heavy equipment activity shall take place within at least 250 feet of an active nest during the breeding season (February 1 through August 31), and 160 feet during the non- breeding season.

If burrowing owls occupy any implementing project site and cannot be avoided, active or passive relocation shall be used to exclude owls from their burrows, as agreed to by the City of Perris Planning Department and the CDFG. Relocation shall be conducted outside the breeding season or once the young are able to leave the nest and fly. Passive relocation is the exclusion of owls from their burrows (outside the breeding season or once the young are able to leave the nest and fly) by installing one-way doors in burrow entrances. These one-way doors allow the owl to exit the burrow, but not enter it. These doors shall be left in place 48 hours to ensure owls have left the burrow. Artificial burrows shall be provided nearby. The implementing project area shall be monitored daily for one week to confirm owl use of burrows before excavating burrows in the impact area. Burrows shall be excavated using hand tools and refilled to prevent reoccupation. Sections of flexible pipe shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow. The CDFG shall be consulted prior to any active relocation to determine acceptable receiving sites available where this species has a greater chance of successful long-term relocation. If avoidance is infeasible, then a DBESP would be required, including associated relocation of burrowing owls. If conservation is not required, then owl relocation would still be required following accepted protocols. Take of active nests would be avoided, so it is strongly recommended that any relocation occur outside of the nesting season.

Because the Project site is within the PVCCSP planning area, it will comply with all applicable mitigation measures identified in the PVCCSP EIR in addition to any Project-specific mitigation, as discussed below. By preparing the Habitat Assessment and Focused Burrowing Owl Surveys, the Project has complied with a portion of PVCCSP EIR mitigation measure **MM Bio 2**.

5.3.3 Design Considerations

No specific design measures that would avoid or reduce potentially significant impacts to sensitive biological resources are proposed as part of this Project.

Although not a design consideration, preparation of the Habitat Assessment and Focused Burrowing Owl Surveys for the proposed Project satisfied a portion of PVCCSP EIR mitigation measure **MM Bio 2**.

5.3.4 Thresholds of Significance

The City of Perris has not established local CEQA significance thresholds and instead, defers to the thresholds of significance identified in Appendix G to the State *CEQA Guidelines*. Impacts related to this Project may be considered potentially significant if the proposed Project would:

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or establish native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites; or
- Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance.
- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service;
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan.

5.3.5 Environmental Impacts Before Mitigation

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

No candidate, sensitive, or special status species were documented onsite during the site visits conducted by Cadre in March 2021 and in May 2022. (Cadre (a), p. 1; Cadre (c), pp. 15-17.) Further, the MSHCP has determined that all of the sensitive species potentially occurring on the Project site have been adequately covered. The majority of the Project site occurs within a MSHCP Survey Area for burrowing owl as shown on **Figure 5.3-3 – MSHCP Survey Areas**. (Cadre (a), p. 2; Cadre (c), p. 19.) Focused burrowing owl surveys were conducted for the portion of the Project site south of Harley Knox Boulevard by Cadre in summer 2021; the MDP Lateral-B Stage 4 alignment, however, did not require focus burrowing owl surveys. The results of the burrowing owl surveys are discussed below.

Biological Resources

Because suitable habitat for BUOW was found on the portion of Project site south of Harley Knox Boulevard, focused MSHCP burrowing owl surveys were conducted by Cadre in the summer of 2021 to determine the presence, absence, and status of the species within and adjacent to the Project site pursuant to MSHCP burrowing owl survey protocol and mitigation contained in the PVCCSP EIR (Cadre (a), p. 8). All observations of suitable burrows or dens, natural or manmade, or sightings of burrowing owl were recorded and mapped during the survey. As shown on Figure 5.3-3, suitable burrowing owl burrows potentially used for refugia and/or nesting include foraging habitat were documented in the northwestern corner of the Project site, partially within the MSHCP Survey Area for burrowing owl. According to the MSHCP guidelines, if suitable habitat is present, the biologist should also walk the perimeter of the property, which consists of a 150-meter (approximately 500-foot) buffer zone around the Project site boundary. If permission to access the buffer area cannot be obtained, the biologist shall visually inspect adjacent habitats with binoculars. Results from the habitat assessment indicate that suitable resources for burrowing owl are present throughout the disturbed regions of the Project site including adjacent habitats. (Cadre (b), p. 5.) The MDP Lateral-B Stage 4 extension study area did not contain burrowing owl burrows potentially utilized for refugia and/or nesting. (Cadre (c), p. 16.) The open space area within the March Air Reserve Base/Inland Port Airport (MARB/IPA), near the alignment, contains potential suitable burrowing owl habitat and burrows may be present. (Cadre (c), p. 16.)

No burrowing owl or characteristic sign (such as whitewash, feathers, tracks, or pellets) were detected within or immediately adjacent to the Project site during the 2021 survey effort and during the May 6, 2022 visit for the MDP Lateral-B Stage 4 alignment. (Cadre (b), p. 2; Cadre (c), p. 19.) Nonetheless, pursuant to PVCCSP EIR mitigation measure **MM Bio 2**, a 30-day preconstruction survey will be conducted immediately prior to the initiation of construction to ensure protection for this species which may colonize the site in the future, in compliance with the conservation goals outlined in the MSHCP. If burrowing owls are detected onsite during the 30-day preconstruction survey, a burrowing owl mitigation plan will be developed for relocation.

Additionally, the non-native vegetation documented at the Project site may support nests utilized by birds protected under the MBTA or the California Fish and Game Code, as discussed under Section 5.2.3, above. Thus, because all migratory non-game native birds are protected from "take" under the MBTA, the potential exists for construction-related disturbance to nested birds covered under the MBTA. The CDFW generally recommends avoidance buffers of approximately 500 feet for birds of prey, and 100 to 300 feet for songbirds. Therefore, Project-specific mitigation measure **MM BIO 1**¹ will be implemented requiring construction activities to be scheduled outside of the breeding season of MBTA-covered bird species to the greatest extent feasible and monitoring prior to ground disturbance activities at the site by a qualified biologist if construction is scheduled within the breeding season. Impacts can be minimized or eliminated by avoiding potential impacts to nesting sites at the Project site during construction pursuant to Project-specific mitigation measure **MM BIO 1**.

Conclusion: No candidate, sensitive, or special status species were documented onsite, and the Project site does not occur within a predetermined Survey Area for narrow endemic plant species. Moreover, no burrowing owl or characteristic sign were detected within or immediately adjacent to the Project site.

¹ Project-specific **MM BIO-1** will be implemented in lieu of PVCCSP EIR mitigation measure **MM Bio 1**.

Accordingly, impacts to special-status wildlife species will be **less than significant with** implementation of PVCCSP EIR mitigation measure **MM Bio 2** and Project-specific mitigation measure **MM BIO 1**.

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

The majority of the Project site is characterized as fallow field croplands, disturbed and developed with little to no topographic relief. No MSHCP riparian or riverine resources were documented within or adjacent to the Project site. Additionally, no evidence of vernal pools, seasonal depressions, seasonally inundated road ruts or other wetland features were recorded on the Project site. Consistent with conditions documented onsite, the Project site is characterized as Exeter sandy loam, Greenfield sandy loam, Pachappa fine sandy loam, and Ramona sandy loam, all types possessing well drained substrates (drainage class). No indication of clay substrates or hydric soils were documented within the Project site. Furthermore, a review of historic aerials was conducted to determine if inundated features were present during years of high rainfall when features would certainly be documented) inundated vernal pools, seasonal depressions and road ruts can easily be seen. No sign or indication of inundation was documented within the Project site during a review of historic aerials. (Cadre (a), pp. 9, 18; Cadre (c), p. 8, 17-18.)

Additionally, no features regulated by the Santa Ana RWQCB, CDFW, or USACE were documented within or immediately adjacent to the Project site or off-site study area and no regulatory permits will need to be acquired. (Cadre (a), pp. 18-19; Cadre (c), p. 17.) Therefore, the Project would have **no impact** to riparian habitat or other sensitive natural communities **and no mitigation is required**.

Threshold C: Would the Project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

As discussed in *Threshold 4b*, no features regulated by the Santa Ana RWQCB, CDFW, or USACE were documented within or immediately adjacent to the Project site or off-site study area and no regulatory permits will need to be acquired (Cadre (a), p. 18-19; Cadre (c), p. 17.). Because there are no federally designated wetlands at the Project site, the Project would have **no impact and no mitigation is required**.

Threshold D: Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The Project site is not located adjacent to extensive native open space habitats and does not represent a wildlife corridor between large open space habitats. The Project site is not located within an MSHCP designated core, extension of existing core, noncontiguous habitat block, constrained linkage, or linkage area. The Project site and adjacent land is bordered on all sides by existing road-networks, existing industrial development, and vacant land (Cadre (a), p. 11; Cadre (c), p. 4, 18). Therefore, the Project would have **no impact** to wildlife movement **and no mitigation is required**.

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

The City of Perris adopted Ordinance No. 1123 to establish a local development mitigation fee for funding the preservation of natural ecosystems in accordance with the MSHCP and has also adopted the following General Plan policies for the protection of biological resources:

Goal II	Preservation of areas with significant biotic communities.
Policy II.A	Comply with state and federal regulations to ensure protection and preservation of significant biological resources.
Measure II.A.2	Public and private projects, located in areas with potential for moderate or high plant and wildlife sensitivity, require biological surveys as part of the development review process.
Measure II.A.3	Public and private projects that are also subject to federal or State approval with respect to impacts to Water of the U.S. and/or Streambeds require evidence of completion of the applicable federal permit process prior to the issuance of a grading permit.
Goal III	Implementation of the Multi-Species Habitat Conservation Plan (MSHCP).
Policy III.A	Review all public and private development and construction projects and any other land use plans or activities within the MSHCP area, in accordance with the conservation criteria procedures and mitigation requirements set forth in the MSHCP.

The Project Applicant will be required to pay applicable MSHCP fees pursuant to Ordinance No. 1123. Through compliance with the MSHCP and this ordinance, development within the PVCCSP area will not conflict with any local policies or ordinances protecting biological resources (PVCCSP EIR, 4.3-28). Therefore, impacts will be **less than significant and no mitigation is required**.

Threshold F: Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan?

Western Riverside County MSHCP

The proposed Project site is located within the geographic area covered by the MSHCP. The MSHCP establishes Criteria Area boundaries in order to facilitate the process by which properties are evaluated for inclusion in the MSHCP Conservation Area. The Criteria Area is an area significantly larger than what may be needed for inclusion in the MSHCP Conservation Area. Proposed projects within the Criteria

Area are evaluated using MSHCP Conservation Criteria. The Criteria Area is an analytical tool, which assists in determining which properties require conservation under the MSHCP.

The Project site is located within the Mead Valley Area Plan of the MSHCP; however, it is not located within the MSHCP Criteria Area. This means that the Project site is not in an area contemplated to be set aside for conservation. Therefore, the proposed Project is not subject to the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) or Joint Project Review (JPR) process. (Cadre (a), pp. 1–2; Cadre (c), p. 18.)

In accordance with the MSHCP, the proposed Project was also reviewed for consistency with the MSHCP Section 6.1.2 (Protection of Species Associated with Riparian/Riverine Areas and Vernal Pool), Section 6.1.3 (Protection of Narrow Endemic Plant Species), Section 6.1.4 (Guidelines Pertaining to the Urban/Wildlands Interface), Section 6.3.2 (Additional Survey Needs and Procedures), and Section 6.4 (Fuels Management). The Project's consistency with each of these sections is discussed below.

Section 6.1.2 Protection of Species within Riparian/Riverine Areas and Vernal Pools

Riparian/Riverine areas are lands which contain habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year. Vernal pools are seasonal wetlands that occur in depression areas that have wetland indicators of all three parameters (soil, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portions of the growing season.

Section 6.1.2 of the MSHCP requires habitat assessments (and focused surveys where suitable habitat is present) for riparian bird species with MSHCP survey requirements, including the least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*).

No MSHCP riparian, riverine or vernal pool resources were documented within or immediately adjacent to the Project site or offsite study area and no suitable habitat for the least Bell's vireo, southwestern willow flycatcher, or western yellow-billed cuckoo was detected within or adjacent to the Project site (Cadre (a), p. 2; Cadre (c), pp. 16, 19.) Therefore, development of an MSHCP Determination of Biologically Equivalent or Superior Preservation (DBESP) is not required and no additional surveys are warranted for these species. The proposed Project is consistent with MSHCP Section 6.1.2.

Section 6.1.3 Protection of Narrow Endemic Plant Species

The Project site does not occur within a predetermined Survey Area for MSHCP narrow endemic plant species; therefore, no surveys are required. (Cadre (a), p. 19; Cadre (c), p. 15.) Accordingly, the Project is consistent with MSHCP Section 6.1.3.

Section 6.1.4 Guidelines Pertaining to Urban Wildlands Interface

Section 6.1.4 outlines policies intended to minimize the indirect effects associated with locating development in close proximity to the MSHCP Conservation Area. To minimize these indirect effects, guidelines in Section 6.1.4 of the MSHCP shall be implemented in conjunction with the review of individual public and private development projects that are located in proximity to the MSHCP Conservation Area. The review of such implementing development and infrastructure projects is required to address drainage, toxics, lighting, noise, invasive species, barriers, and grading/land development.

The proposed Project site is not located adjacent to an existing or proposed MSHCP Conservation Area. Therefore, implementation of the proposed Project would not meaningfully impact the biological integrity of the Conservation Area within the Criteria Area. The Project therefore does not conflict with MSHCP Section 6.1.4.

Section 6.3.2 Additional Survey Needs and Procedures

The MSHCP requires additional surveys for certain species if a project is located within areas that have been identified as having suitable habitat for particularly vulnerable species. As discussed above, no state or federally listed threatened or endangered plant species were detected on the Project site and the Project site does not occur within a predetermined survey area for Criteria Area or Narrow Endemic plant species. (Cadre (a), p. 2; Cadre (c), p. 15.)

The Project site is not located within the Amphibian or Mammal Species Survey Areas; therefore, no additional surveys are required for amphibian or mammal species. (Cadre (a), p. 2; Cadre (c), p. 18.)

The majority of the Project site occurs within a predetermined Survey Area for burrowing owl. Suitable burrowing owl habitats potentially used for refugia and/or nesting were identified in the portion of the Project site south of Harley Knox Boulevard during the initial habitat assessment conducted in March 2021 by Cadre (Cadre (a), p. 2). As discussed above, focused burrowing owl surveys were performed at the site by Cadre on August 3, August 5, August 12, and August 19 in 2021, consistent with MSHCP approved methodology. No burrowing owl or characteristic sign were detected within or immediately adjacent to the Project site during the 2021 survey effort. (Cadre (b), p. 6.) The MDP Lateral-B Stage 4 alignment did not contain suitable burrowing owl habitat, however the open space area within MARB/IPA, near the alignment, contains potential suitable burrowing owl habitat and burrows may be present. (Cadre (c), p. 16.) Therefore, PVCCSP EIR mitigation measure **MM Bio 2**, which requires 30-day preconstruction surveys for burrowing owls, will be implemented to reduce impacts to this species to less than significant. Therefore, the Project is consistent with MSHCP Section 6.3.2.

Section 6.4 Fuels Management

Section 6.4 of the MSHCP focuses on hazard reduction for human safety in a manner compatible with public safety and conservation of biological resources. According to the *Fuels Management Guidelines* of the MSHCP, new development that is planned adjacent to the MSHCP Conservation Area, or other undeveloped areas, shall incorporate brush management within the development boundaries and shall not encroach into the MSHCP Conservation Area.

The proposed Project site is not located adjacent to an existing or proposed MSHCP Conservation Area. (Cadre (a), p. 19.) Therefore, the Project would not conflict with MSHCP Section 6.4.

Stephens' Kangaroo Rat Habitat Conservation Plan

The SKR HCP establishes a mechanism for the long-term conservation of the species. Potential impacts to the SKR are mitigated on a regional basis through compliance with the SKR HCP. The Project site is located within the Fee Area boundary of the SKR HCP and the Project Applicant will pay all applicable fees pursuant to County Ordinance 663.10 to mitigate potential impacts to this species. Therefore, the Project is consistent with the SKR HCP and no mitigation is required.

Conclusion: The proposed Project is consistent with MSHCP Section 6.1.2, Section 6.1.3, Section 6.1.4, and Section 6.4. With implementation of PVCCSP EIR mitigation measure **MM Bio 2** to reduce impacts to burrowing owls to less than significant, the proposed Project will be consistent with MSHCP
Section 5.3	City of Perris
Biological Resources	Duke Warehouse at Patterson Avenue and Nance Street DEIR

Section 6.3.2. The Project Applicant will pay the MSHCP and SKR HCP fees as required, and the proposed Project will be consistent with these plans. Therefore, implementation of the proposed Project will not conflict with the provisions of the MSHCP or SKR HCP and impacts will be less than significant with mitigation.

5.3.6 Recommended Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures which could minimize significant adverse impacts (State CEQA Guidelines, Section 15126.4). Mitigation measures were evaluated for their ability to eliminate or reduce the potential significant adverse impacts to specialstatus species and loss of foraging habitat. The proposed Project will implement PVCCSP EIR mitigation measure MM Bio 2 as well as the following Project-specific mitigation measure to eliminate or reduce potentially significant impacts to species to below the level of significance.

MM BIO 1: To reduce potential indirect impacts to regulated nesting birds, if construction is proposed between February 1st and September 15th, the Project Applicant shall retain a qualified biologist to conduct a nesting bird survey(s) no more than three (3) days prior to initiation of ground-disturbing activities to document the presence or absence of nesting birds within or directly adjacent (100 feet) to the Project site impact area. If the survey identifies the presence of active nests, then the qualified biologist shall implement avoidance measures until the nests are no longer occupied and the juvenile birds can survive independently from the nests. Construction outside the nesting season (September 16th to January 31st) will not require pre-construction nesting bird surveys. A copy of the nesting bird survey results report shall be provided to the City of Perris Planning Division.

5.3.7 Summary of Environmental Effects After Mitigation Measures Are Implemented

The proposed Project site is within the area covered by both the MSHCP and SKR HCP and is consistent with all requirements outlined in each of these plans, as discussed in Section 5.3.4, above. Construction and operation of the proposed Project has the potential to impact burrowing owl and other passerine species covered by the MBTA due to the presence of suitable habitat onsite and in the vicinity of the Project site. Accordingly, the Project will implement the feasible and applicable PVCCSP EIR mitigation measures to reduce impacts to these resources. Additionally, although no burrowing owls or characteristic signs were detected within or immediately adjacent to the Project site, implementation of PVCCSP EIR mitigation measure MM Bio 2 and Project-specific mitigation measure MM BIO 1 will ensure that surveys are conducted to determine the presence, or absence, of burrowing owl and other MBTA-covered species at the Project site and to identify avoidance measures to minimize impacts to these species, if necessary.

Based on compliance with the MSHCP in addition to implementation of PVCCSP EIR mitigation measure MM Bio 2 and Project-specific mitigation measure MM BIO 1 identified above, potential adverse impacts associated with special-status species and their habitat resulting from implementation of the proposed Project are reduced to a less than significant level with mitigation.

5.4 Cultural Resources

The focus of the following discussion is related to whether the Project will: cause a substantial adverse change in the significance of historical resources or archaeological resources; disturb any human remains, including those interred outside of dedicated cemeteries.

No comments related to cultural resources were received in response to the Notice of Preparation (NOP) and the Scoping meeting held on February 2, 2022.

In addition to other documents, the following references were used in the preparation of this section of the DEIR:

- Applied Earthworks, *Phase I Cultural Resources Assessment for the Duke Warehouse at Patterson Avenue and Nance Street, City of Perris, Riverside County, California*, July 2022. (Included as Appendix D.1 to this DEIR) [Cited as AE]
- Brian F. Smith and Associates, *Phase I Cultural Resources Assessment for the Perris Valley Channel Lateral B Extension Project, City of Perris, Riverside County, California*, June 22, 2022. (Included as Appendix D.2 to this DEIR) [Cited as BFSA]
- City of Perris, *Perris Comprehensive General Plan 2030, Conservation Element*, Adopted July 12, 2005; *Sustainable Community Amendment* Adopted February 18, 2008. (Available athttps://www.cityofperris.org/home/showpublisheddocument/449/637203139693370000, accessed May 6, 2022.) [Cited as Perris GP 2030]
- City of Perris, 2009. Perris Valley Commerce Center Specific Plan Initial Study. August 2009. (Available at the City of Perris Planning Department.) [Cited as PVCCSP IS]
- City of Perris, Perris Valley Commerce Center Specific Plan Final Environmental Impact Report, State Clearinghouse #2009081086. November 2011, certified January 10, 2012. (Available at <u>https://www.cityofperris.org/home/showpublisheddocument/13874/637455522381730000</u>, accessed May 9, 2022.) [Cited as PVCCSP EIR]
- California Health and Safety Code, *Division 7, Part 1, Chapter 2, Section 7050.5*, amended 1987. (Available at http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC§ionNum =7050.5, accessed May 6, 2022.)
- California Health and Safety Code, *Division 7, Part 1, Chapter 2, Section 7051*, January 1, 2018. (Available at http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC§ionNum =7051, accessed May 6, 2022.)
- California Health and Safety Code, *Division 7, Part 1, Chapter 2, Section 7054*, January 1, 2018. (Available at <u>http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC§ionNum</u> <u>=7054</u>, accessed May 6, 2022.)
- Native American Heritage Commission, *Welcome*, 2022. (Available at <u>http://nahc.ca.gov/</u>, accessed May 6, 2022.) [Cited as NAHC]

• California Public Resource Code, *Division 5, Chapter 1, Section 5024*, amended 1980. (Available at

https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC§ionNum =5024., accessed May 6, 2022.)

- California Public Resources Code, *Division 5, Chapter 1.75, Section 5097.98*, last amended 2009, effective January 1, 2010. (Available at https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=5097.98.&law Code=PRC, accessed May 6, 2022.)
- Office of Historic Preservation, *About the Office of Historic Preservation, 2022*. (Available at <u>http://ohp.parks.ca.gov/?page_id=27961</u>, accessed May 6, 2022.) [Cited as SHPO-A]
- Office of Historic Preservation, *Mission and Responsibilities*, 2022. (Available at http://ohp.parks.ca.gov/?page_id=1066, accessed May 6, 2022.) [Cited as SHPO-B]

5.4.1 Setting

The Project site is situated in the City of Perris in western Riverside County within the Perris Valley. The Project site is located east of the intersection of Patterson Avenue and Nance Street within Section 1, Township 4 South, Range 4 West, within United States Geological Survey (USGS) 7.5' Series Steele Peak and Perris Quadrangles. (AE, p. 1.) The drainage alignment extension of Perris Valley Master Drainage Plan (MDP) Lateral-B Stage 4 is located west of March Air Reserve Base/Inland Port Airport (MARB/IPA) within the Perris Valley Specific Plan (PVCCSP) planning area. Specifically, the proposed drainage alignment runs east of Patterson Avenue, between two commercial parcels. (BFSA, p. 1.) Prehistorically, ethnographically, and historically, the nature and distribution of human activities in the region have been affected by such factors as topography and the availability of water and natural resources. (AE, p. 7.) Therefore, prior to a discussion of the cultural setting, the environmental setting of the area is summarized below.

Environmental Setting

The Project site is underlain by the Southern California Batholith, which is part of the Peninsular Range, and is a massive geological intrusion of granite rock that was formed in the late Cretaceous and uplifted in the early Tertiary, near the northern end of the Peninsular Ranges physiographic province. The physiography of the province is characterized by three northwest-trending mountainous regions composed of stable crustal blocks, separated by active fault zones including (from east to west) the San Jacinto Mountains, the Perris Block, and the Santa Ana Mountains. The San Jacinto and Elsinore fault zones separate the three regions. The topography of the Perris Block, which directly underlies the Project, consists of bedrock highlands and isolated hills that are separated by alluvium-filled valleys. (AE, p. 7.)

The primary drainage in the San Jacinto Valley is the San Jacinto River located approximately 5 miles southeast of the Project area. The San Jacinto River's headwaters are in the San Jacinto Mountains and flows northwesterly through the San Jacinto Valley and then to the west and southwest until it empties into Lake Elsinore, a sink in the Elsinore fault zone. Levees built between 1919 and 1939 altered the course of the river, shifting it as much as a mile south of its historical course. Prior to historical hydrological modifications, the San Jacinto River flowed perennially only in the eastern portion of the valley. During the wet season, the river flowed farther than today and collected in the northern part of the

valley (about 5 miles northwest of the town of San Jacinto) in an elongate depression forming a shallow ephemeral lake now known as Mystic Lake. Overflow from the lake drained to the southwest, eventually reaching Lake Elsinore. Because the lake existed before 1895, which predates groundwater withdrawal in the valley, it is inferred that the depression is of tectonic origin. (AE, p.7.)

Based on Web Soils Survey data retrieved from the U.S. Department of Agriculture Natural Resources Conservation Service, the Project area includes three soil series: Greenfield, Pachappa, and Ramona soils, all of which belong to the Alfisol taxonomic order and consist mostly of minerals and are primarily found in late-Pleistocene deposits or surfaces. (AE, p. 7.)

Prehistoric Setting

Native American occupation of the region can be divided into six periods: Early Archaic (9500–7000 B.P.); Middle Archaic (7000–4000 B.P.); Late Archaic (4000–1500 B.P.); Saratoga Springs (1500–750 B.P.); Late Prehistoric (750–400 B.P.); and Protohistoric (circa 400 to 150 B.P.), which ended in the ethnographic period. (AE, p. 8.)

Early Archaic Period (ca. 9,500 to 7,000 B.P.)

During the Early Archaic Period small, highly mobile groups traveled widely, utilizing highly portable tool kits to procure and process critical resources, with brief and anticipated intervals of seasonal sedentism near predictable water locations. Due to isolated locations where the conditions for occupation were met, Early Archaic sites are rare compared to later periods of prehistory. (AE, p. 8.)

Middle Archaic Period (ca. 7,000 to 4,000 B.P.)

The Middle Archaic Period is associated with the margins of pluvial lakes and now-extinct springs. Artifacts include leaf-shaped bifacial knives, atlatl dart points, split cobble choppers and scrapers, scraper-planes, and small milling slabs and manos. Most sites from this interval are small surface deposits of lithic artifacts, suggesting temporary and perhaps seasonal occupation by small groups of people. (AE, p. 8.)

Late Archaic Period (ca. 4,000 to 1,500 B.P.)

The Late Archaic Period can be characterized by large occupation sites located adjacent to permanent water sources such as perennial springs and streams. Diagnostic projectile points included large dart points likely used with atlatls. (AE, p. 8.)

Saratoga Springs Period (ca. 1,500 to 750 B.P.)

In the early years of this period, cultural trends were largely a continuation of the developments that began during the Late Archaic Period, expect for the adaptation of the bow and arrow. Shoshonean language speakers also likely moved into the vicinity of the Project. Settlement shifted away from marginal desert areas. (AE, p. 8.)

Late Prehistoric Period (ca. 750 to 400 B.P.)

The Late Prehistoric Period (750–400 B.P.) saw a subsequent population increase, definitive use of bow and arrow technology, and a general westward movement of Patayan populations. (AE, p. 8.)

Protohistoric Period (ca. 400 to 150 B.P.)

Sedentism intensified during the Protohistoric Period, as did hunting with bow and arrow. Exploitation of acorns became widespread, as indicated by an abundance of mortars and pestles. Populations became

more sedentary, and settlement shifted to small villages with resource catchment areas around them. Ceramic technology first appeared in the region around 350 B.P. This period ended in A.D. 1769 when Spanish settlement began in Upper California (also referred to as Alta California). (AE, p. 8.)

Ethnographic Setting

The Project area is situated within the ancestral cultural territory of the Luiseno and Cahuilla. Both of these tribes speak languages of the Cupan branch of the Northern Uto-Aztecan family, part of the larger Uto-Aztecan language-family. The Luiseño and Cahuilla were hunters, collectors, and harvesters.

The Luiseño village was organized as a clan tribelet—a group of people patrilineally related who owned an area in common and who were politically and economically autonomous from neighboring groups. The Cahuilla had nonpolitical, nonterritorial moieties that governed marriage patterns as well as patrilineal clans and lineages. Clans owned land in valley, foothill, and mountain areas, providing them with the resources of many different ecological niches. Although any given village had access to only some of the necessary resources, briskly flourishing systems of trade and exchange gave them access to neighboring and distant resources. (AE, p. 9.) A more comprehensive background can be found in Appendix D.1 and Appendix D.2.

Historical Setting

The historical background of the Project region provides a context for understanding local settlement from the time that Spanish explorers first laid claim to the territory through the development of the modern landscape. The Project site is in a historically dry, remote area away from larger centers of development and settlement. From the era of Spanish exploration to the present, regional history has been influenced by important transportation routes through the area as well as settlement, homesteading, and agriculture. The history of the Project area relates to themes of regional development and agriculture along with road, railway, electrical, and water infrastructure construction. (AE, p. 9.)

The Project area is located in a mixed commercial, industrial and residential land use area. The subject parcels are all currently unimproved or vacant except for three-parcels, totaling 2.7 acres, located in the northwest corner which is currently utilized for semi-truck trailer storage. The Project area is located within the PVCCSP planning area of the City of Perris. The PVCCSP was adopted by the City of Perris on January 12, 2012 (Ordinance No. 1284). Environmental impacts resulting from implementation of allowed development under the PVCCSP have been evaluated in the Perris Valley Commerce Center Specific Plan Final Environmental Impact Report (PVCCSP EIR) (State Clearinghouse No. 2009081086), which was certified by the City of Perris in January 2012. The PVCCSP EIR analyzes the direct and indirect impacts resulting from implementation of the allowed development under the PVCCSP. Measures to mitigate, to the extent feasible, the significant adverse project and cumulative impacts resulting from that development are identified in the EIR. The PVCCSP EIR includes mitigation measures for the study and protection of cultural resources.

California History

Exploration of Southern California coastline during the sixteenth and seventeenth centuries was the basis for the Spanish claim to the region. In the eighteenth century, Spain established settlements along the northern coastline of Alta California to preclude encroachment by the Russian and British fur-traders entering the region from the northwest. Therefore, in the latter half of the eighteenth century, Spain and the missionaries of the Franciscan Order founded a series of pueblos (towns), presidios (military camps)

and missions (religious centers) along the California coast, beginning at San Diego in 1769 and extending northward. (AE, p.10.)

In 1821 ports in San Diego and Monterey where established and opened for foreign trade. American ships docked at ports to purchase tallow and hides. Settlers would come to California, becoming citizens and owners of large ranchos. Conflicts between the Californios, Hispanic settlers, and the central government in Mexico City led to a series of uprisings culminating in the Bear Flag Revolt of June 1846. However, Mexican control of California had diminished significantly the year before when the Californios expelled Manuel Micheltorena, the last Mexican governor. (AE, p. 10.)

In 1848 the Treaty of Guadalupe Hidalgo was signed, and the Mexican American War ended. In the late 1840's California's cattle ranching industry saw a decline which over half a century represented the currency and staple of the rancho system. Drought conditions exacerbated provisions in cattle ranching in the 1850s to 1860s. In 1850, California became the thirty-first state in the Union, and many of the earlier Spanish and Mexican land grants were challenged by the American Board of Land Commissioners. In Southern California, San Diego organized into a county in 1852; in 1853, San Bernardino followed suit. Riverside County was formed in 1893 and carved out of portions of San Bernardino and San Diego counties, with the city of Riverside as the county seat. (AE, p. 10.)

Regional History

Even after statehood, transportation options were limited, and reliable water sources hindered the regional settlement of western Riverside County. With the construction of the rail lines in the 1870s, and the construction of irrigation canals, settlement was stimulated which secured the region's agricultural economy. (AE, p. 10.)

The first transcontinental Southern Pacific Railway line was built in 1870 that entered to Perris and Colton. The Riverside Colony was founded along with the expanding agricultural industry within the region that required a stable supply of water. By 1874, Riverside entrepreneurs formed the Riverside Land and Irrigation Company that established a series of canal systems. (AE, pp. 10-11.)

During this period, population increased rapidly in the City of Los Angeles, which resulted in an influx of settlers into the San Jacinto and Perris valleys. At the time of the arrival of the railroad to the region in the 1880s, settlers focused on grain production which was later followed by citrus and other orchard farming. Due to the lack of rainfall levels in previous years, in 1905 new pumping technologies were made available due to petroleum distillate internal combustion engines. This allowed individual farmsteads in Southern California to pump water from farm wells in increasingly larger volumes. (AE, p. 11.)

During the years from about 1908 through American entry into World War I in 1917, a sharp surge in homestead filings is evidence of the renewed interest in farm settlement and farming in California, including the San Jacinto and Perris valleys. Due to the increase in automobiles and the brighter financial prospects for farming during the World War I years, Southern California saw an increase in population growth. (AE, p. 11.)

Regional urban growth in the 1920s helped local farmers prosper. However, the years 1922–1924 were particularly dry, which set off a temporary collapse of hydroelectric power generation. In the late 1920s, even before the onset of the Great Depression, tax assessor records reflect that farm properties in the region were at least temporarily coming into the hands of banks and other financial institutions. During

the worst years of the Depression in the early 1930s, farmers increasingly lost their land to creditors. The crisis in agriculture during the Depression was particularly difficult for Southern California dry farmers. (AE, p. 11.)

After 1944, a prolonged period of lower-than-average winter rainfall prompted local government officials to improve regional water access. The Colorado River Aqueduct project brought water to the region beginning in the early 1940s. By the early 1950s, the Eastern Municipal Water District delivered that water to the Perris Valley. Farmers in the Project area irrigated their fields with the assistance of this new, more stable water supply, growing alfalfa, potatoes, watermelons, and sugar beets, which became the mainstay crops of the Perris Valley region. Throughout much of the twentieth century, agriculture continued to be a major industry in the Perris Valley. (AE, p. 12.)

The post-World War II era ushered in a new boom in commercial, industrial, and residential development in and near Southern California's urban centers, including the Inland Empire. This development forced Perris Valley's historical town centers outward. Once-rural areas took on a more semirural character, dotted by small "mini-ranch" subdivisions. In more recent years, continued housing and urban development have swallowed up former agricultural land at an exponential rate, forever changing the character of the region. Substantial regional growth has also necessitated the construction of numerous artificial lakes, reservoirs, and other forms of municipal water storage to capture and retain water during peak rain years to meet demands. During the first decade of 2000, inexpensive land and housing transformed many of the towns in southwestern Riverside County into "bedroom" communities for those working in Los Angeles, Orange, and San Diego counties. (AE, p. 12.)

Road Development in Perris Valley

The earliest roadways in the Perris Valley were wagon roads developed in the mid-nineteenth century that connected the Riverside area to San Jacinto to the east, Temescal to the west, and Temecula to the south. The arrival of the railroad in the 1880s spurred growth in the valley, and the new agricultural economy facilitated the need for a transportation network that included a road system. By the turn of the twentieth century, a regional road system linked the communities of western Riverside County. In the Perris Valley, a road along the Southern California Railway San Bernardino to Temecula line connected Lake Elsinore, via Perris, to Riverside. By 1904, a web of east–west and north–south roads, including Patterson Avenue, Nance Street, and Nevada Avenue, radiated out from the Southern California Railway, providing farmers in the Project easier access to transport their goods to market. By 1938, a two-lane graded dirt highway, now signed U.S. Highway 395, paralleled the railroad and provided farmers two options for transporting their goods to market. (AE, p. 12.)

U.S. Highway 395

Historically referred to as the Three Flag Highway, Highway 395 is a north–south route that originally ran from San Diego, California, through several western states to the U.S.-Canadian border near Laurier, Washington. Although state highway agencies and the federal government have initiated many expansions and realignments of Highway 395 in California, the highway remains largely unchanged in other states. In 1939, the federal government passed legislation officially designating the roadway. In Perris Valley, this meant the road that had paralleled the ATSF Railway line (formerly a branch of the Southern California Railway) was now officially U.S. Highway 395. Segments of U.S. 395 in Southern California, including Perris Valley, remained two-lane dirt roads until World War II. (AE, p. 13.)

During World War II, improvements to U.S. 395 were made to facilitate transport between San Diego's naval base, Fallbrook's weapons depot, and what is now known as the March Air Reserve Base in Perris

Valley. In response, they authorized a modernization effort under the War Production Board to be facilitated by the California Division of Highways. Within only a few months, the California Division of Highways widened a 10-mile portion of the highway between Riverside and Perris Valley from two lanes to a four-lane divided roadway nicknamed the Cannonball Highway. (AE, p. 14.)

After World War II, Southern California's population growth and resulting urban sprawl altered and increased traffic demands throughout the region. By 1952, the California Division of Highways routed U.S. 395 on a new, more direct route between Temecula and Perris, rather than through Elsinore. During the 1960s, California officials authorized the expansion of U.S. 395 in Perris Valley prior to the construction of Interstate 15. The Federal Aid Highway Act of 1968 expanded the interstate network further and resulted in the extension of Interstate 15 along the U.S. 395 alignment. (AE, p. 15.)

In 1974, the California Department of Transportation [Caltrans] temporarily resigned Highway 395 as Interstate 15E. Due to California highway numbering conventions; however, this segment was known as Route 194 until 1982 when Caltrans deemed the northernmost portion of Interstate 15E, including the segment in Perris Valley, freeway standard and resigned it as Interstate 215. In 1994, Caltrans renamed the remainder of the old alignment Interstate 215 after it was brought to freeway standard. The current alignment of Interstate 215 follows the same path as the original Highway 395. Although the segments of Highway 395 within Riverside County were decommissioned in favor of Interstate 215, the California State Legislature recognized the original alignment as a historic route in 2008. (AE, p. 15.)

Southern California Edison

Southern California Edison (SCE) is a public utility company headquartered in Rosemead, California. (AE, p.15.) At the time of its incorporation in 1909, SCE provided electricity to over 600,000 people in five counties. Today, SCE has an approximate service territory of 50,000 square miles. It serves roughly 15 million customers across 14 counties in central, coastal, and Southern California, including the Project area. SCE provides electricity to its customers through an electrical power conveyance system that includes steam plants, hydroelectric facilities, and numerous substations. (AE, p. 15.)

Electrical Power Conveyance Systems

Electrical power conveyance systems deliver electricity to individual properties, also known as power grids. (AE, p. 15.) SCE conveys electricity through the power grid using a system of transmission, subtransmission, and distribution lines. Per SCE's current guidance, transmission lines carry electricity at voltages higher than 160 kilovolt (kV) and consist of high-voltage conductors typically mounted on steel lattice poles or towers. Subtransmission lines serve as the mid-level conveyance feature and carry electricity at voltages between 50 and 160 kV. Subtransmission lines can be mounted on steel lattice towers, steel lattice poles, or wood poles. Distribution lines convey electricity at voltages under 50 kV and are usually mounted on single or double wood poles. (AE, p. 16.)

Electrical power conveyance systems are continuously upgrading equipment to respond to technological advances as well as changing energy demands. Changes to the power grid typically occur incrementally, and subtransmission lines, distribution lines, and substations are installed or upgraded separately as independently operating facilities. (AE, p. 16.)

Distribution Lines

Distribution lines are the final stage of electricity delivery to residential and commercial customers. As opposed to the high-voltage, long-distance conveyance achieved with transmission lines, distribution lines can only carry low-voltage electricity over short distances. Distribution lines are typically supported by wood poles in single or double configurations. (AE, p. 16.)

Distribution lines on wood poles represent the earliest form of electrical transmission technology used in California. The design was based off of the existing telegraph transmission technology, that conveyed low-voltage electricity over short distances. However, borrowing existing technology and design to develop distribution lines mounted on wood poles are commonplace utilitarian structures that do not represent a notable period of electrical engineering history. (AE, p. 16.)

Project Specific History

Historical sources have documented the Project area through aerial photographs during the following years; 1938, 1958, 1962, 1967, 1976 and 2004. These photographs show that the Project area had primarily been used for agricultural purposes from at least 1938 until approximately 2009. By 1953, a farm complex is visible just outside the Project area to the east of Nevada Avenue. The only built element noted on historic maps and images within the Project area appears to be auxiliary buildings/structures associated with this farm. Architectural remnants of these auxiliary farm buildings/structures (AE-4278-02) were located during the archaeology survey within APN 314-153-048. Additionally, a cluster of four concrete irrigation standpipes and a sawn-off utility pole (AE-4278-01) were identified during the archaeology survey at the southwest corner of a formerly cultivated farm field within APN 314-153-040. Additionally, according to historical maps, three streets within the Project area, Patterson Avenue, Nevada Avenue, and Nance Street are all depicted unnamed on the 1901 USGS Elsinore topographic quadrangle. (AE, pp. 17-18.)

Sources Consulted

Cultural Resource Literature and Records Search

As required by PVCCSP EIR mitigation measure **MM Cultural 1**¹ a Phase I Cultural Resources Assessment was prepared for the proposed Project by Applied Earthworks (AE) and Brian F. Smith Associates (BFSA) found in Appendix D.1 and Appendix D.2, respectively. The objectives of the cultural resource investigation for the proposed Project site was to: complete a cultural resource inventory of the Project area to identify and document all cultural resources that may be impacted or adversely affected by the proposed Project, and evaluate the significance of the identified cultural resources on the Project site to determine if any identified resources are eligible for listing on the California Register of Historical Resources (CRHR). Accordingly, AE conducted an archaeological literature and records search at the Eastern Information Center (EIC) at the University of California, Riverside (UCR), for recorded cultural resources within a 0.5-mile radius of the Project site herein referred to as "Study Area"; requested a Sacred Lands Files search from the Native American Heritage Commission (NAHC); and performed a cultural resources pedestrian survey of the Project site (Pedestrian survey date: February 16,2022). (AE, pp. ii, 17.)

During the February 16, 2022 pedestrian survey, six cultural resources were identified within the Project site. Of the six, two were considered historical archaeological sites, and four built environment sites. On March 17, 2022 an additional intensive survey was performed on the four built environment resources previously identified. A subsequent pedestrian survey for the MDP Lateral-B Stage 4 extension was conducted by BFSA on June 2, 2022. During this survey no cultural resources were identified within the MDP Lateral-B Stage 4 extension site. (BFSA, p. 30.) All cultural resources identified within the Project

¹ Refer to Section 5.4.4, Related Regulations under the PVCC Specific Plan subheading.

area were evaluated for significance under the CRHC criteria and considered to be ineligible for listing. (AE, p. ii; BFSA, pp. 25-26.)

Prior to the pedestrian survey, a cultural resource literature and records search of the California Historical Resource Information System (CHRIS) was conducted at the EIC on September 10, 2021 and on June 10, 2022 encompassing the entire Project site, including the MDP Lateral-B Stage 4 extension, and an additional 0.5-mile radius. Records indicate 34 previous cultural resource investigations were conducted within a 0.5-mile radius of the Project site between 1981 and 2017 (refer to Table 3-1 of Appendix D.1). Two of the previous studies included portions of the Project site. Thus, approximately 35 percent of the Project area has been previously investigated. (AE, p.17.) The archaeological records search results from AE and BFSA indicated a total of 35 previously recorded cultural resources are located within the Study Area as shown in **Table 5.4-A – Cultural Resources in the Study Area**, below. Approximately about 16 of the 35 resources are historical sites, 15 prehistoric sites, and three built environment resources were also identified within the Study Area. (AE, pp. 17-20, BFSA, pp. 30-31.) One of the sites, P-33-024092, remnant features of an irrigation system, is adjacent to, but outside the Project site. (AE, pp. ii, 17-20.)

Primary	Trinomial	Description				
	Prehistoric					
P-33-003500	CA-RIV-3500					
P-33-003501	CA-RIV-3501					
P-33-	CA-RIV-					
005386/5387/P-33-	5386/5387/RRIV-					
028891	12941					
P-33-005389	CA-RIV-005389					
P-33-005390	CA-RIV-005390					
P-33-005391	CA-RIV-005391					
P-33-005392	CA-RIV-005392	Prehistoric bedrock milling feature				
P-33-013446	CA-RIV-007465					
P-33-013447	CA-RIV-007466					
P-33-013448	CA-RIV-007467					
P-33-013449	CA-RIV-007468					
P-33-013450	CA-RIV-007469					
P-33-013788	CA-RIV-007549					
P-33-016250	CA-RIV-008401					
P-33-016251	CA-RIV-008402					
		Historical Sites				
P-33-001183	-001183 CA RIV1183H Remains of a railroad siding					
P-33-007649		Camp Haan Barracks				
P-33-007830	CA-RIV-005826H	Historic Trash Scatter				
P-33-008700		Site of demolished concrete base pad and standpipe				
P-33-008701		Steel pipeline with riveted seams				
P-33-008702		Remnants of a house, concrete pad and debris				
P-33-015743	CA-RIV-8196H	Remains of a historical railroad				
P-33-016239	CA-RIV-8390	Remnants of a house, concrete pad and debris				
P-33-020334	CA-RIV-010260H	Historic well/cistern				
P-33-024092		Irrigation systems				
P-33-024850	CA-RIV-012870	Historic water conveyance system				
P-33-024853		Historic Engineering structure				
P-33-024854		Historic Engineering structure				
P-33-024867		Segment of Oleander flood control channel				

Table 5.4-A – Cultural Resources in the Study Area

P-33-028172		Refuse deposit			
P-33-028588	CA-RIV-12877H	Two wood utility poles			
P-33-028589 CA-RIV-12878H Two upright steel pipes					
Built-Environmental Resources					
P-33-007639	P-33-007639 Residence at 18391 Patterson				
P-33-007650	P-33-007650 Three former Camp Haan Barracks				
P-33-024868		Segment of Webster Avenue			

Source: AE, Table 3-2; BFSA, Table 1: BFSA, Appendix C

Map Review

Additional research of development and land use in the Study Area included review of historical maps and aerial photographs available in online archives. Maps consulted included topographic quadrangle maps available online from the USGS National Geological Database. Historical aerial photographs were accessed from the Geospatial Collection of the University of California, Santa Barbara Library and Historical aerial by NetrOnline. Aerial images and maps show that the Project area has primarily been in use for agricultural purposes until the present time. A farm complex is visible just outside the Project area to the east of Nevada Avenue on a 1953 USGS map, and by 1958 additional buildings are visible adjacent to the farm, across the street on the west side of Nevada Avenue within the Project area. (AE, p. 20.) The MDP Lateral-B Stage 4 extension alignment did not historically contain structures. (BFSA, pp 31-32.)

Native American Communication

As part of the Phase I Cultural Resources Assessment, in order to determine if any known Native American cultural properties (e.g., traditional use or gathering areas, places of religious or sacred activity, etc.) are present within or adjacent to the Project area, AE contacted the NAHC on September 10, 2021 for a review of the Sacred Lands File (SLF). The NAHC responded on October 13, 2021, noting that the SLF search failed to indicate the presence of Native American cultural resources in the immediate Project area. The NAHC requested that Native American individuals and organizations be contacted to elicit information and/or concerns regarding cultural resource issues related to the proposed Project. After review of the NAHC Native American Contact list, 14 individuals and organizations were contacted. A letter describing the Project and asking these individuals and organizations for their input was sent via mail and electronic mail on February 22, 2022. A second attempt at correspondence was made on March 16, 2022, to organizations who had not responded to the initial request on February 22, 2022. (AE, p. 21.) **Table 5.4-B – Native American Agencies Contacted** below details all native American agencies that were contacted, and the five responses received.

	-
Agency	Comment
Agua Caliente Band of Cahuilla Indians (Patricia Garcia-Plotkin, Tribal Historic Preservation Officer)	Indicated that the Project area is not within the boundaries of the
	ACBCI reservation. However, it is within the Tribe's Traditional Use
	Area. As such a copy of the records search and cultural resource
	documentation generated in connection with this Project as well as a
	cultural resources inventory of the Project area by a qualified
	archaeologist prior to any development activities is requested.

Table 5.4-B – Native American Agencies Contacted

Duke Warehouse at Patterson Avenue and Nance Street DEIR

Augustine Band of Cahuilla Indians (Amanda Vance, Chairperson)	Indicated they have no knowledge of cultural resources in the area. However, wish to be contacted for further evaluation in the event of any new discoveries.		
Cabazon Band of Mission Indians (Doug Welmas, Chairperson)	No Response		
Cahuilla Band of Indians (Daniel Salgado, Chairperson)	No Response		
Los Coyotes Band of Cahuilla and Cupeño Indians (Shane Chapparosa, Chairman)	No Response		
Morongo Band of Mission Indians (Ann Brierty, Tribal Historic Preservation Officer)	No Response		
Pala Band of Mission Indians (Shasta Gaughen, Tribal Historic Preservation Officer)	Indicated that the Project was outside their Traditional Use Area boundaries. As such they defer to other tribes in closer proximity.		
Pechanga Band of Luiseno Indians (Ebru Ozdil, Cultural Analyst)	No Response		
Quechan Tribe of the Fort Yuma Reservation (Jill McCormick, Historic Preservation Officer)	No comment; Defers to local tribes in the area		
Ramona Band of Cahuilla (Joseph Hamilton, Chairperson)	No Response		
Rincon Band of Luiseno Indians (Cheryl Madrigal, Tribal Historic Preservation Officer)	Indicated that the Project is located within the Luiseno territory and the tribe's specific area of historic interest. However, the Tribe has no knowledge of cultural resources within the Project area, but suggests a records search be conducted.		
Santa Rosa Band of Cahuilla Indians (Lovina Redner, Tribal Chair)	No Response		
Soboba Band of Luiseño Indians (Joseph Ontiveros, Tribal Historic Preservation Officer)	No Response		
Torres-Martinez Desert Cahuilla Indians (Thomas Tortez, Chairperson)	No Response		

Source: AE, pp. 21-22

On June 10, 2022, BFSA contacted the NAHC regarding the MDP Lateral B Stage 4 extension to determine if any known Native American cultural properties are present within or adjacent to the drainage alignment. As of the date of BFSA's report (June 22, 2022), the results from the NAHC have not been received. (BFSA, p. 32.)

5.4.2 Related Regulations

Numerous federal laws and regulations protect cultural resources and Native American concerns for such resources. With a few exceptions, many State of California laws and regulations that apply to cultural resources mirror the federal statutes.

Federal Regulations

National Historic Preservation Act

The National Historic Preservation Act of 1966 (NHPA) (54 U.S.C. Sections 300101 et seq.) is legislation intended to preserve historical and archaeological sites in the United States of America. The act created the National Register of Historic Places, the list of National Historic Landmarks, and the State Historic

Preservation Offices (SHPO). Among other things, the act requires federal agencies to evaluate the impact of all federally funded or permitted projects on historic properties (buildings, archaeological sites, etc.) through a process known as "Section 106 Review."

National Register of Historic Places

Developed in 1981 pursuant to Title 36 CFR Section 60, the NRHP provides an authoritative guide to be used by federal, state, and local governments, private groups, and citizens to identify the nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment. It should be noted that the listing of a private property on the NRHP does not prohibit any actions which may otherwise be taken by the property owner with respect to the property. The listing of sites in California to the National Register is initiated through an application submitted to the State Office of Historical Preservation. Applications deemed suitable for potential consideration are handled by the State Historic Preservation Officer. All NRHP listings for sites in California are also automatically added to the California Register of Historical Resources by the State of California. The listing of a site on the NRHP does not generally result in any specific physical protection. Among other things, however, it does create an additional level of CEQA (and National Environmental Policy Act (NEPA) review to be satisfied prior to the approval of any discretionary action that might adversely affect the resource.

State Regulations

California Environmental Quality Act

CEQA requires the lead agency to determine whether the proposed development project will have a significant effect on the environment. Public Resources Codes Sections 21083.2 and 21084.1 deal with the definitions of unique and non-unique archaeological resources and historical resources, respectively. Public Resources Code Section 21083.2 directs the lead agency to determine whether the project may have a significant effect on unique archaeological resources. If the lead agency determines that the project may have a significant effect on unique archaeological resources Code Section 21084.1 directs the lead agency to determine whether the project may have a significant effect on unique archaeological resources, the environmental impact report shall address the issue of those resources. Public Resources Code Section 21084.1 directs the lead agency to determine whether the project may have a significant effect on historical resources, irrespective of the fact that these historical resources may not be listed or determined to be eligible for listing in the CRHR, a local register of historical resources, or they are not deemed significant pursuant to criteria set forth in Public Resources Code Section 5024.1(g).

State Historic Preservation Office

The State Historic Preservation Office (SHPO) is a state governmental function created per the NHPA, which called for the creation of a state agency to implement provisions of the law, including the preparation of a comprehensive historic preservation plan and a statewide survey of historical resources (SHPO-A). SHPO administers the National Register of Historic Places, the California Register of Historical Resources, the California Historical Landmarks, and the California Points of Historical Interest programs. The responsibilities of the SHPO include identifying, evaluating, and registering historic properties; ensuring compliance with federal and state regulatory obligations; encouraging the adoption of economic incentives programs designed to benefit property owners; encouraging economic revitalization by promoting a historic preservation ethic through preservation education and public awareness and, most significantly, by demonstrating leadership and stewardship for historic preservation System (CHRIS), which includes the statewide Historical Resources Inventory database. (SHPO-B).

Native American Heritage Commission

The Native American Heritage Commission (NAHC), created by statute in 1976, is a nine-member body, appointed by the Governor, to identify and catalog cultural resources (i.e., places of special religious or social significance to Native Americans, and known graves and cemeteries of Native Americans on private lands) in California. The Commission is charged with the duty of preserving and ensuring accessibility of sacred sites and burials, the disposition of Native American human remains and burial items, maintain an inventory of Native American sacred sites located on public lands (i.e. Sacred Lands File), and review current administrative and statutory protections related to these sacred sites. (NAHC 2022).

Unique Archaeological Resources Criteria

CEQA requires the lead agency to consider whether a project will have a significant effect on unique archaeological resources and to avoid unique archaeological resources when feasible or mitigate any effects to less-than-significant levels per Public Resources Code Section 21083.2. Public Resources Code Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

Human Remains

According to State CEQA Guidelines Section 15064.5, all human remains are assigned special importance and specific procedures are to be used when Native American remains are discovered. These procedures are discussed within Public Resources Code Section 5097.98. Public Resources Code Section 5097.98 addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the NAHC to resolve disputes regarding the disposition of such remains.

California Health and Safety Code (Sections 7050.5, 7051, and 7054)

California Health and Safety Code Sections 7050.5, 7051, and 7054 collectively address the illegality of interference with human burial remains (except as allowed under applicable sections of the Public Resources Code), as well as the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project, treatment of the remains prior to, during and after evaluation, and reburial procedures.

California Public Resources Code (Section 5097.98)

California Public Resources Section 5097.98 addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction. This Section also establishes procedures to be implemented if Native American skeletal remains are

discovered during construction of a project and establishes the NAHC to resolve disputes regarding the disposition of such remains. It has been incorporated into State CEQA Guidelines Section 15064.5(e).

Local Regulations

Perris Comprehensive General Plan 2030

The following are applicable measures from the Perris Comprehensive General Plan 2030 (Perris GP 2030) related to cultural resources:

Conservation Element

Measure IV.A.1	For all private and public projects involving new construction, substantial grading, or demolition, including infrastructure and other public service facilities, staff shall require appropriate surveys and necessary site investigations in conjunction with the earliest environmental document prepared for a project.
Measure IV.A.2	For all projects subject to CEQA, applicants will be required to submit results of an archaeological records search request through the Eastern Information Center, at the University of California, Riverside.
Measure IV.A.3	Require Phase I Surveys for all projects located in areas that have not previously been surveyed for archaeological or historic resources, or which lie near areas where archaeological and/or historic sites have been recorded.

Perris General Plan Historic Points of Interest

The Perris Valley Historical Association and the Riverside County Office of Historic Preservation have identified historic sites and structures within the City of Perris. All of these structures exist in the Downtown area and are not located in the vicinity of the proposed Project site. The Santa Fe Depot was listed in 1994 on the National Register of Historic Places (NRHP) and is currently home to the Perris Valley Historical Museum. The Southern Hotel is listed in the California Register of Historic Places.

PVCCSP Standards and Guidelines and Mitigation Measures

There are no PVCCSP Standards and Guidelines applicable to the analysis of cultural resources. However, the PVCCSP EIR includes mitigation measures **MM Cultural 1**, **MM Cultural 2**, **MM Cultural 3**, **MM Cultural 4**, and **MM Cultural 6** to ensure that Projects located within the PVCCSP planning area eliminate or reduce potential adverse impacts related to cultural resources to less than significant levels.

MM Cultural 1 Prior to the consideration by the City of Perris of implementing development or infrastructure projects for properties that are vacant, undeveloped, or considered to be sensitive for cultural resources by the City of Perris Planning Division, a Phase I Cultural Resources Study of the subject property prepared in accordance with the protocol of the City of Perris by a professional archeologist² shall be submitted to the City of Perris

² For the purpose of this measure, the City of Perris considers professional archaeologists to be those who meet the United States Secretary of the Interior's standards for recognition as a professional, including an advanced degree in anthropology, archaeology, or a related field, and the local experience necessary to evaluate the specific project. The professional archaeologist must also meet the minimum criteria for recognition by the Register for Professional Archaeologists (RPA), although membership is not required.

Planning Division for review and approval. The Phase I Cultural Resources Study shall determine whether the subject implementing development would potentially cause a substantial adverse change to any significant paleontological, archaeological, or historic resources. The Phase I Cultural Resources Study shall be prepared to meet the standards established by Riverside County and shall, at a minimum, include the results of the following:

- 1. Records searches at the Eastern Information Center (EIC), the National or State Registry of Historic Places and any appropriate public, private, and tribal archives.
- 2. Sacred Lands File record search with the NAHC followed by project scoping with tribes recommended by the NAHC.
- 3. Field survey of the implementing development or infrastructure project site.

The proponents of the subject implementing development projects and the professional archaeologists shall also contact the local Native American tribes (as identified by the California Native Heritage Commission and the City of Perris) to obtain input regarding the potential for Native American resources to occur at the project site.

Measures shall be identified to mitigate the known and potential significant effects of the implementing development or infrastructure project, if any. Mitigation for historic resources shall be considered in the following order of preference:

- 1. Avoidance.
- 2. Changes to the structure provided pursuant to the Secretary of Interior's Standards.
- 3. Relocation of the structure.
- 4. Recordation of the structure to Historic American Buildings Survey (HABS)/Historic American Engineering Record (HAER) standard if demolition is allowed.

Avoidance is the preferred treatment for known and discovered significant prehistoric and historical archaeological sites, and sites containing Native American human remains. Where feasible, plans for implementing projects shall be developed to avoid known significant archaeological resources and sites containing human remains. Where avoidance of construction impacts is possible, the implementing projects shall be designed and landscaped in a manner, which would ensure that indirect impacts from increased public availability to these sites are avoided. Where avoidance is selected, archaeological resource sites and sites containing Native American human remains shall be placed within permanent conservation easements or dedicated open space areas.

The Phase I Cultural Resources Study submitted for each implementing development or infrastructure project shall have been completed no more than three (3) years prior to the submittal of the application for the subject implementing development project or the start of construction of an implementing infrastructure project.

MM Cultural 2 If the Phase I Cultural Resources Study required under **MM Cultural 1** determines that monitoring during construction by a professional archaeologist is needed for the implementing development project; the project proponent shall retain a professional archaeologist prior to the issuance of grading permits. The task of the archaeologist

shall be to verify implementation of the mitigation measures identified in the approved Phase I Cultural Resources Study and to monitor the initial ground-altering activities³ at the subject site for the unearthing of previously unknown archaeological and/or cultural resources. Selection of the archaeologist shall be subject to the approval of the City of Perris Planning Manager and no grading activities shall occur at the site until the archaeologist has been approved by the City.

The archaeological monitor shall be responsible for maintaining daily field notes, a photographic record, and reporting all finds in a timely manner. The archaeologist shall also be equipped to record and salvage cultural resources that may be unearthed during initial ground-altering activities. The archaeologist shall be empowered to temporarily halt or divert construction equipment to allow recording and removal of the unearthed resources.

In the event that cultural resources are discovered at the development site, the handling of the discovered resources will differ. However, it is understood that all artifacts with the exception of human remains and related grave goods or sacred objects belong to the property owner. All artifacts discovered at the development site shall be inventoried and analyzed by the professional archaeologist. If any artifacts of Native American origin are discovered, all activities in the immediate vicinity of the find shall stop, the project developer and project archaeologist shall notify the City of Perris Planning Division, the Pechanga Band of Luiseño Indians and the Soboba Band of Mission Indians, and a Native American observer of Luiseño descent shall be retained to help analyze the Native American artifacts for identification as everyday life and/or religious or sacred items, cultural affiliation, temporal placement, and function, as deemed possible. The significance of Native American resources shall be evaluated in accordance with the provisions of CEQA and shall consider the religious beliefs, customs, and practices of the Luiseño tribes. All items found in association with Native American human remains will be considered grave goods or sacred in origin and subject to special handling (see MM Cultural 6, below). Native American artifacts that cannot be avoided or relocated at the project site will be prepared in a manner for curation and the archaeological consultant will deliver the materials to an accredited curation facility approved by the City of Perris within a reasonable amount of time.

Non-Native American artifacts will be inventoried, assessed, and analyzed for cultural affiliation, personal affiliation (prior ownership), function, and temporal placement. Subsequent to analysis and reporting, these artifacts will be subjected to curation or returned to the property owner, as deemed appropriate. Once ground-altering activities have ceased or the professional archaeologist determines that monitoring activities are no longer necessary, monitoring activities may be discontinued following notification to the City of Perris Planning Division.

³ For the purpose of this measure, ground-altering activities include, but are not limited to, debris removal, vegetation removal, tree removal, grading, trenching, or other site preparation activities. Initial ground-altering activities refer to the first time that the existing materials are altered by construction-related activities. Materials that have already been disturbed by construction-related activities do not require subsequent monitoring.

A report of findings, including an itemized inventory of recovered artifacts, shall be prepared upon completion of the steps outlined above. The report shall include a discussion of the significance of all recovered artifacts. The report and inventory, when submitted to the City of Perris Planning Division, will signify completion of the program to mitigate impacts to archaeological and/or cultural resources. A copy of the report shall also be filed with the Eastern Information Center (EIC).

- **MM Cultural 3** If the Phase I Cultural Resources Study required under **MM Cultural 1** determines that monitoring during construction by both a professional archaeologist and a Native American representative is needed for the implementing development project, the project proponent shall retain a professional archaeologist and a Native American representative of Luiseño descent prior to the issuance of grading permits. The professional archaeologist and Native American observer shall be required on site during all initial ground-altering activities. The Native American observer shall have the authority to temporarily divert, redirect, or halt the ground disturbance activities to allow the evaluation of cultural resources with the project archaeologist. The evaluation and treatment provisions of mitigation measure **MM Cultural 2** shall apply to this measure.
- **MM Cultural 4** In the event that cultural resources are discovered at a development site that is not monitored by a professional archaeologist, all activities in the immediate vicinity of the find shall stop, the project developer shall notify the City of Perris Planning Division, and the project developer shall retain a professional archaeologist to analyze the find for identification as prehistoric and historical archaeological resources. The evaluation and treatment provisions of mitigation measure **MM Cultural 2** shall apply to this measure.
- **MM Cultural 6** In the event that human remains (or remains that may be human) are discovered at the implementing development project site during grading or earthmoving, the construction contractors shall immediately stop all activities in the immediate area of the find. The project proponent shall then inform the Riverside County Coroner and the City of Perris Planning Division and the coroner would be permitted to examine the remains.

If the coroner determines that the remains are of Native American origin, the coroner would notify the NAHC and the Commission would identify the "Most Likely Descendent" (MLD)⁴. Despite the affiliation of any Native American representatives at the site, the Commission's identification of the MLD would stand. The MLD shall be granted access to inspect the site of the discovery of the Native American human remains and may recommend to the project proponent means for treatment or disposition, with appropriate dignity of the human remains and any associated grave goods. The MLD shall complete their inspection and make recommendations or

⁴ The "Most Likely Descendent" ("MLD") is a reference used by the California Native American Heritage Commission to identify the individual or population most likely associated with any human remains that may be identified within a given project area. Under California Public Resources Code section 5097.98, the Native American Heritage Commission has the authority to name the MLD for any specific project and this identification is based on a report of Native American remains through the County Coroner's office. In the case of the City of Perris, the Native American Heritage Commission may identify the Luiseño descendent, but generally names the Soboba or Pechanga bands of Mission Indians (both Luiseño populations) and alternates between the two groups. The City of Perris will recognize any MLD identified by the Native American Heritage Commission is not tasked with the identification of a Native American representative, the City of Perris reserves the right to make an independent decision based upon the nature of the proposed project.

preferences for treatment within 48 hours of being granted access to the site. The disposition of the remains would be determined in consultation with the City of Perris, the project proponent, and the MLD. The City of Perris would be responsible for the final decision, based upon input from the various stakeholders.

If the human remains are determined to be other than Native American in origin, but still of archaeological value, the remains would be recovered for analysis and subject to curation or reburial at the expense of the project proponent. If deemed appropriate, the remains would be recovered by the coroner and handled through the Coroner's Office.

Coordination with the Coroner's Office would be through the City of Perris and in consultation with the various stakeholders.

The specific locations of Native American burials and reburials would be proprietary and not disclosed to the general public. The locations would be documented by the consulting archaeologist in conjunction with the various stakeholders and a report of findings shall be filed with the Eastern Information Center (EIC).

By preparing the Phase 1 Cultural Resources Assessment, the Project has complied with PVCCSP EIR mitigation measure **MM Cultural 1**.

5.4.3 Design Considerations

Because no potentially significant prehistoric or historic-period cultural resources were identified at the proposed Project site, there are no site design measures incorporated which would lessen impacts related to cultural resources. Mitigation measures included below would lessen impacts to unknown cultural resources which may occur below the surface at the Project site.

5.4.4 Thresholds of Significance

The City of Perris has not established local CEQA significance thresholds and instead, defers to the thresholds of significance identified in State *CEQA Guidelines* Appendix G. Impacts related to this Project may be considered potentially significant if the proposed Project would result in:

- Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5; or
- Cause a substantial adverse change in the significance of an archeological resource pursuant to Section 15064.5; or
- Disturb any human remains, including those interred outside of dedicated cemeteries.

5.4.5 Environmental Impacts Before Mitigation

Threshold A: Would the Project would cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

The two Phase I Cultural Assessments, (Appendix D.1 and Appendix D.2) included a records search from the EIC of the CHRIS at UCR which found that 51 previous cultural resource investigations had been conducted in the Project area. Two of the previous studies included approximately 35 percent of the Project site. A total of 35 previously recorded cultural resources are located within the Project Study Area (shown in **Table 5.4-A**). Of the 35 previously recorded cultural resources, three were categorized as built environment resources. However, none of the 35 cultural resources previously identified were

located within the Project site, including within the MDP Lateral-B Stage 4 extension. (AE, pp. ii, 19; BFSA, pp. 32, 34.)

Additionally, a pedestrian survey was conducted by AE who identified three more cultural resources not identified on the EIC records search. Two of these six are categorized as historical sites and four are built environment sites. The two historical sites consist of a cluster of irrigation features and the concrete pad remains of structures associated with a farm just outside the Project area. The four built environment sites consist of the three historic period roads in addition to one historic period utility pole alignment along Nance Street. (AE, pp. 24, 36.) The three historic roads analyzed were Patterson Avenue, West Nance Street and Nevada Avenue. The historic period utility pole resource consists of eleven individual wood poles carrying electrical distribution lines along West Nance Street. Based on further analysis to determine historic distribution lines were not associated with events that have made significant contribution to our history, lives of significant persons of historical significance, nor appear to embody the distinctive characteristics of a type, period of method of construction, and do not yield important information about historical context. Since these additional six resources do not qualify as significant resources under any of the four CRHR criteria, further assessment of integrity is not necessary. (AE, pp. 37-40.)

BFSA conducted a subsequent pedestrian survey for the MDP Lateral-B Stage 4 extension alignment. The pedestrian survey did not identify any cultural resources within the alignment. (BFSA, pp. 32, 34.) Therefore, no potential impacts to historical resources within the MDP Lateral-B Stage 4 extension alignment would occur.

Thus, the resources identified by AE do not meet the definition of a historic resource per Section 15064.5 and impacts resulting from their demolition will be less than significant. Additionally, none of the EIC records search results are for sites located on the Project site. Therefore, Project implementation will not affect historical resources. Because implementation of the proposed Project will not cause a substantial change in the significance of a historical resource as defined in Section 15064.5 of the State CEQA Guidelines, **impacts will be less than significant and no mitigation is required**.

Threshold B: Would the Project cause a substantial adverse change in the significance of an archeological resource pursuant to Section 15064.5?

As previously mentioned in Threshold A above, 35 cultural resources were previously identified in a records search. Seventeen resources were categorized as historical sites and consist of remnant rail lines, irrigation systems, houses and utility poles. None of the 17 cultural resources previously identified are located within the Project site. (AE, pp. ii, 19) Fifteen of the cultural resources previously identified were prehistoric bedrock milling features within proximity to the MDP Lateral-B Stage 4 extension alignment. However, none of these prehistoric features are within a quarter-mile, and most cluster over one-half to three-quarters of a mile to the west and southwest. (BFSA, pp. 30, 32)

No other archaeological resources were identified during the records search, or as a result of the AE and BFSA pedestrian survey. Additionally, as discussed in Section 5.14 of this document, the Tribes did not identify any known prehistoric archaeological resources on the Project site that would be of concern to them. Therefore, per Section 15064.5, Project implementation will not affect archeological resources

Nonetheless, there is always the potential that previously unidentified archaeological resources may be discovered during ground disturbance. In the unlikely event that an archaeological resource is discovered, Project-specific mitigation measure **MM CR 1**⁵ shall be implemented. Therefore, impacts with regard to archeological resources will be reduced to **less than significant with mitigation**.

Threshold C: Would the Project would disturb any human remains, including those interred outside of dedicated cemeteries?

The PVCCSP area, which includes the Project site, has been historically used for agriculture and therefore is not expected to contain human remains, including those interred outside of formal cemeteries. (PVCCSP IS, p. 21.) Due to the lack of any indication of a formal cemetery or informal family burial plot, development within the PVCCSP area will not impact known human remains.

In the unlikely event that suspected human remains are uncovered during construction, all activities in the vicinity of the remains shall cease and the contractor shall notify the County Coroner immediately pursuant to California Health & Safety Code Section 7050.5, California Public Resources Code Section 5097.98, and Project-specific mitigation measure **MM CR 2**⁶ would be implemented. Therefore, impacts with regard to disturbing human remains, including those interred outside of formal cemeteries, will be reduced to **less than significant with mitigation**.

5.4.6 Recommended Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (State CEQA Guidelines Section 15126.4). Mitigation measures were evaluated for their ability to eliminate or reduce the potential significant adverse impacts to archeological resources and human remains. The proposed Project will implement Project-specific mitigation measures **MM CR 1** and **MM CR 2** to eliminate or reduce potentially significant cultural resources impacts to below the level of significance.

MM CR 1: Prior to the issuance of grading permits, the Project proponent/developer shall retain a professional archaeologist meeting the Secretary of the Interior's Professional Standards for Archaeology (U.S. Department of Interior, 2012; Registered Professional Archaeologist preferred). The primary task of the consulting archaeologist shall be to monitor the initial ground-disturbing activities at both the subject site and any off-site Project-related improvement areas for the identification of any previously unknown archaeological and/or cultural resources. Selection of the archaeologist shall be subject to the approval of the City of Perris Director of Development Services and no ground-disturbing activities shall occur at the site or within the off-site Project improvement areas until the archaeologist has been approved by the City.

The archaeologist shall be responsible for monitoring ground-disturbing activities, maintaining daily field notes and a photographic record, and for reporting all finds to the developer and the City of Perris in a timely manner. The archaeologist shall be prepared and equipped to record and salvage cultural resources that may be unearthed during

⁵ Project-specific mitigation measure **MM CR 1** replaces PVCCSP EIR mitigation measures **MM Cultural 2**, **MM Cultural 3**, and **MM Cultural 4**.

⁶ Project-specific mitigation measure **MM CR 2** replaces PVCCSP EIR mitigation measure **MM Cultural 6**.

ground-disturbing activities and shall be empowered to temporarily halt or divert ground-disturbing equipment to allow time for the recording and removal of the resources.

In the event that archaeological resources are discovered at the Project site or within the off-site project improvement areas, the handling of the discovered resource(s) will differ, depending on the nature of the find. Consistent with California Public Resources Code Section 21083.2(b) and Assembly Bill 52 (Chapter 532, Statutes of 2014), avoidance shall be the preferred method of preservation for Native American/tribal cultural/archaeological resources. However, it is understood that all artifacts, with the exception of human remains and related grave goods or sacred/ceremonial/religious objects, belong to the property owner. The property owner will commit to the relinquishing and curation of all artifacts identified as being of Native American origin. All artifacts, Native American or otherwise, discovered during the monitoring program shall be recorded and inventoried by the consulting archaeologist.

If any artifacts of Native American origin are discovered, all activities in the immediate vicinity of the find (within a 50-foot radius) shall stop and the Project proponent and Project archaeologist shall notify the City of Perris Planning Division and the Soboba Band of Luiseño Indians and the Pechanga Band of Luiseño Indians. A designated Native American representative from either the Soboba Band of Luiseño Indians or the Pechanga Band of Luiseño Indians or the Pechanga Band of Luiseño Indians shall be retained to assist the Project archaeologist in the significance determination of the Native American artifact as deemed possible. The designated Luiseño tribal representative will be given ample time to examine the find. The significance of Native American resources shall be evaluated in accordance with the provisions of CEQA and shall consider the religious beliefs, customs, and practices of the Luiseño tribal representative will work with the City and consulting archaeologist to protect the resource in accordance with tribal requirements. All analysis will be undertaken in a manner that avoids destruction or other adverse impacts.

In the event that human remains are discovered at the Project site or within the off-site Project improvement areas, mitigation measure **MM CR 2** shall immediately apply and all items found in association with Native American human remains shall be considered grave goods or sacred in origin and subject to special handling.

Native American artifacts that are relocated/reburied at the Project site would be subject to a fully executed relocation/reburial agreement with the assisting Luiseño tribe. This shall include, but not be limited to, an agreement that artifacts will be reburied on-site and in an area of permanent protection, and that reburial shall not occur until all cataloging and basic recordation have been completed by the consulting archaeologist.

Native American artifacts that cannot be avoided or relocated at the Project site shall be prepared for curation at an accredited curation facility in Riverside County that meets federal standards (per 36 CFR Part 79) and available to archaeologists/researchers for further study. The Project archaeologist shall deliver the Native American artifacts, including title, to the identified curation facility within a reasonable amount of time, along with applicable fees for permanent curation.

Non-Native American artifacts shall be inventoried, assessed, and analyzed for cultural affiliation, personal affiliation (prior ownership), function, and temporal placement. Subsequent to analysis and reporting, these artifacts will be subjected to curation, as deemed appropriate, or returned to the property owner.

Once grading activities have ceased and/or the archaeologist, in consultation with the designated Luiseño representative, determines that monitoring is no longer warranted, monitoring activities can be discontinued following notification to the City of Perris Planning Division.

A report of findings, including an itemized inventory of artifacts, shall be prepared upon completion of the tasks outlined above. The report shall include all data outlined by the Office of Historic Preservation guidelines, including a conclusion of the significance of all recovered, relocated, and reburied artifacts. A copy of the report shall also be filed with the City of Perris Planning Division, the University of California, Riverside, Eastern Information Center (EIC) and the Luiseño tribe(s) involved with the Project.

MM CR 2: In the event that human remains (or remains that may be human) are discovered at the Project site or within the off-site Project improvement areas during ground-disturbing activities, the construction contractors, Project archaeologist, and/or designated Luiseño tribal representative shall immediately stop all activities within 100 feet of the find. The Project proponent shall then inform the Riverside County Coroner and the City of Perris Planning Division immediately, and the coroner shall be permitted to examine the remains as required by California Health and Safety Code Section 7050.5(b).

If the coroner determines that the remains are of Native American origin, the coroner would notify the Native American Heritage Commission (NAHC), which will identify the "Most Likely Descendent" (MLD). Despite the affiliation with any Luiseño tribal representative(s) at the site, the NAHC's identification of the MLD will stand. The MLD shall be granted access to inspect the site of the discovery of Native American human remains and may recommend to the Project proponent means for treatment or disposition, with appropriate dignity of the human remains and any associated grave goods. The MLD shall complete his or her inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The disposition of the remains will be determined in consultation between the Project proponent and the MLD. In the event that there is disagreement regarding the disposition of the remains, State law will apply and mediation with the NAHC will make the applicable determination (see Public Resources Code Section 5097.98I and 5097.94(k)).

The specific locations of Native American burials and reburials will be proprietary and not disclosed to the general public. The locations will be documented by the consulting archaeologist in conjunction with the various stakeholders and a report of findings will be filed with the Eastern Information Center (EIC).

5.4.7 Summary of Environmental Effects After Mitigation Measures Are Implemented

The proposed mitigation measures will ensure that any unknown buried tribal cultural and/or archaeological resources that are discovered during development of the proposed Project are protected, evaluated and recovered as determined by the appropriate qualified expert. With the above Project-specific mitigation measures **MM CR 1** and **MM CR 2** implemented, impacts to unknown potentially significant cultural resources and human remains will be reduced to a **less than significant level with mitigation**.

5.5 Energy Conservation

The following discussion is related to the potential for the proposed Project to have impacts due to inefficient, wasteful, and unnecessary consumption of energy resources during construction or operation, or a conflict with a state or local plan for renewable energy or energy efficiency.

A portion of the following discussion includes a summary of the *Air Quality/Greenhouse Gas Analysis for the Duke Warehouse at Patterson Avenue and Nance Street* (included as Appendix B.1 of this DEIR), and the *Energy Consumption Calculations* (prepared for the proposed Project by Albert A. Webb Associates (included as Appendix E of this DEIR).

In response to the Notice of Preparation (NOP), no comment letters were received related to energy. Verbal comments were received at the February 2, 2022 EIR public scoping meeting regarding energy, specifically with regard to alternative transportation options, solar panel feasibility, and electric vehicle charging. These comments are addressed in this Section, as well as in Section 3.0, Project Description, and 5.13, Transportation.

In addition to other reference documents, the following references were used in the preparation of this section of the DEIR:

- California Air Resources Board, *Advanced Clean Cars Program About*. (Available at https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about, accessed May 13, 2022.) [Cited as CARB ACCP]
- California Air Resources Board, Advanced Clean Trucks Fact Sheet, August 20, 2021. (Available at https://ww2.arb.ca.gov/sites/default/files/2021-08/200625factsheet_ADA.pdf, accessed May 13, 2022.) [Cited as CARB ACT]
- California Air Resources Board, *Climate Change Scoping Plan*, December 2008. (Available at http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf, accessed May 12, 2022.) [Cited as CARB 2008]
- California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, November 2017. (Available at <u>https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf</u>, accessed May 11, 2022.) [Cited as CARB 2017]
- California Air Resources Board, *Truck and Bus Regulation Amendments, Final Statement of Reasons for Rulemaking*, December 16-17, 2010. (Available at http://www.arb.ca.gov/regact/2010/truckbus10/tbfsor.pdf, accessed May 13, 2022.) [Cited as CARB 2010a]
- California Air Resources Board, LEV III and ZEV Regulation Amendments for Federal Compliance Option, December 31, 2012. (Available at http://www.arb.ca.gov/regact/2012/leviiidtc12/leviiidtc12.htm, accessed May 13, 2022.) [Cited as CARB 2012]
- California Air Resources Board, 2020 Mobile Source Strategy, October 21, 2021. (Available at https://ww2.arb.ca.gov/sites/default/files/2021-12/2020 Mobile Source Strategy.pdf, accessed May 13, 2022.) [Cited as CARB 2020]

Energy

- California Air Resources Board, Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles, October 2000. (Available at <u>https://ww3.arb.ca.gov/diesel/documents/rrpfinal.pdf</u>, accessed May 13, 2022.) [Cited as CARB 2000]
- California Energy Commission, 2022 Building Energy Efficiency Standards Summary. (Available at <u>https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiencystandards/2022-building-energy-efficiency</u>, accessed May 17, 2022.) [Cited as CEC 2022]
- California Energy Commission, Appliance Efficiency Regulations-Title 20, 2022. (Available at https://www.energy.ca.gov/rules-and-regulations/appliance-efficiency-regulations-title-20, accessed May 13, 2022.) [Cited as CEC Title 20]
- California Building Standards Commission, 2019 California Green Building Standards Code, Part 11. (Available at https://codes.iccsafe.org/content/CAGBSC2019/cover,accessed May 13, 2022.) [Cited as CALGreen]
- California Department of Energy Commission Fuel Data, *Facts and Statistics*. (Available at <u>https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm</u>, accessed May 17, 2022.) [Cited as CDEC]
- California Department of Resources Recycling and Recovery, *Glossary of Terms, Integrated Waste Management Act*, Last Updated September 5, 2018. (Available at https://www.calrecycle.ca.gov/LGCentral/Glossary/#IWMA, accessed May 17, 2022.) [Cited as CalRecycle 2018]
- California Department of Resources Recycling and Recovery, *Jurisdiction Diversion/Disposal* Rate Summary, Last Updated August 22, 2018. (Available at <u>https://www.calrecycle.ca.gov/LGCentral/Datatools/Reports/DivDispRtSum</u>, accessed May 12, 2022.) [Cited as CalRecycle JD]
- California Department of Resources Recycling and Recovery, Annual Reporting Requirements, Last Updated April 2, 2019. (Available at <u>https://www.calrecycle.ca.gov/LGCentral/AnnualReport/</u>, accessed May 12, 2022.) [Cited as CalRecycle 2019]
- California Department of Resources Recycling and Recovery, *Jurisdiction Diversion/Disposal Rate Summary*, (2007-Current), Jurisdiction Perris. (Available at <u>https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionPost2006</u>, accessed May 11, 2022.) [Cited as CalRecycle Perris]
- California Department of Resources Recycling and Recovery, California's 75 Percent Initiative Defining the Future, Last Updated January 21, 2020. (Available at <u>https://sj-admin.s3-us-west-</u>2.amazonaws.com/2019_0000_CalRecycle_75PercentInitiative.pdf, accessed May 11, 2022.)
 [Cited as CalRecycle 2020]
- California Energy Commission, *Energy Consumption Data Management System, California Energy Consumption Database, Electricity Consumption by Entity*, interactive web tool.

Duke Warehouse at Patterson Avenue and Nance Street DEIR

(Available at http://www.ecdms.energy.ca.gov/elecbyutil.aspx, accessed May 18, 2022.) [Cited as CEC ECDMSa]

- California Energy Commission, Energy Consumption Data Management System, California Energy Consumption Database, Natural Gas Consumption by Entity, interactive web tool. (Available at http://www.ecdms.energy.ca.gov/gasbyutil.aspx, accessed May 18, 2022.) [Cited as CEC ECDMSb]
- California Energy Commission, *Final 2021 Integrated Energy Policy Report Volume IV*, February 2022. (Available at <u>https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2020-integrated-energy-policy-report-update</u> accessed May 11, 2022.) [Cited as TEFA]
- California Gas and Electric Utilities, 2020 California Gas Report, 2020. (Available at https://www.socalgas.com/sites/default/files/202010/2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf, accessed May
 13, 2022.) [Cited as 2020 CGR]
- California Public Utilities Commission, *Energy Division Resolution E-4456*, January 12, 2012. (Available at http://docs.cpuc.ca.gov/PUBLISHED/FINAL_RESOLUTION/157542.htm, accessed May 13, 2022.) [Cited as CPUC 2012]
- California Public Utilities Commission, California Renewables Portfolio Standard (RPS), Current Renewable Procurement Status. (Available at https://www.energy.ca.gov/programs-andtopics/programs/renewables-portfolio-standard, accessed May 13, 2022.) [Cited as CPUC 2022a]
- California Public Utilities Commission, 2020 California Renewable Portfolio Standard, November 2020. (Available at https://www.cpuc.ca.gov/-/media/cpuc-website/files/uploadedfiles/cpuc-public-website/content/utilities-and-industries/energy-electricity-and-natural-gas/2020-rps-annual-report.pdf, May 18, 2022) [Cited as CPUC 2020
- California Public Utilities Commission, California's Natural Gas Market, webpage (Available at https://www.cpuc.ca.gov/industries-and-topics/natural-gas, accessed May 13, 2022.) [Cited as CPUC NGC]
- City of Perris, *Perris Comprehensive General Plan 2030, Conservation Element*, adopted July 12, 2005, Sustainable Community Amendment adopted February 18, 2008. (Available at https://www.cityofperris.org/home/showpublisheddocument/449/637203139693370000, accessed May 13, 2022.) [Cited as Perris GP 2030]
- City of Perris, *Perris Comprehensive General Plan 2030, Healthy Community Element*, adopted June 9, 2015. (Available at https://www.cityofperris.org/home/showpublisheddocument/453/637203139703670000, accessed May 13, 2022.) [Cited as Perris GP 2030]
- City of Perris, *Perris Comprehensive General Pan 2030, Land Use Element*, adopted April 26, 2005. (Available at https://www.cityofperris.org/home/showpublisheddocument/457/637203139714030000, accessed May 13, 2022.) [Cited as Perris GP 2030]

- City of Perris, *Perris Valley Commerce Center Specific Plan Final Environmental Impact Report*, State Clearing house # 2009081086 November 2011, certified January 10, 2012. (Available at the City of Perris.) [Cited as PVCCSP EIR]
- City of Perris, City of Perris Climate Action Plan, adopted February 23, 2016. (Available at https://www.cityofperris.org/Home/ShowDocument?id=12935#:~:text=This%20Climate%20Action%20Plan%20(CAP.reduction%20goals%20(AB%2032), accessed May 13, 2022.) (Perris CAP)
- Government Publishing Office, Energy Policy and Conservation Act, Public Law 94-163, As Amended Through 115-270, Enacted October 23, 2018, November 5, 2018 (Available at https://www.govinfo.gov/content/pkg/COMPS-845/pdf/COMPS-845.pdf, accessed May 11, 2022.) [Cited as EPCA]
- National Highway Traffic Safety Administration, Federal Register, Vol. 77, No. 199, Rules & Regulations, 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards, effective December 14, 2012. (Available at https://www.gpo.gov/fdsys/pkg/FR-2012-10-15/pdf/2012-21972.pdf, accessed May 13, 2022.) [Cited as NHTSA]
- National Highway Traffic Safety Administration, Corporate Average Fuel Economy-Finalizes CAFÉ Standards for MYs 2024-2026. May 2, 2022. (Available at https://www.govinfo.gov/content/pkg/FR-2022-05-02/pdf/2022-07200.pdf, accessed May 13, 2022.) [Cited as NHTSA 2022]
- Legislative Counsel of California, *California Senate Bill 100*, September 2018. (Available at <u>https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100</u>, accessed May 11, 2022.) [Cited as SB 100]
- Southern California Edison, About Us Who We Are, webpage. (Available at https://www.sce.com/wps/portal/home/about-us/who-we-are/, accessed May 13, 2022.) [Cited as SCE 2022a]
- Southern California Edison, *Projects in Progress: Tehachapi Renewable Transmission Project*, webpage. (Available at https://www.sce.com/wps/portal/home/about-us/reliability/upgrading-transmission/TRTP-4-, accessed May 13, 2022.) [Cited as SCE 2022b]
- Southern California Edison, Projects in Progress: West of Devers Upgrade Project, webpage. (Available at <u>https://www.sce.com/wps/portal/home/about-us/reliability/upgrading-transmission/west-of-devers/</u>, accessed May 13, 2022.) [Cited as SCE 2022c]
- United States Court of Appeals, Rocky Mountain Farmers Union v. Corey (September 18, 2013), U.S. Court of Appeals for the 9th Circuit No. 12-15131. (Available at <u>http://cdn.ca9.uscourts.gov/datastore/opinions/2013/09/18/12-15131.pdf</u>, accessed May 12, 2022.)
- United States Department of Energy, *Energy Sources, Fossil, Oil*, webpage. (Available at http://www.energy.gov/energysources/oil.htm, accessed May 13, 2022.) [Cited as USDOE ES]
- United States Department of Transportation, Federal Highway Administration, Legislation, Regulations, and Guidance, Intermodal Surface Transportation Efficiency Act of 1991

Information, February 24, 2020. (Available at https://www.fhwa.dot.gov/planning/public_involvement/archive/legislation/istea.cfm, accessed May 13, 2022.) [Cited as DOT]

- United States Energy Information Administration, State Profile and Energy Estimates, Profile Overview, Updated March 2022, California. (Available at <u>https://www.eia.gov/state/?sid=CA</u>,accesed accessed May 11, 2022.) [Cited as USEIAa]
- United States Energy Information Administration, *Table CT7: Transportation Sector Energy Consumption Estimates, 1960-2018*, California. (Available at <u>https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_use/tra/use_tra_CA.html&sid=</u> <u>CA</u>, accessed May 11, 2022.) [Cited as USEIAb]

5.5.1 Setting

Energy sources are classified as non-renewable if they cannot be replenished in a short period of time. Therefore, non-renewable energy resources include fossil fuels. Fossil fuels, which consist of oil, coal, and natural gas and associated byproducts, provide the energy required for the vast majority of motorized vehicles and generation of electricity at power plants. Thus, the discussion of energy conservation most relevant to the Project is focused on Project-generated electricity demand, natural gas demand, and fuel consumption.

Electricity

Southern California Edison (SCE) provides service to the City, including the Project site. SCE is one of the nation's largest electric utilities and provides electricity service to more than 15 million people in a 50,000 square mile area of central, coastal, and Southern California. SCE monitors and maintains a vast electricity system consisting of approximately 12,782 miles of transmission lines and 90,401 miles of distribution lines (SCE 2022a). Two major projects that benefit SCE's service area are the Tehachapi Renewable Transmission Project and the West of Devers Upgrade Project. The Tehachapi Renewable Transmission Project consists of new and upgraded electric transmission lines and substations between eastern Kern County and San Bernardino County, and delivers electricity from new wind farms in the Tehachapi area to SCE customers and the California transmission grid. The Renewable Transmission Project will consist of removing and replacing approximately 48 miles of existing transmission lines within an existing transmission corridor between the existing Devers Substation (near Palm Springs), El Casco Substation (Calimesa) Vista Substation (in Grand Terrace), and San Bernardino Substation to provide more capacity for renewable power to be delivered to the power grid. The project upgrades were completed in May 2021 and are currently conducting clean up and restoration activities (SCE 2022c).

The City and SCE are dedicated to conserving energy generated by fossil fuels and increasing its portfolio of renewable energy sources. In 2019, 38 percent of SCE's energy supply was generated from renewable energy sources (CPUC 2020, p. 9), which includes bioenergy, geothermal, small hydropower, conduit hydropower, wind, and solar power (CPUC 2020, p. 18). SCE has exceeded the 2020 Renewables Portfolio Standard (RPS) requirement of 33 percent. (CPUC 2020, p. 6.) Therefore, SCE is in full compliance with the California renewable energy goals and legislative mandates and is on track to meet the 2030 RPS procurement mandate of 60 percent per Senate Bill (SB) 100 which will require all of California's electricity to come from carbon-free sources by 2045 (CPUC 2020, p. 43). SCE's electricity

Energy

consumption by sector as of 2020 is provided in **Table 5.5-A – Electricity Consumption in SCE Service Area (2020)**.

Agricultural & Water Pump	Commercial Building	Commercial Other	Industry	Mining & Construction	Residential	Streetlight	Total Usage
3,111.6	28,799.6	4,449.4	12,449.5	1,821.9	32,475.1	425.5	83,532.6

Table 5.5-A – Electricity Consumption in SCE Service Area (2020)^{a, b}

Notes:

^a California Energy Commission, Energy Consumption Data Management System, *California Energy Consumption Database*, interactive web tool.

^b all units are million kilowatt-hours (GWh)

As shown in the table above, SCE produced approximately 83.5 billion kilowatt-hours (kWh) in 2020, of which approximately 12.4 billion kWh were consumed by industry and 32 billion kWh were consumed by the commercial building sector, those sectors which are relevant to the proposed Project. In 2010, the City consumed approximately 286,470,000 kWh of electricity (Perris CAP).

Natural Gas

SoCalGas (SCG) is the principal distributor of natural gas in Southern California, providing retail and wholesale customers with transportation, exchange, storage services and also procurement services to most retail core customers. SCG is a gas-only utility and, in addition to serving the residential, commercial, and industrial markets, provides gas for enhanced oil recovery (EOR) and electric generation (EG) customers in Southern California (2020 CGR, p. 93). California's existing gas supply portfolio is regionally diverse and includes supplies from on- and off-shore California sources, southwestern United States supply sources, the Rocky Mountains, and Canada (2020 CGR, p. 12). The CPUC regulates natural gas utility service for approximately 10.8 million customers that receive natural gas from Pacific Gas and Electric (PG&E), SCG, San Diego Gas & Electric (SDG&E), Southwest Gas, and several smaller natural gas utilities (CPUC NGC).

Natural gas demand statewide, including volumes not served by utility systems, is expected to decrease at an annual average rate of 1.0 percent through 2035. The decline in throughput demand is due to modest economic growth and CPUC-mandated energy efficiency standards and programs and SB 350 goals. Other factors that contribute to the downward trend are tighter standards created by revised Title 24 Codes and Standards, renewable electricity goals, a decline in core commercial and industrial demand, and conservation savings linked to Advanced Metering Infrastructure (AMI). (2020 CGR, p. 96.) From 2020-2035, residential demand is expected to decline approximately one percent per year, on average due to declining use per meter. The core, non-residential markets (comprising core commercial, core industrial and Natural Gas Vehicles (NGV)) are expected to decline at an average annual rate of 1.0 percent by 2035. However, the NGV market is expected to grow 1.45 percent over the forecast horizon. The NGV market is expected to grow due to government (federal, state and local) incentives and regulations encouraging the purchase and operation of alternate fuel vehicles as well as the increased use of renewable natural gas that provides significant GHG emission reduction benefits. The noncore, non-EG markets are expected to decline 0.3 percent by 2035. That decline is being driven by very aggressive energy efficiency goals and associated programs. Total EG load, including large cogeneration and non-cogeneration EG for a normal hydro year, is expected to decrease 2.0 percent per year by 2035 (CGEU, p. 96).

Duke Warehouse at Patterson Avenue and Nance Street DEIR

SCG also implements energy efficiency programs. (2020 CGR, p. 96). Programs administered by SCG include services that help customers evaluate their energy efficiency options and adopt recommended solutions, as well as simple equipment-retrofit improvements, such as rebates for new hot water heaters (2020 CGR, p. 109). The overall annual energy efficiency cumulative savings goal is forecast to increase from approximately 4 billion cubic feet (Bcf) in 2020 to 53 Bcf by 2035 (2020 CGR, p. 110).

Natural gas service must be provided in accordance with SCG's policies and extension rules on file with CPUC at the time contractual agreements are made. The viability of natural gas is based on present conditions of gas supply and regulatory policies. **Table 5.5-B – Natural Gas Consumption in SCG Service Area (2020)**, shows the natural gas consumption by SCE service area with the latest data available from CEC.

Table 5.5-B – Natural Gas Consumption in SCG Service Area (2020)^a

Agricultural & Water Pump	Commercial Building	Commercial Other	Industry	Mining & Construction	Residential	Total Usage
74.4	801.6	87.9	1,615.6	226.2	2,425.8	5,231.4

Notes:

^a California Energy Commission, Energy Consumption Data Management System, *California Energy Consumption Database*, interactive web tool.

^b all numbers in million therms

As shown in the table above, SCG produced approximately 5.2 billion therms in 2020, of which approximately 1.6 billion therms were consumed by industry and 802 million therms were consumed by the commercial building sector.

Transportation Fuel

Fossil fuels are known to create almost all of the United States' transportation fuels. As stated above, energy sources include oil, coal, and natural gas, which are non-renewable resources that formed when prehistoric plants and animals died and were gradually buried by layers of rock; however, fossil fuel industries drill or mine for these energy sources, burn them to produce electricity, or refine them for use as fuel for heating or transportation (USDOE ES).

The U.S. and specifically California is defined by the automobile. In 2021-2022 there were over 15 million vehicles registered in California by the Department of Motor Vehicles (CDMV). In 2019, 39.3 percent of all of California's energy use was used for transportation, approximately 3,060 trillion British thermal units (Btu) (USEIAa). In 2019, California consumed 565,056 thousand barrels of petroleum for transportation uses, which is approximately 3,0172 trillion Btu (USEIAb).

The 2021 Integrated Energy Policy Report (IEPR) provides the results of the California Energy Commission's assessments of a variety of energy related issues facing California. The IERP includes a transportation energy and demand forecast that considers vehicles and associated fuels, incorporates consumer preference, regulatory impacts, economic and demographic projects, projected improvements in technology, and other market factors. (TEFA, pp. 3-4.) The most recent forecast estimated that between 2021 and 2035, gasoline fuel demand for transportation in California will decline primarily due to increases in electrification and the use of zero emission vehicles (ZEV) (TEFA, pp. 50-70). Petroleum-based fuels will continue to represent the largest shares of transportation energy Energy

demand. Under the high-demand case for Light Duty Vehicle, gasoline consumption will drop from approximately 13.8 billion gross gasoline equivalents (GGE) in 2020 to approximately 11 billion GGE in 2035. Electricity consumption would increase from less than 1 billion GGE in 2020 to approximately 4 billion GGE which includes raw energy used by the plug in-vehicles (PEV), but also the gasoline energy avoided by using more PEVs. Diesel energy forecast is less than 1 GGE in 2020 and will remain roughly the same in 2035. (TEFA, p. 67.).

Use of biomethane or renewable gas fuel in California's transportation sector has grown significantly to displace an increasing portion of fossil pipeline gas, and the state is poised for significant development of new California-based production plants in several sectors. The CEC expects a continual growth trend because of state and local government incentives, vehicle and engine technology advances, and an existing network of fueling stations located in key areas of the state. (TEFA, p. 134.).

Vehicles in California consumed 179 million diesel gallons equivalent (DGE) of fossil gas and renewable gas. Renewable gas has been directed primarily at vehicle fuels because of the low-carbon fuel standard, comprising 77 percent of the pipeline gas supply for vehicles in 2019. Renewable gas displaced 5 percent of the diesel fuel consumption in trucks. (TEFA, p. 134.).

5.5.2 Related Regulations

Federal Regulations

At the federal level, the United States Department of Transportation (USDOT), the United States Department of Energy (DOE), and the United States Environmental Protection Agency (EPA) are three agencies with substantial influence over energy policies and programs. Generally, federal agencies influence and regulate transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, through funding of energy-related research and development projects, and through funding for transportation infrastructure improvements. Major federal energy-related laws and plans are discussed below.

Federal Energy Policy and Conservation Act (EPCA)

The Federal Energy Policy and Conservation Act (EPCA) of 2018 grants specific authority to the President of the U.S. to fulfill obligations of the U.S. under the international energy program; provide for the creation of a Strategic Petroleum Reserve capable of reducing the impact of severe energy supply interruptions; conserve energy supplies through energy conservation programs; provide for improved energy efficiency of motor vehicles, major appliances and other consumer products; provide a means for verification of energy data to assure the reliability of energy data; and to conserve water by improving the water efficiency of certain plumbing products and appliances. Furthermore, the EPCA establishes fuel economy standards for on-road motor vehicles in the U.S (EPCA 2018).

The National Highway Traffic and Safety Administration (NHTSA), which is part of USDOT, is responsible for establishing additional vehicle standards and revising existing standards under the EPCA. The NHTSA has set new fuel economy standards that are estimated to require a combined passenger car and light truck average fuel economy level of 54.5 mpg by 2025 (NHTSA). It should be noted that heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with federal fuel economy standards is not determined for each individual vehicle model; instead, compliance is determined on the basis of each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States. The Corporate Average Fuel Economy program, administered by the EPA, was created to determine vehicle

manufacturers' compliance with the fuel economy standards. The EPA calculates a value for each manufacturer, based on city and highway fuel economy test results and vehicles sales. On the basis of the information generated under the program, USDOT is authorized to assess penalties for noncompliance. In the course of over a 30-year history, this regulatory program has resulted in vastly improved fuel economy throughout the United States' vehicle fleet, and also has protected against inefficient, wasteful, and unnecessary use of energy.

In 2012, NHTSA established passenger and light truck Corporate Average Fuel Economy (CAFE) standards for model years (MY) 2017 through 2021 which required, on an average industry fleet-wide basis, a range from 40.3 to 41.0 miles per gallon in model year (MY) 2021. In 2019, the NHTSA and EPA amended certain existing CAFE and greenhouse gas emissions standards for passenger cars and light trucks and establish new standards, covering model years 2021 through 2026. However, in March 2022, the NHTSA and EPA revised the standards covering MY 2024 through 2026 and would require an industry fleet-wide average of roughly 49 mpg in MY 2026. (NHTSA 2022)

Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA)

The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) promoted the development of inter-modal transportation systems to maximize mobility, as well as to address national and local interests in air quality and energy. The ISTEA contained factors that metropolitan planning organizations were required to address in developing transportation plans and programs, including some energy-related factors. To meet the new ISTEA requirements, metropolitan planning organizations adopted explicit policies defining the social, economic, energy, and environmental values that were to guide transportation decisions in that metropolitan area. The planning process for specific projects would then address these policies. Another requirement was to consider the consistency of transportation planning with federal, State, and local energy goals. Through this requirement, energy consumption was expected to become a decision criterion, along with cost and other values that determine the best transportation solution (DOT).

The Transportation Equity Act for the 21st Century (TEA-21)

The Transportation Equity Act for the 21st Century (TEA-21) builds upon the initiatives established in the ISTEA legislation discussed previously. TEA-21 authorizes highway, highway safety, transit, and other efficient surface transportation programs. TEA-21 continues the program structure established for highways and transit under ISTEA, such as flexibility in the use of funds, emphasis on measures to improve the environment, and focus on a strong planning process as the foundation of good transportation decisions. TEA-21 also provides for investment in research and its application to maximize the performance of the transportation system through, for example, deployment of Intelligent Transportation Systems, to help improve operations and management of transportation systems and vehicle safety (DOT).

State

At the State level, the CEC and CPUC are two agencies with authority over different aspects of energy. CPUC regulates privately-owned utilities in the energy, rail, telecommunications, and water sectors. CEC collects and analyzes energy-related data, prepares statewide energy policy recommendations and plans, promotes and funds energy efficiency programs, and adopts and enforces appliance and building energy efficiency standards. California is exempt under federal law from setting State fuel economy standards for new on-road motor vehicles. The California Air Resources Board has responsibility for mobile source emissions in the State. Major State energy-related laws and plans are discussed below.

California Air Resources Board (CARB)

The California Air Resources Board (CARB), which has the responsibility for control of emissions from mobile sources (CARB 2000, p. 9), took the lead on addressing diesel emissions in the State of California. The first step to significantly reduce diesel emissions occurred in 2000 when CARB approved the "Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles" or Diesel Risk Reduction Plan.

Most recently, the CARB approved the 2020 Mobile Source Strategy, which will deliver broad environmental and public health benefits, as well as support much needed efforts to modernize and upgrade transportation infrastructure, enhance system-wide efficiency and mobility options, and promote clean economic growth in the mobile sector. (CARB 2021) The 2020 Mobile Source Strategy includes concepts to move the State towards the goal that 100 percent of sales will be ZEVs by 2035 for on-road light-duty vehicles, 100 percent of California-registered trucks will be ZEVs by 2045, where feasible for on-road medium- and heavy-duty vehicles, and 100 percent of off-road vehicles and equipment will be zero-emission by 2035, where technologically feasible. (CARB 2021, pp. 4-5)

Advanced Clean Cars and Trucks

In January 2012, CARB approved the Advanced Clean Cars Program, a new emissions-control program for model year 2017 through 2025.

The program combines the control of smog-causing pollutants and GHGs with requirements for greater numbers of zero-emission vehicles (ZEVs). By 2025, when the rules will be fully implemented, the new automobiles will emit 40 percent fewer GHG emissions and 75 percent fewer smog-forming emissions (CARB ACCP).

The program also requires car manufacturers to offer for sale an increasing number of ZEVs each year, including battery electric, fuel cell, and plug-in hybrid electric vehicles (EV) (CARB ACCP).

In December 2012, CARB adopted regulations allowing car manufacturers to comply with California's GHG emissions requirements for model years 2017-2025 through compliance with the EPA GHG requirements for those same model years (CARB 2012). CARB staff is also currently developing the Advanced Clean Cars II program, which will update the state's passenger vehicle emission standards and ZEV requirements. The proposal is set for consideration in summer of 2022.

Additionally, CARB adopted the Advanced Clean Trucks (ACT) Regulation in 2021. The ACT Regulation is part of a holistic approach to accelerate a large-scale transition of zero-emission medium-and heavyduty vehicles from Class 2b to Class 8 and includes a manufacturers ZEV sales requirement and a onetime reporting requirement for large entities and fleets. (CARB ACT) CARB is also developing a medium and heavy-duty zero-emission fleet regulation with the goal of achieving a zero-emission truck and bus California fleet by 2045 everywhere feasible and significantly earlier for certain market segments such as last mile delivery and drayage applications.

Heavy-duty Vehicle Greenhouse Gas Regulation

In December 2008, CARB adopted the Heavy-duty Vehicle Greenhouse Gas Regulation to reduce GHG emissions by improving the fuel efficiency of heavy-duty tractors that pull 53-foot or longer box-type trailers. Fuel efficiency is improved through improvements in tractor and trailer aerodynamics and the use of low rolling resistance tires. The tractors and trailers subject to this regulation must use EPA SmartWay certified tractors and trailers or retrofit their existing fleet with SmartWay verified technologies. Trucks serving the Project that are not drayage trucks will be regulated under this statute

Duke Warehouse at Patterson Avenue and Nance Street DEIR

and required to comply with SmartWay standards to reduce GHG emissions. As part of the regulatory package for the Heavy-duty Vehicle GHG Regulation, CARB also reviewed and implemented the Drayage Truck Regulation and Truck and Bus Regulation. These three regulations were collectively adopted to address emissions from trucks (CARB 2010a).

Low Carbon Fuel Standard

Executive Order S-01-07 (January 18, 2007) requires a 10 percent or greater reduction in the average fuel carbon intensity for transportation fuels in California regulated by CARB. CARB identified the Low Carbon Fuel Standard (LCFS) as a Discrete Early Action item under AB 32 and the final resolution (09-31) was issued on April 23, 2009. In 2009, CARB approved for adoption the LCFS regulation which became fully effective in April 2010 and is codified at Title 17, CCR, Sections 95480-95490. The LCFS will reduce greenhouse gas emissions by reducing the carbon intensity of transportation fuels used in California by at least 10 percent by 2020. Carbon intensity is a measure of the GHG emissions associated with the various production, distribution, and use steps in the "lifecycle" of a transportation fuel. On December 29, 2011, the U.S. District Court for the Eastern District of California issued several rulings in the federal lawsuits challenging the LCFS. Opponents argued that the LCFS violates the Supremacy Clause (US Constitution, Article VI, Clause 2) and Commerce Clause (US Constitution, Article 1, Section 8, Clause 3) of the U.S. Constitution by discriminating against fuel produced out-of-state. One of the district court's rulings preliminarily enjoined CARB from enforcing the regulation. In January 2012, CARB appealed that decision to the Ninth Circuit Court of Appeals. On September 18, 2013, the Ninth Circuit issued its decision affirming the District Court's conclusion that LCFS ethanol and initial crude-oil provisions are not facially discriminatory but remanded to the District Court to determine whether the LCFS ethanol provisions are discriminatory in purpose and effect. Additionally, the Ninth Circuit remanded to the District Court with instructions to vacate the preliminary injunction against CARB's enforcement of the regulation (Rocky Mountain Farmers Union v. Corey (2013) U.S. Court of Appeals for the 9th Circuit No. 12-15131.).

California Energy Commission (CEC)

The CEC was formed by Assembly Bill (AB) 1575 and is the State's primary energy policy and planning agency. AB 1575, which was adopted in 1975 in response to the oil crisis of the 1970s, also requires EIRs to consider wasteful, inefficient, and unnecessary consumption of energy and was the driving force behind the creation of State *CEQA Guidelines* Appendix F. The CEC was established to address the State's energy challenges, and is responsible for the creation of the State Energy Plan. The State Energy Plan identifies the emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The State Energy Plan recommends that the State assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the fewest environmental and energy costs. The State Energy Plan also identifies a number of strategies, including providing assistance to public agencies and fleet operators, encouraging urban designs that reduce vehicles miles traveled, and accommodating pedestrian and bicycle access.

California Public Utilities Commission (CPUC)

CPUC regulates investor-owned electric and natural gas utilities operating in the State, including SCG. The CPUC regulates the natural gas rates and natural gas services, including in-State transportation over the utilities' transmission and distribution pipeline systems, storage, procurement, metering, and billing. CPUC policy on natural gas infrastructure and capacity is to: 1) allow gas utilities to gain better access to new sources of supply, develop a diverse supply portfolio, and have adequate storage capacity for core procurement requirements; 2) ensure adequate, diverse utility natural gas pipeline and

storage infrastructure for utilities and consumers; 3) assure delivery of supplies with a high degree of certainty, especially for core customers; 4) minimize transmission constraints; 5) provide access to a diverse portfolio of supplies; 6) reduce the likelihood of price spikes; 7) allow more gas to be stored when prices are low; 8) allow customers to match supplies with requirements; and 9) obtain fair access to utility transmission systems for suppliers and pipelines.

California Energy Code

The California Energy Code (Title 24, Part 6 of the California Code of Regulations (CCR)) was established in 1978 to reduce California's energy consumption. Energy use standards in the code are updated periodically to reduce per-capita energy use and to include new programs, such as the California Renewable Energy Portfolio Standards and the California Solar Initiative. In 2008, the CPUC adopted the state's first "Long-Term Energy Efficiency Strategic Plan" for achieving energy savings in various sectors throughout California. In 2011, the Strategic Plan was updated to include a chapter related to lighting.

Title 20 of the California Code of Regulations

California's Appliance Efficiency 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. (CEC Title 20)

Title 24 of the California Code of Regulations

The California Energy Code (CCR Title 24, Part 6) was established in 1978 to reduce California's energy consumption. Energy use standards in the code, referred to as Building Energy Efficiency Standards, are updated on an approximately three-year cycle (CEC Standards). Energy consumption by new buildings in the State is regulated by The California Energy Code via the Building Energy Efficiency Standards. These efficiency standards (commonly referred to as Title 24 standards) apply to newly constructed buildings and additions and alterations to existing buildings. (CEC 2022). They are designed to reduce wasteful, uneconomic, inefficient or unnecessary consumption of energy, and enhance outdoor and indoor environmental quality. The current 2022 Building Energy Efficiency Standards (Energy Code), which goes into effect January 1, 2023, focuses on four key areas in new construction of homes and business by encouraging 1) electric heat pump technology and use, 2) establishing electric-ready requirements when natural gas is installed, 3) expanding solar photovoltaic (PV) system and battery storage standards, and 4) strengthening ventilation standards to improve indoor air quality. Specifically, the 2022 updates require all new homes be electric-ready. That means buildings with gas stoves have the electrical panels and wiring to support a switch to electric stoves. Further advancements and cost reductions will continue to expand electric options for heating, cooking, laundering, and EV charging to meet all Californians' needs. (CEC 2022) The Project will be subject to the Title 24 Standards in effect at the time of building permits. It is projected that the upcoming 2022 building efficiency standards will reduce 10 million metric tons of GHGs over 30 years. This reduction is equivalent to taking nearly 2.2 million cars off the road for a year. (CEC 2022) On a statewide basis throughout 2023, all measures for
newly constructed buildings and altered components of existing buildings collectively would save approximately 33 million therms of fossil fuel natural gas and 1.3 billion kWh of electricity.¹

Green Building Standards

The purpose of Title 24, specifically Part 11, known as the California Green Building Standards (CALGreen) Code, is to encourage sustainable construction practices that reduce negative impacts on the environment through planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. The CALGreen Code is applicable to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout the State. See Section 5.7.2 of this DEIR for a more detailed listing of applicable CALGreen code sections.

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (AB 939) requires each jurisdiction in California to submit detailed solid waste planning documents for the California Department of Resources, Recycling, and Recovery's (CalRecycle) approval, set diversion requirements of 25 percent in 1995 and 50 percent in 2000, established a comprehensive statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities, and authorized local jurisdictions to impose fees based on the types or amounts of solid waste generated (CalRecycle 2018b). As of 2007, jurisdictional diversion rates are no longer calculated; with the passage of the Per Capita Disposal Measurement System (SB1016), only per capita disposal rates are measured. CalRecycle compares each jurisdiction's reported disposal tons to population to calculate per capita disposal in pounds per person per day (CalRecycle JD). The City achieved an annual per capita disposal rate of 6.2 pounds per day per resident, and 23.1 pounds per day per employee in 2020, the most recent data available. (CalRecycle Perris)

AB 341 (2011) amended AB 939 to include a provision declaring that it is the policy goal of the State that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020, and annually thereafter (Public Resources Code Section 41780.01) The state did not meet its 75 percent by 2020 recycling goal set out in AB 341. However, CalRecycle identified five strategies and three additional focus areas that can be pursued by the state to reach the 75 percent goal. (CalRecycle 2020)

The City contracts with CR&R for waste management. Regarding construction and demolition material, CR&R offers a variety of ways to recycle and reduce waste on construction sites. Landfill is further reduced through construction waste re-planning, source separation, mixed recycling, and the reuse or donation of used or excess construction materials (Perris CAP).

Renewable Portfolio Standard

Established in 2002 under SB 1078, accelerated in 2006 under SB 107, again in 2011 under SBX1-2, in 2015 under SB 350, and again in 2018 under SB 100, California's Renewable Portfolio Standard (RPS) required retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020 (SB 1078, SB 1368). The 33 percent standard was

¹ Per the Draft Environmental Impact Report Amendments to the Building Energy Efficiency Standards (<u>https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency</u>)

consistent with the RPS goal established in the Scoping Plan (CARB 2008). Initially, the RPS provisions applied to investor-owned utilities, community choice aggregators, and electric service providers. SBX1-2 added, for the first time, publicly owned utilities to the entities subject to RPS.

Senate Bill 350 (SB 350), signed in 2015, increased the RPS from 33 percent in 2020 to 50 percent by 2030 and will double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation by 2030. (CARB 2017, p. 2)

Senate Bill 100 (SB 100) was subsequently signed in 2018 and directs CPUC, CEC, and CARB to plan for 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045. SB 100 also accelerates the RPS target to 50 percent by 2026 and to 60 percent by 2030.

Local

Perris Comprehensive General Plan 2030

The Perris GP 2030 sets forth objectives and policies to promote minimizing the use of energy and instead generating electricity from renewable resources to ensure plentiful future supply and reducing the negative impacts on the environment. Specifically, the Conservation and Healthy Community Element focuses on conserving, among other items, energy resources. The relevant Perris GP goals, policies, and implementation measures, which are intended to conserve energy in the City, are discussed below.

Conservation Element

Goal VIII	Create a vision for energy and resource conservation and the use of green building design for the City which provides for the protection of the environment while improving the quality of life and promoting sustainability.
Policy VIII.A	Adopt and maintain development regulations, which encourage water and resource conservation.
Measure VIII.A.2	Use indigenous and/or drought-resistant planting and efficient irrigation systems with smart controls in all new and refurbished commercial and industrial development projects. Also, restrict use of turf to 25% or less of the landscaped areas.
Measure VIII.A.4	Use gray water, and water-conserving appliances and fixtures within all new commercial and industrial developments.
Policy VIII.C	Adopt and maintain development regulations which encourage increased energy efficiency in buildings, and the design of durable buildings that are efficient and economical to own and operate. Encourage green building development by establishing density bonuses, expedited permitting, and possible tax deduction incentives to be made available for developers who meet LEED building standards for new and refurbished developments (U.S. Green Building Council's Leadership in Energy and Environmental Design green building programs).
Measure VIII.C.3	Encourage the design and construction of durable buildings that are efficient and economical to own and operate.

City of Perris	Section	5.5
Duke Warehouse at Pa	atterson Avenue and Nance Street DEIR Ener	ſgy
Measure VIII.C.4	Review new development projects for compliance with the design guidelines contained within the Sustainable Community section through Conditions of Approval and a finding that the project conforms to the General Plan.	
Measure VIII.C.5	Encourage green building density bonuses, expedited permitting, and possible to deduction incentives to be made available for developers who meet LEED building standards for new developments.	ax 1g
Goal IX	Encourage project designs that support the use of alternative transportation facilities.	
Policy IX.A	Encourage land uses and new development that support alternatives to the single occupant vehicle.	e
Measure IX.A.1	Encourage installation of shared vehicle parking and support facilities within new and refurbished commercial and industrial developments, i.e., dual fuel vehicles and charging systems on site, car pool parking, and bus stop shelters.	1
Measure IX.A.2	Install bicycle paths and create secure and accessible bicycle storage for visitors and occupants within new and refurbished commercial and industrial developments.	3
Measure IX.A.4	Encourage building and site designs that facilitate pedestrian activity, such as locating buildings close to the street and providing direct connections to public walkways and neighboring land uses.	
Measure IX.A.5	The City shall require all new public and private development to include bike and walking paths wherever feasible.	1
Goal X	Encourage improved energy performance standards above and beyond the California Title 24 requirements.	
Policy X.A	Establish density bonuses, expedited permitting, and possible tax deduction incentives to be made available for developers who exceed current Title 24 requirements for new development.	
Policy X.B	Encourage the use of trees within project design to lessen energy needs, reduce the urban heat island effect, and improve air quality throughout the region.	ł
Policy X.C	Encourage strategic shape and placement of new structures within new commercial and industrial projects.	
Measure X.C.1	Promote energy conservation by taking advantage of natural site features such a natural lighting and ventilation, sunlight, shade and topography during the site plan process.	IS
Measure X.C.2	When possible, locate driveways and parking on the east and north sides of buildings to reduce heat buildup during hot afternoons.	
Healthy Communit	y Element	
Policy HC 6.1:	Support regional efforts to improve air quality through energy efficient technolog use of alternative fuels, and land use and transportation planning.	y,
Policy HC 6.2:	Support regional water quality efforts that balance water conservation, use of recycled water, and best practices in watershed management.	

Energy

PVCCSP Standards and Guidelines and Mitigation Measures

There are no specific standards or guidelines related to energy conservation identified within the PVCCSP; however, section 13.3.5 does require each new entitlement to attempt to LEED certification:

13.3.5 LEED Certification Eligibility

 LEED Certification Eligibility is based on LEED New Construction and the California Green Building Code (part 11 of Title 24). LEED has four levels of certification: Certified, Silver, Gold, and Platinum. The Project proponent must indicate a commitment to reach a particular level of LEED certification prior to project approval. At a minimum, the City will mandate that any new entitlement shall attempt to achieve a "Certified" status. For each level of LEED Certification that the project proponent intends to meet in excess of "certified" status, the City shall reward a corresponding level of incentive.

Additionally, the PVCCSP EIR includes various mitigation measures to ensure that projects located within the PVCCSP planning area identify air quality impacts from construction and operation and mitigate any potential impacts appropriately. Relevant mitigation measures from the PVCCSP EIR which address air quality impacts and also increase energy efficiency.

- **MM Air 4**: Building and grading permits shall include a restriction that limits idling of construction equipment on site to no more than five minutes.
- **MM Air 11**: Signage shall be posted at loading docks and all entrances to loading areas prohibiting all on-site truck idling in excess of five minutes.
- **MM Air 12**: Where transport refrigeration units (TRUs) are in use, electrical hookups will be installed at all loading and unloading stalls in order to allow TRUs with electric standby capabilities to use them.
- **MM Air 14**: Each implementing development project shall designate parking spaces for highoccupancy vehicles and provide larger parking spaces to accommodate vans used for ride sharing. Proof of compliance would be required prior to the issuance of occupancy permits.
- **MM Air 18**: Prior to the approval of each implementing development project, the Riverside Transit Agency (RTA) shall be contacted to determine if the RTA has plans for the future provision of bus routing within any street that is adjacent to the implementing development project that would require bus stops at the project access points. If the RTA has future plans for the establishment of a bus route that will serve the implementing development project, road improvements adjacent to the Project site shall be designed to accommodate future bus turnouts at locations established through consultation with the RTA. RTA shall be responsible for the construction and maintenance of the bus stop facilities. The area set aside for bus turnouts shall conform to RTA design standards, including the design of the contact between sidewalks and curb and gutter at bus stops and the use of ADA-compliant paths to the major building entrances in the Project.
- **MM Air 19**: In order to reduce energy consumption from the individual implementing development projects, applicable plans (e.g., electrical plans, improvement maps) submitted to the City shall include the installation of energy-efficient street lighting throughout the Project

site. These plans shall be reviewed and approved by the applicable City Department (e.g., City of Perris' Building Division) prior to conveyance of applicable streets.

MM Air 20: Each implementing development project shall be encouraged to implement, at a minimum, an increase in each building's energy efficiency 15 percent beyond Title 24, and reduce indoor water use by 25 percent. All reductions will be documented through a checklist to be submitted prior to issuance of building permits for the implementing development project with building plans and calculations.

City of Perris Community Energy Action Plan (CEAP) and Climate Action Plan (CAP)

At the subregional level, the Western Riverside Council of Governments (WRCOG) developed a CAP to assist local cities and jurisdictions in meeting statewide goals, as well as to encourage input and coordination among participating jurisdictions. Perris was a participating member. To meet emissions reduction targets, the WRCOG CAP considers existing programs and policies in the subregion that achieve GHG emissions reductions, in addition to new GHG reduction measures. This CAP uses consistent methodologies and allows jurisdictions to collaboratively implement regionally-effective measures using economies of scale which may lead to lower administrative costs and greater publicity of incentives. Several proposed measures apply to participating jurisdictions uniformly, because they respond to adoption of a state law (e.g., the Low Carbon Fuel Standard) or result from programs administered at the discretion of a utility serving multiple jurisdictions (e.g. utility rebates). The Perris CAP was adopted in 2016 and included the GHG inventories and forecasts from the WRCOG CAP. However, the CAP did not demonstrate compliance with the statewide GHG goal established by SB 32 for 2030 because it was adopted prior to SB 32. Additional discretionary measures have been adopted by participating jurisdictions, including Perris, to voluntarily commit to a participation level that can be implemented in their community.

One of the discretionary measures the City has undertaken is the development of Perris's Community Energy Action Plan (CEAP). The CEAP was adopted in 2014 to improve the energy efficiency of the City. Based on the energy efficiency analysis, the CEAP will assist the City in prioritizing goals, policies, and assign appropriate energy consumption reduction targets across the community. The CEAP includes statewide policies as R1 reduction measures. The R1 measures are consistent with all of the anticipated reduction strategies identified in the AB 32 Scoping Plan for implementation at the state level that will ultimately result in a reduction of GHG emissions at the local level. CEAP R2 and R3 measures describe local actions which would be incorporated to provide additional reductions in GHG emissions. R2 measures can be quantified to show the value of the reduction in GHG emissions. The R3 measures are supportive measures or methods of implementation for the R2 measures. R3 measures provide a program through which reductions in emissions would occur, but their value cannot be quantified.

5.5.3 Design Considerations

Design considerations refer to ways in which the proposed Project will reduce potential impacts to energy. The PVCCSP requires each entitlement to attempt to obtain LEED certification. The Project Applicant has committed to achieve LEED "Certified" status for the building. As stated in Project Description of this DEIR (Section 3.3.6), the proposed Project will also be designed and constructed so as to meet all applicable standards under CALGreen and Title 24. This will be accomplished by incorporating, at a minimum, the following features or other features that are equally efficient to reduce energy consumption:

Energy Efficiency

- Design building shells and components, such as windows, roof systems and electrical systems to meet California Title 24 Standards for nonresidential buildings.
- Design buildings to achieve U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) features for potential certification. This includes design considerations related to the building envelope, heating, ventilation, and air conditioning (HVAC), lighting, and power systems. Additionally, the architectural expression such as roofs and windows in the buildings will relate to conserving energy.
- Install energy efficient light-emitting diodes (LED) lighting on the site. Provide skylights for natural day light to reduce the lighting load, therefore saving energy. Lighting will incorporate motion sensors that turn them off when not in use.
- Meet City minimum landscape requirements and provide adequate landscape shade for the site to reduce energy use.
- Install light-colored roofing materials over office area spaces and light-colored paving materials.
- For future office space, install energy efficient HVAC systems (seasonal energy efficiency ratio (SEER) 13), appliances and equipment, and control systems that are Energy Star rated.
- For future office improvement, refrigerants and HVAC equipment will be selected to minimize or eliminate the emission of compounds that contribute to ozone depletion and global climate change. Ventilation and HVAC systems will be designed to meet or exceed the minimum outdoor air ventilation rates described in the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) standards and/or per California Title 24 requirements.
- For future office improvement, implement design features to increase the efficiency of the building envelope (i.e., the barrier between conditioned and unconditioned spaces). This includes providing R-19 roof insulation for conditioned space and R-22 between conditioned and unconditioned space to minimize heat transfer and minimize energy consumption.
- Provide greatly enhanced window glazing insulation for exterior walls at conditioned spaces (0.28 or less U-factor).
- Incorporate Energy Star rated space heating and cooling equipment, light fixtures, appliances, or other applicable electrical equipment.

Water Conservation and Efficiency

- Recycled water shall be used for landscape irrigation.
- Surface parking lots will be landscaped in accordance with City standards to reduce heat island effect.
- Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and sensors for landscaping according to the California Department of Water Resources Model Efficient Landscape Ordinance and Chapter 19.70 (Landscaping) of the City's Municipal Code.
- Design buildings to be water-efficient. Install water-efficient fixtures in accordance with Section 5.303 of the California Green Building Standards Code Part 11.

- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff in accordance with City Standards.
- Provide education about water conservation and available programs and incentives to the building operators to distribute to employees.

Transportation and Motor Vehicles

- The Project site will include preferred parking locations for clean air/vanpool vehicles in accordance with Section 5.106.5.2, Designated parking for clean air vehicles, of the California Green Building Standards Code Part 11.
- Limit idling time for commercial vehicles to no more than five minutes per Title 13 of the California Code of Regulations, Section 2485.
- Provide at least six percent of the total parking spaces to facilitate future installation of electric vehicle supply equipment in accordance with Section 5.106.5.3.2, Multiple Charging Space Requirements, of the California Green Building Standards Code Part 11.
- Provide up to two electric vehicle charging facilities to encourage the use of low or zeroemission vehicles.
- Signage shall be posted on-site directing truck drivers to use existing City truck routes on Harley Knox Boulevard.
- Maintain existing Class II bike lane on Patterson Avenue.
- Provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience in compliance with Section 5.106.4 of the California Green Building Standards Code Part 11 and standard City code requirements.

On-Site Equipment and Loading Docks

- The Project owner will inform building operators of existing requirements to turn off equipment, including heavy-duty equipment, motor vehicles, and portable equipment, when not in use for more than 5 minutes. Truck idling shall not exceed 5 minutes in time. All facilities will post signs (both interior- and exterior-facing signs, including signs directed at all dock and delivery areas) requiring that trucks shall not be left idling for more than 5 minutes pursuant to Title 13 of the California Code of Regulations, Section 2485, which limits idle times to not more than five minutes and to report violations to California Air Resources Board, the South Coast Air Quality Management District, and the building manager.
- Service equipment (i.e., yard trucks and forklifts) used within the site shall be electric or powered by other alternative fuels.

Construction

- Require Construction Equipment to Turn Off When Not in Use per Title 13 of the California Code of Regulations, Section 2449.
- Use regionally produced and/or manufactured building materials, where feasible, for Project construction.
- Use "green" building materials where feasible, such as those materials that are resource efficient and recycled and manufactured in an environmentally friendly way.

Energy

Duke Warehouse at Patterson Avenue and Nance Street DEIR

5.5.4 Thresholds of Significance

The City of Perris has not established local CEQA significance thresholds and instead, defers to the thresholds of significance identified in Appendix G to the State *CEQA Guidelines*. Impacts related to this Project may be considered potentially significant if the proposed Project would:

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

5.5.5 Environmental Impacts before Mitigation

Threshold A: Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The analysis of energy impacts utilizes the assumptions from the *Air Quality/Greenhouse Gas Analysis for the Duke Warehouse at Patterson Avenue and Nance Street* evaluated in Section 5.2 Air Quality and Section 5.7 Greenhouse Gas Emissions, respectively (refer to Appendix B.1.). Because the California Emissions Estimator Model (CalEEMod) program used in this technical report does not display the amount and fuel type for construction-related sources, additional calculations were conducted and are summarized herein. These calculations are included as Appendix E of this DEIR.

This analysis addresses each of the six potential energy impacts identified in State CEQA Guidelines Appendix F. Appendix F provides criteria for assessing potential impacts that a project could have on energy supplies, focusing on the goal of conserving energy by ensuring that projects use energy in a wise and efficient manner. Pursuant to impact possibilities listed in Appendix F, an impact to energy consumption and conservation will occur if implementation of the proposed Project will:

- Result in the wasteful, inefficient, or unnecessary consumption of energy. Impacts may include:
 - 1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal;
 - 2. The effects of the project on local and regional energy supplies and on requirements for additional capacity;
 - 3. The effects of the project on peak and base period demands for electricity and other forms of energy;
 - 4. The degree to which the project complies with existing energy standards;
 - 5. The effects of the project on energy resources;
 - 6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

The analysis below addresses each of the six potential energy impacts identified in State CEQA Guidelines Appendix F.

1. The project's energy requirements and its energy use efficiencies by amount and fuel type for each stage of the project including construction, operation, maintenance and/or removal.

Construction

Project construction would require the use of construction equipment for grading, hauling, and building activities, as well as construction workers and vendors traveling to and from the Project site. Construction equipment requires diesel as the fuel source.

Fuel consumption from on-site heavy-duty construction equipment was calculated based on the equipment mix and usage factors provided in the CalEEMod construction output files included in Appendix B.1 of this DEIR. The total horsepower was then multiplied by fuel usage estimates per horsepower-hour included in Table A9-3-E of the SCAQMD's CEQA Air Quality Handbook. Fuel consumption from construction worker and vendor/delivery trucks was calculated using the trip rates and distances provided in the CalEEMod construction output files. Total vehicle miles traveled (VMT) was then calculated for each type of construction-related trip and divided by the corresponding county-specific miles per gallon factor using California Air Resources Board's (CARB's) EMFAC 2017 model. EMFAC provides the total annual VMT and fuel consumed for each vehicle type. Consistent with CalEEMod, construction worker trips were assumed to include 50 percent light duty gasoline auto and 50 percent light duty gasoline trucks. Construction vendor trucks were assumed to be medium-duty and heavy-duty diesel trucks. Please refer to Appendix E of the DEIR for detailed calculations.

As shown below in **Table 5.5-C – Construction Energy Use**, a total of 101,343 gallons of diesel fuel, and 75,211 gallons of gasoline is estimated to be consumed during Project construction.

Fuel	Fuel Consumption
Diesel	
On-Road Construction Trips ^a	43,663 Gallons
Off-Road Construction Equipment ^b	57,680 Gallons
Diesel Total	101,343 Gallons
Gasoline	
On-Road Construction Trips ^a	75,211 Gallons
Off-Road Construction Equipment ^c	Gallons
Gasoline Total	75,211 Gallons

Table 5.5-C -	Construction	Energy Use
---------------	--------------	-------------------

Notes:

Source: Table 1 – Total Construction-Related Fuel Consumption, Appendix E of DEIR.

^a On-road mobile source fuel use based on vehicle miles traveled (VMT) from CalEEMod for construction in 2022 and fleet average fuel consumption in gallons per mile from EMFAC2017 for the construction year in the SCAQMD. See Table 2 – On Road Construction Trip Estimates, Appendix E of DEIR for calculation details. ^b Off-road mobile source fuel usage based on a fuel usage rate of 0.05 gallons of diesel per horsepower (HP)-hour, based on SCAQMD CEQA Air Quality Handbook, Table A9-3E.

° All emissions from off-road construction equipment were assumed to be diesel.

Fuel energy consumed during construction would be temporary in nature and would not represent a significant demand on energy resources. Construction equipment is also required to comply with regulations limiting idling to five minutes or less (CCR Title 13 Section 2449(d)(3)) which is included in

PVCCSP EIR mitigation measure **MM Air 4**, as described in Section 5.5.2, above. Furthermore, there are no unusual Project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the State. For comparison, the State of California consumed 14.0 billion gallons of gasoline and 3.5 billion gallons of diesel fuel in 2020, which is the most recent published data (CDEC). Thus, the fuel usage during Project construction would account for a negligible percent of the existing gasoline and diesel fuel related energy consumption in the State of California. Furthermore, it is expected that construction-related fuel consumption associated with the Project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

Operation

The Project will promote building energy efficiency through compliance with energy efficiency standards (Title 24 and CALGreen). The Project proponent has committed to achieve LEED "Certified" status for the building. The Project also reduces vehicle fuel usage due to compliance with regulatory programs and Project design features that reduce VMT and fuel use. AB 1493 ("the Pavley Standard") requires reduction in GHG emissions from non-commercial passenger vehicles and light-duty trucks of model year 2009 and thereafter. Executive Order S-01-07 went into effect in 2010 and requires a reduction in the carbon intensity of transportation fuels used in California by at least 10 percent by 2020. It imposes fuel requirements on fuel that will be sold in California that will decrease GHG emissions by reducing the full fuel-cycle and the carbon intensity of the transportation fuel pool in California. The Advanced Clean Cars program, introduced in 2012, combines the control of smog, soot causing pollutants and greenhouse gas emissions into a single coordinated package of requirements for model years 2017 through 2025. Advanced Clean Trucks includes a manufacturers ZEV sales requirement that will further reduce fuel consumption.

For operational activities, annual electricity and natural gas consumption were calculated using demand factors provided in the CalEEMod output as part of the greenhouse gas analysis included in Section 5.7, Greenhouse Gas Emissions, of this DEIR. The Project's total electrical consumption was estimated to be approximately 8,022,946 kWh (approximately 8 million kWh) of electricity per year and the natural gas consumption was estimated to be approximately 1,547,030 kilo-British thermal units (kBTUs) or approximately 15,474 therms.² The electricity demand for potential EV charging stations at each EV charging space is estimated to be 3,942,000 kWh/year. The electricity demand for on-site electric service equipment is estimated to be 1,796,036 kWh/year and 84,953 kWh/year for forklifts and yard trucks, respectively. The electricity use associated with the Project water consumption was also estimated to be approximately 83.5 billion kWh of electricity in 2020 and SCG produced approximately 83.5 billion kWh of electricity demand would be a negligible amount of the existing electricity and the natural gas demand would be a negligible percent of the existing natural gas use in SCG's service area.

Energy impacts associated with transportation during operation were also assessed using the traffic data contained in the greenhouse gas analysis included in Section 5.7, Greenhouse Gas Emissions, of this DEIR. Based on the annual VMT, gasoline and diesel consumption rates were calculated using the Riverside County-specific miles per gallon in EMFAC2017. As shown below in **Table 5.5-D – Annual**

² Per Table 3 – Annual Energy Consumption from Operation, Appendix E of the DEIR.

Fuel Consumption, a total of 136,733 gallons of diesel fuel, and 213,255 gallons of gasoline is estimated to be consumed each year.

Fuel Type ^{a, b}	Fuel Consumption (gallons/year)
Gasoline	213,255
Diesel	136,733

Table 5.5-D – Ann	nual Fuel Co	onsumption
-------------------	--------------	------------

Source: Table 3 - Annual Energy Consumption from Operation, Appendix E of

Notes:

DEIR. ^a Mobile source fuel use based on annual vehicle miles traveled (VMT) from CalEEMod output (DEIR Appendix B.1) for operational year 2023 and fleetaverage fuel consumption in gallons per mile from EMFAC2017 data in Riverside County.

^b Operational VMT for the Project was calculated at 7,951,847 miles per year based on the CalEEMod output (DEIR Appendix B.1).

Regulations previously identified related to energy conservation and fuel efficiency include but are not limited to Title 24 requirements for windows, roof systems, and electrical systems, and Pavley standards and Advanced Clean Cars Program. Designing the building to achieve LEED "Certified" status will increase energy efficiency beyond existing regulations, and will include, but is not limited to feasible design measures that evaluate increasing reliance on renewable energy resources. Additionally, mitigation measures in Section 5.2, Air Quality, also serve to reduce energy and fuel consumption. Specifically, PVCCSP EIR mitigation measures **MM Air 11** and **MM Air 12** reduce fuel usage by limiting truck idling times to five minutes on the site, requiring electrical hook-ups at loading docks, and designing the Project to require on-site service equipment such as forklifts and yard trucks to be electric or powered by other alternative fuels, respectively. PVCCSP EIR mitigation measures **MM Air 18** also promote the use of efficient transportation choices such as carpool/vanpool and buses.

Collectively, compliance with regulatory programs and implementation of these mitigation measures would ensure that the Project would not result in the inefficient, unnecessary, or wasteful consumption of energy. Therefore, impacts to energy resources during construction or operation will be less than significant and no additional mitigation is required beyond those required by PVCCSP EIR mitigation measures listed above.

2. The effects of the project on local and regional energy supplies and on requirements for additional capacity.

As addressed above, the Project's electrical consumption was minimal in-comparison to SCE's supply. The Project will comply with applicable state, SCE, and Perris GP 2030 goals and policies that require energy conservation to reduce electrical demand within the Project site. As discussed above, SCE's total electrical consumption was approximately 83.5 billion kilowatt-hours (kWh) in 2020. The Project demand would be a negligible amount of SCE's existing electricity use. As such, there will be adequate capacity to serve the proposed Project.

As addressed in above, the Project's natural gas consumption was estimated to be approximately 15,474 therms. The Project will comply with applicable CPUC, State, SCG, and Perris GP 2030 goals and policies and standards that require energy conservation to reduce natural gas demand within the Project area. As discussed above, the Project demand would be a negligible percent of SCG's existing

Energy

natural gas use. As the proposed Project's overall consumption of natural gas use is comparatively insignificant to existing SCG-wide use and as they continuously expand the network, as needed, to meet the need in Southern California, there will be adequate capacity to serve the proposed Project. The Project would therefore not have a significant effect on local and regional energy supplies.

As described above, SCE produced approximately 83.5 billion kilowatt-hours (kWh) in 2020, and the Project is expected to have a negligible impact to SCE's total electricity usage. Therefore, the Project will not have a substantial effect on energy supplies.

3. The effects of the project on peak and base period demands for electricity and other forms of energy.

As described above, SCE produced approximately 83.5 billion kWh in 2020, and the Project is expected to have a negligible impact to SCE's total electricity usage. Therefore, the Project will not have a substantial effect on energy supplies.

The Project will meet Title 24 regulatory standards for windows, roof systems, and electrical systems. The Project will install efficient lighting and lighting control systems. Solar or light-emitting diodes (LEDs) will be installed for outdoor lighting. The site and buildings will be designed to take advantage of daylight, such that use of daylight is an integral part of the lighting systems in buildings. Lighting will incorporate motion sensors that turn them off when not in use. Trees and landscaping will be used to reduce energy use. Light colored roof materials over office area spaces and light colored paving materials will be installed. With regard to peak hour demands, purveyors of energy resources, including SCE, have established long standing energy conservation programs to encourage consumers to adopt energy conservation habits and reduce energy consumption during peak demand periods. The proposed Project supports these efforts through implementation of PVCCSP EIR mitigation measures **MM Air 19** and **MM Air 20**, Perris GP 2030 policies identified above, and a number of Project design features that will not only reduce energy consumption during peak hour demands, but also during the base period. To this end, the Project will not substantially affect peak and base period demands for electricity or other forms of energy, such as natural gas.

4. The degree to which the project complies with existing energy standards.

The proposed Project would be required to comply with City, State and federal energy conservation measures related to construction and operations. Many of the regulations regarding energy efficiency are focused on increasing building efficiency and renewable energy generation, promoting sustainability through energy conservation measures, as well as reducing water consumption and VMT. As described above in Section 5.5.2 and 5.5.3, the proposed Project will meet and/or exceed these regulatory requirements and implement additional design features.

The California Energy Code building energy efficiency standards include provisions applicable to all buildings, residential and non-residential, which are mandatory requirements for efficiency and design. The proposed Project will comply with Title 24. This would be accomplished through among other things, implementation of energy reduction measures, such as energy efficient lighting and appliances. The Project would comply fully with existing energy standards.

In addition, the Project will be consistent with applicable goals and polices within the Perris GP 2030. Through implementation of energy conservation measures and sustainable practices, the Project will not

use large amounts of energy in a manner that is wasteful or otherwise inconsistent with adopted standards, plans or policies.

5. The effects of the project on energy resources.

The effects of the Project on energy supplies and resources from a capacity standpoint are described above in the preceding analysis. With regard to the effects of Project implementation on energy resources, the Project is required to ensure that the Project does not result in the inefficient, unnecessary, or wasteful consumption of energy. Notable regulatory measures that are discussed above include compliance with California Title 24 and CalGreen Standards, Renewable Portfolio Standards (RPS), Pavley standards and the Advanced Clean Cars Program. The Project also includes, but is not limited to, the following design features discussed in Sections 5.5.3:

- Designing the building to achieve LEED "Certified" status.
- Design building shells and components, such as windows, roof systems and electrical systems to meet California Title 24 Standards for nonresidential buildings.
- Design buildings to achieve U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) features for potential certification. This includes design considerations related to the building envelope, heating, ventilation, and air conditioning (HVAC), lighting, and power systems. Additionally, the architectural expression such as roofs and windows in the buildings will relate to conserving energy.
- Install energy efficient light-emitting diodes (LED) lighting on the site. Provide skylights for natural day light to reduce the lighting load, therefore saving energy. Lighting will incorporate motion sensors that turn them off when not in use.
- Meet City minimum landscape requirements and provide adequate landscape shade for the site to reduce energy use.
- Install light-colored roofing materials over office area spaces and light-colored paving materials.
- For future office space, install energy efficient HVAC systems (seasonal energy efficiency ratio (SEER) 13), appliances and equipment, and control systems that are Energy Star rated.
- For future office improvement, refrigerants and HVAC equipment will be selected to minimize or eliminate the emission of compounds that contribute to ozone depletion and global climate change. Ventilation and HVAC systems will be designed to meet or exceed the minimum outdoor air ventilation rates described in the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) standards and/or per California Title 24 requirements.
- For future office improvement, implement design features to increase the efficiency of the building envelope (i.e., the barrier between conditioned and unconditioned spaces). This includes providing R-19 roof insulation for conditioned space and R-22 between conditioned and unconditioned space to minimize heat transfer and minimize energy consumption.
- Provide greatly enhanced window glazing insulation for exterior walls at conditioned spaces (0.28 or less U-factor).
- Incorporate Energy Star rated space heating and cooling equipment, light fixtures, appliances, or other applicable electrical equipment.

• Service equipment (i.e., yard trucks and forklifts) used within the site shall be electric or powered by other alternative fuels.

Further, the previously listed PVCCSP EIR mitigation measures will reduce energy consumption.

6. The project's projected transportation energy use requirements and its overall use of efficient transportation alternatives.

As stated above, energy impacts associated with transportation during construction and operation of the Project would not result in the inefficient, unnecessary, or wasteful consumption of energy through adherence to existing regulations and Perris GP 2030 policies and implementation of design features and mitigation measures. Regarding efficient transportation alternatives, the Project will provide alternative transportation choices because Riverside Transit Agency (RTA) operates two bus routes that travel through the PVCCSP area, Routes 19 and 41. Route 19 passes the Project site along Perris Boulevard, just under one-half mile from the Project site. Additionally, the Project will comply with CALGreen requirements and, pursuant to PVCCSP EIR mitigation measure **MM Air 14** will provide bike racks and carpool/vanpool parking stalls, in addition to the specific design features incorporated in the Project. Implementation of these various measures decreases reliance on fossil fuels.

Threshold B: Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

As previously stated, the proposed Project will comply with City, State and federal energy conservation measures related to construction and operations, as noted above. Many of the regulations regarding energy efficiency are focused on increasing building efficiency and renewable energy generation, promoting sustainability through energy conservation measures, as well as reducing water consumption and VMT and increasing use of alternative fuels. The California Energy Code building energy efficiency standards include provisions applicable to all buildings, residential and non-residential, which are mandatory requirements for efficiency and design. Further, the proposed Project will comply with Title 24. This would be accomplished through among other things, with implementation of energy reduction measures, such as energy efficient lighting and lighting control systems, appliances, installation of light colored roof materials over office spaces, installation of light colored pavements, installation of barriers between conditioned and unconditioned spaces, and providing clean air/vanpool parking stalls. Moreover, the service providers (SCE and SCG) are subject to renewable energy requirements under the RPS.

In addition, the Project will be consistent with applicable goals and polices within the Perris GP 2030 and the City's CAP and CEAP. The CEAP was adopted in 2014 to improve the energy efficiency of the City. As such, through compliance with Perris GP 2030 energy objectives and policies noted above, the proposed Project will meet and/or exceed these regulatory requirements. Therefore, impacts to obstructing a state or local plan for renewable energy or energy efficiency during construction or operation will be **less than significant**.

5.5.6 Recommended Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures that could minimize significant adverse impacts (State CEQA Guidelines Section 15126.4). Development of the proposed Project with adherence to existing regulations and incorporation of the energy efficient and conserving features discussed previously under Section 5.5.2 and 5.5.3 will not result in wasteful or

inefficient and unnecessary consumption of energy. The Project will also implement the feasible and applicable PVCCSP EIR mitigation measures listed in Section 5.5.2, to reduce energy consumption and encourage transportation alternatives at the Project site.

5.5.7 Summary of Environmental Effects after Mitigation Measures Are Implemented

Implementation of the proposed Project with incorporation of the required design features and implementation of the feasible and applicable PVCCSP EIR mitigation measures, will not result in wasteful or inefficient and unnecessary consumption of energy.

5.6 Geology and Soils

The focus of the following discussion is related to the potential for the proposed Project to have impacts related to: the rupture of a known earthquake fault; strong seismic ground shaking; seismic-related ground failure, including liquefaction; landslides; substantial loss of topsoil or soil erosion; unstable soils; expansive soils; soil capability of supporting septic; paleontological resources or other geologic features. The analysis in this section is based on three reports; the *Geotechnical Investigation Proposed Warehouse NEC Patterson Avenue and Nance Street Perris California for Duke Realty,* which is included as Appendix F.1 of this Draft Environmental Impact Report (DEIR), the *Paleontological Technical Memorandum for the Duke Warehouse at the Patterson Avenue and Nance Street,* which is included as Appendix F.2 of this DEIR, and the *Paleontological Assessment for the Perris Valley Channel Lateral B Extension Project,* which is included as Appendix F.3 of this DEIR.

There were no comments received on the Notice of Preparation (NOP) or at the February 2, 2022 EIR public scoping meeting regarding geology and soils.

In addition to other documents, the following references were used in the preparation of this section of the DEIR:

- Applied Earthworks Inc., *Paleontological Technical Memorandum for the Duke Warehouse at the Patterson Avenue and Nance Street, City of Perris, Riverside County, California.* July 29, 2022. (Included as Appendix F.2 to this DEIR). [Cited as AE]
- Brain F. Smith and Associates, Inc., *Paleontological Assessment for the Perris Valley Channel Lateral B Extension Project Perris California.* June 22, 2022. (Included as Appendix F.3 to this DEIR) [Cited as BFSA]
- City of Perris, *Draft Environmental Impact Report City of Perris General Plan 2030*, State Clearinghouse #2004031135. October 2004, certified April 26, 2005. (Available at <u>https://www.cityofperris.org/home/showpublisheddocument/451/637203139698630000</u>, accessed January 10, 2022.) [Cited as Perris GP 2030 EIR]
- City of Perris. Perris Valley Commerce Center Specific Plan Initial Study. August 2009. (Available at the City of Perris Planning Department.) [Cited as PVCCSP IS]
- City of Perris, *Perris Valley Commerce Center Specific Plan Final Environmental Impact Report*, State Clearing house # 2009081086 November 2011, certified January 10, 2012. (Available at <u>https://www.cityofperris.org/home/showpublisheddocument/13874/637455522381730000</u>, accessed January 10, 2022.) [Cited as PVCCSP EIR]
- City of Perris, *Perris Comprehensive General Plan 2030 Safety Element*. Adopted January 25, 2022. (Available at https://www.cityofperris.org/home/showpublisheddocument/15024/637807110903270000https://www.cityofperris.org/home/showdocument?id=465, accessed January 10, 2022.) [Cited as Perris GP 2030]
- City of Perris, *Perris Valley Commerce Center Amendment No. 12 Specific Plan*, adopted January 10, 2012, and subsequently amended and approved January 11, 2022. (Available at https://www.cityofperris.org/Home/ShowDocument?id=2647, accessed April 5, 2022.) [Cited as PVCCSP]

Geology and Soils

City of Perris

- Google Earth Pro, 2021, Version 7.3.4.8248 (Accessed on December 15, 2021) [Cited as Google Earth]
- Southern California Geotechnical, *Geotechnical Investigation Proposed Warehouse NEC Patterson Avenue and Nance Street Perris California for Duke Realty*. Updated December 13, 2021. (Included as Appendix F.1 to this DEIR.) [Cited as SCG]
- USDA, United States Department of Agriculture Natural Resources Conservation Service website: Web Soil Survey. (Available at <u>https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx</u>, accessed on December 8, 2021.) [Cited as USDA]
- USGS, United States Geological Survey website: U.S. Quaternary Faults. (Available at https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf 88412fcf, accessed on December 14, 2021.) [Cited as USGS]

5.6.1 Setting

Regional Geology

The PVCCSP EIR, Section 4.5, Geology and Soils, includes a discussion of the regional geology for the PVCCSP area, which includes the Project area. The PVCCSP area is located within the Perris Block within the Peninsular Ranges geomorphic province of southern California. Fault zones in this range are characterized by a northwest-southeast trending which separate elongated structural blocks. The Perris Block is underlain with rocks of the Peninsular Ranges batholiths. This contains a very large mass of crystalline igneous rocks of Cretaceous age and pre-batholithic metasedimentary and metavolcanic rocks of older ages. The Perris Block is bound on the northeast by the San Jacinto Fault, on the north by the Cucamonga Fault and the San Gabriel Mountains, and on the southwest by the Elsinore Fault and the Santa Ana Mountains. (PVCCSP EIR)

Local Geology

As required by PVCCSP EIR mitigation measure **MM Geo 1** presented below in Section 5.6.2, a geotechnical investigation of the Project site was conducted, and is included in Appendix F.1. The geotechnical investigation included a visual site reconnaissance, subsurface exploration, field and laboratory testing, and geotechnical engineering analysis to provide criteria for Project design. A total of 10 borings were advanced to depths of approximately 10 to 25 feet below existing site grades as shown in **Figure 5.6-1 – Boring Locations**.

Native alluvial soils were encountered at the ground surface at each of the boring locations on the Project Site (**Figure 5.6-1**), extending to the maximum explored depth of $25\pm$ feet below existing site grades. The near-surface alluvial soils extending from the ground surface to depths of 1 ½ to 6 ½ ± feet, were classified as younger alluvium. The younger alluvium generally possesses lower densities than the soils classified as older alluvium. The younger alluvium generally consists of medium dense to dense silty sands, sandy silts, and clayey sands. At Boring No. B-4 a layer of hard sandy clay was encountered. Older native alluvial soils were encountered beneath the younger native alluvial soils at all of the boring locations. The soils classified as older alluvium generally possess higher densities than the younger alluvial soils, many samples were observed to be weakly to moderately cemented. Most of the older alluvial soils encountered at the boring locations consist of medium dense to very dense silty sands, sandy silts, and clayey sands. Older alluvial soils also consisted of stiff to hard sandy clays and varying amounts of silt. Older native alluvial soils extended to at least the maximum depths explored at all of the boring locations. (SCG, p. 5.)

Groundwater

Groundwater was not encountered at any of the boring locations. Due to the lack of water found within the onsite borings (**Figure 5.6-1**), and the moisture contents of the recovered soil samples, the static groundwater table is considered to have existed at a depth of excess of $25\pm$ feet below existing site grades.

Water level data was obtained by the California Department of Water Resources Water Data Library. The nearest monitoring well on record is located $60\pm$ feet south of the site. Water level readings within this monitoring well indicate a groundwater level of $72\pm$ feet below the ground surface in March 2020. (SCG, p. 7.)

Faulting and Seismicity

The Project area is not located within an Alquist-Priolo Earthquake Fault Zone, and SCG did not identify any evidence of faulting during the geotechnical investigation (SCG, p. 10.). However, as with all of Southern California, the Project area lies in a seismically active region. The nearest active earthquake fault to the Project area is the San Jacinto Valley fault zone, located approximately 10 miles east of the area (USGS). There is a probability of an earthquake measuring 6.7 magnitude striking Southern California during a 30-year period. (GP, pp. 27 - 28.).



Figure 5.6-1, Boring Location Plan Duke Warehouse at Patterson Avenue and Nance Street





Topography

During literature review and subsurface investigation, SCG concluded that the Project site slopes gently downward to the north at a gradient of $\frac{1}{2\pm}$ percent, which results in a total $4\pm$ feet of elevation differential across the overall site. (SCG, p. 4.)

Paleontological Resources

As previously identified, two paleontological reports were prepared for the Project and are included in Appendix F.2 and Appendix F.3 of this DEIR. A Paleontological Technical Memorandum (Appendix F.2) was completed by Applied Earthworks (AE) for the Project site and adjacent off-site improvement areas. A Paleontological Resource Assessment (Appendix F.3) was completed by Brian F. Smith and Associates (BFSA) for the Perris Valley Master Drainage Plan (MDP) Lateral-B Stage 4 extension proposed off-site and located west of March Air Reserve Base in the northern corner of the city of Perris, Riverside County, California.

AE used published geological maps and paleontological literature, the geotechnical report for the Project and museum records searches. A records search was obtained from the Natural History Museum of Los Angeles County (NHMLAC) and the Western Sciences Center (WSC) in Hemet, California searching for fossil localities recorded in their collection. Additionally, an online search was conducted using Paleobiology Database (PBDB) and the University of California Museum of Paleontology (UCMP) in order to identify fossil material and repository of fossils in the West Coast. BFSA used paleontological literature and a recent paleontological locality records search for the Ramona Webster Project, conducted by WSC in Hemet. (BFSA, pp. 1, 6)

Based on both AE's and BFSA's records searches, there were no reports of fossils within the Project site, nor within a one-mile radius, which encompasses the Project area. (AE, p. 7, BFSA, p. 6.) However, a few localities were identified at 8 miles to 23 miles from the Project area. (AE, p. 7.) Additionally, it was noted that Pleistocene- aged sedimentary deposits withing Riverside County are considered to be of high Paleontological sensitivity and have been recovered from similar deposits in the region. (BFSA, p. 6.) 6.)

Search results from NHMLAC collections found localities nearby from unknown depths likely within Pleistocene- age alluvial deposits similar to those mapped either at the surface or likely at depth in the Project area. (AE, p. 6.) The closest recorded fossil localities according to the search results is LACM VP 6059 located approximately 12 miles south-southwest of the Project area, which yielded an unspecified camel specimen (*Camelidae*). Locality LACM VP 1207 located 18 miles northwest of the Project yielded a specimen from the cattle family (*Bovidae*). Approximately 22 miles south-southeast locality LACM VP 7456 was found that yielded specimens of garter snake (Thamnophis), pocket gopher (*Thomomys*), deer mouse (*Peromyscus*), and various snails (*Gastropoda*). The depths of these finds are unknown, although they likely came from subsurface contexts since they were encountered during earth-moving construction activities. The farthest localities LACM VP 7268, 7271, and LACM VP 7268 and 7271 a horse (*Equus*) specimen was documented. Specimens of ground sloth (Nothrotheriops), horse (*Equus*), and a member of the elephant order (*Proboscidea*) were yielded at locality LACM VO 7508. (AE, p. 6.)

Search results from the WSC collections found that Pleistocene age alluvial deposits were well documented in Southern California, and were known to contain abundant fossils, including megafauna, such as Columbian mammoth (*Mammuthus columbi*), Pacific mastodon (*Mammut pacificus*), saber - toothed cat (*Smilodon fatalis*) and ancient horse (*Equus*), as well as microfauna. Localities were found

approximately 17 miles southeast of the Project area that included numerous specimens of megafauna, including camel (*Camelops*) and horse (*Equus*), as well as many microfauna specimens. (AE, p. 6.)

Based on the PBDB online database, there are no known fossil localities or Pleistocene-age alluvial deposits within the Project area but the database shows numerous localities approximately 8 miles to the east. These localities yielded mammoth (*Mammuthus*), saber-toothed cat (*Smilodon*), horse (*Equus*), bison (*Bison sp. cf. B. antiquus*), and numerous small mammals, reptiles, invertebrates, and plants. (AE, p. 7.)

The UCMP's online database does not list any fossil localities from Pleistocene-age alluvial deposits within the Project area but shows numerous localities approximately 12 miles to the southwest of the Project area. These localities yielded over 450 pollen and seed specimens representing dozens of gymnosperm and angiosperm taxa including pine (*Pinus*), willow (*Salix*), maple (*Acer*), buckwheat (*Eriogonum*), ragweed (*Ambrosia*), and many others. (AE, p. 7.)

A paleontological sensitivity map generated by the City of Perris divides the City of Perris and the immediate vicinity into five areas based on geological units exposed at or near the surface. The entire Project area has been ranked as Area #1 (High sensitivity) which is determined to contain Pleistocene-age older valley deposits. In these areas, the potential for impacts to fossil resources increases with depth from low to high potential as an excavation reaches and exceeds five feet below ground surface. (AE, p. 4, BFSA, p. 9.)

BFSA conducted a paleontological survey on June 2, 2022, to determine if paleontological resources exist within the proposed alignment of the MDP Lateral-B Stage 4 off-site extension. The survey of the property did not result in the identification of any paleontological resources, or evidence suggesting the presence of paleontological resources. The survey area was generally highly disturbed and previously graded. (BFSA, p. 8.)

5.6.2 Related Regulations

The PVCCSP EIR Section 4.5, Geology and Soils, provides a discussion of the regulatory framework for the analysis of impacts related to geology and soils. Following is a discussion of regulations that are specifically relevant to the Project, which information that is new or has been updated since the PVCCSP EIR was prepared. It should be noted that development of the Project is also required to comply with regulations pertaining to erosion from wind and water, which are addressed in Section 5.2, Air Quality, and Section 5.9, Hydrology and Water Quality, respectively, of this DEIR (e.g., Federal Clean Water Act, South Coast Air Quality Management District (SCAQMD) Rule 403, etc.).

State

Alquist-Priolo Earthquake Fault Zoning Act (A-P Act)

The Alquist-Priolo Special Studies Zones Act of 1972 was renamed in 1994 to the Alquist Priolo Earthquake Fault Zoning (A-P) Act. The A-P Act requires the State Geologist to establish regulatory zones (known as Earthquake Fault Zones) around the surface traces of active faults and to issue appropriate maps. Local agencies must regulate most development projects within the zones. Projects include all land divisions and most structures for human occupancy. Before a project can be permitted, cities and counties must require a geologic investigation to demonstrate that the proposed building will not be constructed across active faults. If an active fault is found, a structure for human occupancy cannot be placed over the trace of the fault and must be set back from the fault (generally 50 feet).

There are no active faults within the Project area and the Project area is not located within any A-P Earthquake Fault Zone.

Seismic Hazards Mapping Act

California Geological Survey (CGS) provides guidance with regard to seismic hazards. Under the CGS Seismic Hazards Mapping Act (SHMA) of 1990 (Public Resources Code, Chapter 7.8, Sections 2690-2699.6), seismic hazard zones are identified and mapped to assist local governments in land use planning. The intent of the SHMA is to protect the public from the effects of strong ground shaking, liquefaction, landslides, ground failure, or other hazards caused by earthquakes. The SHMA requires the State Geologist to establish regulatory zones (Zones of Required Investigation) and to issue appropriate maps (Seismic Hazard Zone maps). CGS Special Publication 117A, Guidelines for Evaluating and Mitigating Seismic Hazards in California, provides guidance for the evaluation and mitigation of earthquake-related hazards for projects within designated zones of required investigations.

The USGS quadrangle that includes the Project area has not yet been mapped pursuant to the SHMA. However, based on information presented in the site-specific Geotechnical Investigation, the Project area is in an area with low potential for liquefaction. Due to the relatively flat topography of the Project area, there is a low potential for earthquake-induced landslides.

California Building Code

The California Building Code (also known as the "California Building Standards Code" or CBC) is promulgated under the California Code of Regulations (CCR) (Title 24, Parts 1 through 12) and is administered by the California Building Standards Commission (CBSC). The national model code standards adopted into Title 24 apply to all occupancies in California except for modifications adopted by State agencies and local governing bodies. The CBSC published the 2019 CBC in July 2019, which is based on the 2018 International Building Code (IBC) (the national model building code), providing standardized requirements for construction and became effective January 1, 2020. The Project would comply with State requirements regarding seismic design in effect at the time building permits are issued. Cities and counties may adopt ordinances making more restrictive requirements than provided by CBC, because of local climatic, geological, or topographical conditions. Such adoptions and a finding of need statement must be filed with the California Building Standards Commission.

Local

Perris Comprehensive General Plan 2030

The specific policies, measures and actions outlined in the Perris Comprehensive General Plan 2030 (Perris GP 2030) that are related to geology and soils include the following:

Conservation Element

Policy IV.A	Comply with state and federal regulations and ensure preservation of the significant historical, archaeological and paleontological resources.
Measure IV.A.4	In Area 1 and Area 2 shown on the Paleontological Sensitivity Map, paleontologic [<i>sic</i>] monitoring of all projects requiring subsurface excavations will be required once any excavation begins. In Areas 4 and 5, paleontologic [<i>sic</i>] monitoring will be required once subsurface excavations reach five feet in depth, with monitoring levels reduced if appropriate, at the discretion of a certified Project Paleontologist.

Section 5.6	City of Perris
Geology and Soils	Duke Warehouse at Patterson Avenue and Nance Street DEIR
Safety Element	
Policy S-7.1	Require all development to provide adequate protection from damage associated with to seismic incidents.
Policy S-7.2	Require geological and geotechnical investigations by State-licensed professionals in areas with potential for seismic and geologic hazards as part of the environmental and development review and approval process.
Action S-7.2a	Require implementation of mitigation measures identified in studies outlined in Policy S-7.2, prior to issuing grading and building permits.
Action S-7.2d	Adopt and enforce the most current version of the California Building Code (CBC).

PVCCSP Standards and Guidelines and Mitigation Measures

There are no PVCCSP Standards and Guidelines applicable to the analysis of geology and soils. However, the PVCCSP EIR includes mitigation measures **MM Geo 1** and **MM Cultural 5** to ensure that projects located within the PVCCSP planning area eliminate or reduce potential adverse impacts related to geology and soils and paleontological resources to less than significant levels. By preparing the Project-specific Geotechnical Investigation (Appendix F.1), the Project has complied with PVCCSP EIR mitigation measure **MM Geo 1** listed below:

- **MM Geo 1** Concurrent with the City of Perris' review of implementing development projects, the project proponent of the implementing development project shall submit a geotechnical report prepared by a registered geotechnical engineer and a qualified engineering geologist to the City of Perris Public Works/ Engineering Administration Division for its review and approval. The geotechnical report shall assess the soil stability within the implementing development project affecting individual lots building pads, and shall describe the methodology (e.g., over excavated, backfilled, compaction) being used to implement the project's design.
- **MM Cultural 5** Prior to grading for projects requiring subsurface excavation that exceeds five (5) feet in depth, proponents of the subject implementing development projects shall retain a professional paleontologist to verify implementation of the mitigation measures identified in the approved Phase I Cultural Resources Study and to monitor the subsurface excavation that exceed five (5) feet in depth. Selection of the paleontologist shall be subject to the approval of the City of Perris Planning Manager and no grading activities shall occur at the site until the paleontologist has been approved by the City.

Monitoring should be restricted to undisturbed subsurface areas of older alluvium, which might be present below the surface. The paleontologist shall be prepared to quickly salvage fossils as they are unearthed to avoid construction delays. The paleontologist shall also remove samples of sediments which are likely to contain the remains of small fossil invertebrates and vertebrates. The paleontologist shall have the power to temporarily halt or divert grading equipment to allow for removal of abundant or large specimens.

Collected samples of sediments shall be washed to recover small invertebrate and vertebrate fossils. Recovered specimens shall be prepared so that they can be identified and permanently preserved. Specimens shall be identified and curated and placed into an accredited repository (such as the Western Science Center or the Riverside Metropolitan Museum) with permanent curation and retrievable storage.

Geology and Soils

A report of findings, including an itemized inventory of recovered specimens, shall be prepared upon completion of the steps outlined above. The report shall include a discussion of the significance of all recovered specimens. The report and inventory, when submitted to the City of Perris Planning Division, will signify completion of the program to mitigate impacts to paleontological resources.

Perris Municipal Code

Perris Municipal Code Chapter 16.08 (Building, Plumbing and other Codes Adopted), includes the City's Building Code. Building construction is governed by the CBC; however, the City has amended and provided exemptions to the CBC that address specific geologic considerations in the City.As identified in Chapter 16.08.050 (Adoption of the 2019 California Building Code), the 2019 CBC shall become the building codes of the City for regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, height, area and maintenance of all buildings and/or structures in the City.

5.6.3 Design Considerations

Design considerations refer to ways in which the proposed Project will reduce potential impacts to geology and soils. The Geotechnical Investigation provides geotechnical design considerations such as; remedial grading, static settlements, foundation and floor design, and polyethylene encasement for iron pipes. Adherence to the Geotechnical Investigation geotechnical design considerations complies with PVCCSP EIR mitigation measure **MM Geo 1** and reduces potential adverse impacts related to geology and soils to less than significant levels.

5.6.4 Thresholds of Significance

The City of Perris has not established local CEQA significance thresholds and defers to the thresholds of significance identified in State CEQA Guidelines Appendix G. Impacts related to this Project may be considered potentially significant if the proposed Project would:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:
 - Rupture of a known earthquake fault, as delineated on the most Alquist-Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault.
 - Strong seismic ground shaking.
 - \circ $\;$ Seismic-related ground failure, including liquefaction.
 - o Landslides.
- Result in substantial soil erosion or the loss of topsoil.
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse.
- Be located on expansive soil, as defined in Table 18-I-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property.

- Duke Warehouse at Patterson Avenue and Nance Street DEIR
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

5.6.5 Environmental Impacts before Mitigation

Threshold A: Would the Project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most Alquist- Priolo Earthquake Fault Zoning Map, issued by the State Geologist for the area or based on other substantial evidence of a known fault?

Fault rupture can occur along pre-existing, known active fault traces; however, fault rupture also can splay from known active faults or rupture along unidentified fault traces. The Geology and Soils section of the PVCCSP EIR IS (Section 3 threshold 3.a.i.) determined that the PVCCSP area is not located in an Alquist-Priolo Earthquake Fault Zone, and no other known faults are in the vicinity. This is consistent with the conclusion of the site-specific geotechnical study, which reviewed available maps, and found that the Project site is not located within an Alquist-Priolo Earthquake Fault Zone. Additionally, SCG did not identify any evidence of faulting during the geotechnical investigation. Therefore, the possibility of significant fault rupture is considered to be low (SCG, p. 10.). There would be no impact related to the potential to directly or indirectly expose people or structures to substantial adverse effects related to ground rupture. This impact is **less than significant and no mitigation is required**.

ii. Strong seismic ground shaking?

The Geology and Soils section of the PVCCSP EIR IS (Section 3 threshold 3.a.ii.) concludes that the PVCCSP area, which includes the Project area, would be subject to strong ground shaking, typical of Southern California, and that design and construction in accordance with current building codes and all geotechnical recommendations would reduce impacts from ground shaking to a less than significant level.

Consistent with PVCCSP EIR mitigation measure **MM Geo 1** above, a site-specific Geotechnical Investigation has been prepared by a registered geotechnical engineer for the Project site (Appendix F.1). As previously identified, the nearest earthquake fault is the San Jacinto Valley fault zone, located approximately 10 miles east of the site (USGS). The Project area is located in an area with high regional seismicity, and the San Jacinto fault is estimated to have a six percent probability of generating a 6.7 magnitude earthquake or greater. (Perris GP 2030, pp. 27-29.) The risk for seismic hazards is not substantially different than the risk to properties throughout the southern California area.

The Geotechnical Investigation prepared by SCG, includes site-specific seismic design parameters and provides design/construction recommendations for geotechnical design, grading, construction, foundations, floor slabs, exterior flatwork, retaining walls, and pavement. Consistent with General Plan policies cited above, the Project would be designed and constructed in accordance with the site-specific geotechnical report recommendations, which are based on CBC requirements. The Geotechnical Investigation concluded that the Project is considered feasible from a geotechnical standpoint (SCG, p. 10.).

Geology and Soils

Further, the PVCCSP EIR and the Perris Building Code, which incorporates the CBC, provide guidelines and parameters that reduce the effects of ground shaking produced by regional seismic events. The Project Applicant is required to implement seismic design considerations in accordance with the CBC, which is reflected in Perris GP 2030 Action S-7.2d. Notably, the City would apply a mandatory condition of approval on the Project that would require all buildings to be constructed in accordance with the Perris Building Code, which incorporates the CBC.

Consistent with Perris GP 2030 action items cited above and PVCCSP EIR mitigation measure **MM Geo 1**, the Project would be designed and constructed in accordance with the recommendations (referred to as mitigation measures in Perris GP 2030 Action S-7.2a above) from the site-specific Geotechnical Investigation and shall be reviewed and approved by the City Engineer. With adherence to Perris GP 2030 policies, compliance with the CBC and Perris Building Code, and mandatory compliance with the recommendations of the Geotechnical Investigation related to design and construction, the Project would not directly or indirectly expose people or structures to substantial adverse effects, including loss, injury or death, involving seismic ground shaking impacts related to strong seismic ground shaking. This impact is **less than significant**.

iii. Seismic-related ground failure, including liquefaction?

Seismic-related ground failure in Southern California is typically a result of liquefaction. Liquefaction is the loss of strength in generally cohesionless, saturated soils when the pore-water pressure induced in the soil by a seismic event becomes equal to or exceeds the overburden pressure. The primary factors which influence the potential for liquefaction include groundwater table elevation, soil type and plasticity characteristics, relative density of the soil, initial confining pressure, and intensity and duration of ground shaking. The depth within which the occurrence of liquefaction may impact surface improvements is generally identified as the upper 50 feet below the existing ground surface. Liquefaction potential is greater in saturated, loose, poorly graded fine sands with a mean (d50) grain size in the range of 0.075 to 0.2 millimeters (mm). Non-sensitive clayey (cohesive) soils which possess a plasticity index of at least 18 are generally not considered to be susceptible to liquefaction, nor are those soils which are above the historic static groundwater table (SCG, p. 12.).

The Geology and Soils section of the PVCCSP EIR IS (Section 3 threshold 3.a.iii.) identifies that the PVCCSP area includes locations with varying liquefaction potential, from low to very high, and requires that each Project site conduct a specific geotechnical study in order to determine the liquefaction risk. The Geotechnical Investigation conducted by SCG reviewed the Riverside County GIS website and determined that the Project area was located within a zone of low liquefaction susceptibility. The site-specific Geotechnical Investigation included additional subsurface exploration at the boring locations, and conditions at these locations determined that the Project site was not conducive to liquefaction. These conditions consist of moderate to high strength older native alluvial soils and no evidence of a long-term groundwater table within the depths explored by the borings (SCG, p. 11.). Therefore, impacts are considered **less than significant and no mitigation is required**.

iv. Land Slides?

As previously discussed, the Project area is generally flat and does not contain, nor is it adjacent to any, steep natural or manufactured slopes and there is no evidence of historical landslides. As such, the Project area is not susceptible to seismically-induced landslides.

The Geology and Soils section of PVCCSP EIR IS (Section 3 threshold 3.a.iv.) concludes that there would be no impacts related to landslides, as the PVCCSP area, which includes the Project area, is relatively flat and not located near any areas which possess potential landslide characteristics. Based on images obtained from Google Earth there are no hillsides or steep slopes within the Project area or in the immediate vicinity of the area. (Google Earth) Accordingly, implementation of the Project would not expose people or structures within the Project area to substantial landslide risks, and implementation of the Project would not pose a substantial direct or indirect landslide risk to properties surrounding the Project area. **No impact** would result.

Threshold B: Would the Project result in substantial soil erosion or the loss of topsoil?

Erosion is the process by which the upper layers of the surface (such as soils) are worn and removed by the movement of water or wind. Soils with characteristics such as low permeability and/or low cohesive strength are more susceptible to erosion than those soils having higher permeability and cohesive strength. Wind erosion can damage land and natural vegetation by removing soil from one place and depositing it in another. It mostly affects dry, sandy soils in flat, bare areas, but wind erosion may occur wherever soil is loose, dry, and finely granulated. According to soil data compiled by the United States Department of Agriculture (USDA), soils within the Project area and surrounding area primarily contain a low susceptibility to water erosion and a slight susceptibility to wind erosion (USDA). However, under existing conditions, the Project area has the potential to contribute windblown soil and sand because it is undeveloped with no or little vegetative cover and contains loose and dry topsoil conditions.

The Geology and Soils section of the PVCCSP EIR IS (Section 3 threshold 3.b.) concludes that no longterm soil erosion would occur, as PVCCSP implementing projects would involve the development of structures, paving (i.e., hardscape), and landscaping; short-term construction-related erosion potential would be addressed through compliance with National Pollutant Discharge Elimination System (NPDES) permit requirements, and impacts would be **less than significant**.

Construction-Related Erosion

The largest source of erosion and topsoil loss, particularly in a developed environment, is uncontrolled drainage during construction. The Project area is relatively flat, and surface water flows generally to the southeast. Ground disturbance (including over-excavation, utility trenching, and foundation excavation during construction activities on exposed soils) could lead to erosion and topsoil loss during heavy rains and windy conditions. Grading for the Project would be limited to relatively minor cuts and fills to establish design grades, to prepare building foundations, and for utility trenching/infrastructure excavation.

As further discussed in Section 5.9, Hydrology and Water Quality, of this DEIR, pursuant to the requirements of the State Water Resources Control Board, the Project Applicant would be required to obtain a NPDES permit for construction activities, including grading. The NPDES permit is required for all development projects that include construction activities, such as clearing, grading, and/or excavation that disturb at least 1 acre of total land area. The City's Municipal Separate Storm Sewer System (MS4) NPDES Permit requires development projects to prepare and submit to the City for approval a site-specific Storm Water Pollution Prevention Plan (SWPPP) to demonstrate compliance with the NPDES permit requirements. The SWPPP is required to identify a combination of erosion control and sediment control measures (i.e., Best Management Practices) that will reduce or eliminate sediment discharge to surface water from stormwater and non- stormwater discharges during construction. In addition, as discussed in Section 5.2, Air Quality, of this DEIR, the Project Applicant would be required

to comply with SCAQMD Rule 403's requirements related to fugitive dust control, which would reduce the amount of particulate matter in the air and minimize the potential for wind erosion. With mandatory compliance with all applicable regulatory requirements as presented in the Air Quality and Hydrology and Water Quality sections of this DEIR, the potential for water and/or wind erosion within the Project area during construction activities would be **less than significant**. **No mitigation measures are necessary**.

Post-Development Erosion

Regarding erosion during long-term Project operation, consistent with the PVCCSP EIR IS, the Project site would be landscaped or covered with impervious surfaces and surface runoff would be captured and treated by an on-site storm drain system. Implementation of the Project would result in less longterm erosion and loss of topsoil than under the existing conditions. The City's MS4 NPDES Permit requires the Project Applicant to prepare and submit to the City for approval a WQMP. The WQMP identifies an effective combination of erosion control and sediment control measures (i.e., BMPs) to reduce or eliminate sediment discharge to surface water from stormwater and non-stormwater discharges. The Preliminary WQMP for the Project, prepared by Albert A. Webb and Associates (Webb) (included in Appendix H.2), incorporates curb and gutters, grate inlets, and subsurface storm drain systems. The storm drain systems would be used to convey flows into to underground chambers located on the southeastern portion of the property. Following water quality treatment, discharged stormwater will connect to Perris Valley Master Drainage Plan (MDP) facilities. These design features would be effective at removing silt and sediment from stormwater runoff, and the Preliminary WQMP requires post-construction maintenance and operational measures to ensure ongoing erosion protection. Compliance with the Preliminary WQMP would be required as a condition of Project approval and longterm maintenance of on-site water quality features is required.

Therefore, the Project would not result in substantial erosion or loss of topsoil during long-term operation through compliance with the WQMP requirements resulting in a **less than significant impact**. **No mitigation is necessary**.

Threshold C: Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

The Geology and Soils section of the PVCCSP EIR IS (Section 3 threshold 3.c.) concludes that the potential for lateral spreading and landslide is low, as the PVCCSP area is relatively flat; however, the potential for subsidence is high. As previously mentioned in Threshold A (iii) above, the Project site is located in area that has low liquefaction potential and did not show signs of faulting. Therefore, SCG determined that potential for other geologic hazards such as seismically induced settlement, lateral spreading, tsunami inundation, seiches, flooding and subsidence is considered low. (SCG, p. 10.) The following discussion of the potential settlement and shrinkage/subsidence potential is summarized from the Geotechnical Investigation (SCG, p. 14.).

Settlement

Settlement refers to unequal compression of a soil foundation, shrinkage, or undue loads being applied to a building after its initial construction that affect the soil foundation. Remedial grading, as recommended in the Geotechnical Investigation, would remove the compressible/collapsible near-surface native alluvium and replace these materials as compacted structural fill. The native soils that would remain in place below the recommended depth of overexcavation would not be subject to

significant load increases from the foundations of the new structure. With adherence to remedial grading recommendations, the post-construction static settlements of the proposed structures would be within tolerable limits.

Shrinkage/Subsidence

Subsidence is a gradual settling or sudden sinking of the ground surface (i.e., loss of elevation). The principal causes of subsidence are aquifer-system compaction, drainage of organic soils, underground mining, and natural compaction. Shrinkage is the reduction in volume in soil as the water content of the soil drops (i.e., loss of volume). Based on the results of the laboratory testing, the Geotechnical Investigation concluded that removal and recompaction of the near-surface native alluvium soils would result in an average shrinkage of 2 to 12 percent for the Project site. Nevertheless, the estimated shrinkage of the individual soil layer at the site is highly variable, ranging from 1 percent to 16 percent at different depths and locations. The settlement and subsidence would occur during the initial grading for the Project and would not affect the proposed warehouse building. This estimate is based on previous experience and the subsurface conditions encountered at the boring locations. The actual amount of subsidence is expected to be variable and will be dependent on the type of machinery used, repetitions of use, and dynamic effects, which are difficult to assess precisely.

Soluble Sulfates

Representative samples of the near-surface soils at the Project site were submitted for laboratory testing to determine the soluble sulfate content. Soluble sulfates are naturally present in soils, and if the concentration is high enough, can result in degradation of concrete which comes into contact with these soils. The results of the soluble sulfate testing indicate the sulfate classification as negligible.

Consistent with Perris GP 2030 action items cited above and PVCCSP EIR mitigation measure **MM Geo 1**, the Project would be designed and constructed in accordance with all Geotechnical Investigation recommendations (referred to as mitigation measures in Perris GP 2030 Action S-7.2a above); and the Geotechnical Investigation shall be reviewed and approved by the City Engineer. Furthermore, the City of Perris would conduct a thorough administrative review of future grading permits to ensure that earthwork activities do not result in any conditions that could result in unstable soils. Therefore, with compliance with Perris GP 2030 policies and action items, the recommendations of the Geotechnical Investigation, and PVCCSP EIR mitigation measure **MM Geo 1**, impacts related to location on an unstable geologic unit or soil would be **less than significant**. **No additional mitigation is necessary**.

Threshold D: Would the Project be located on expansive soil, as defined in Table 18-I-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?

Expansive soils are soils that exhibit cyclic shrink and swell patterns in response to variations in moisture content. The near-surface soils on-site consist of silty sands and sandy silts with varying clay content and occasional sandy clays. It was determined that on-site soils possess medium expansion potential (EI=53). Based on the presence of expansive soils, the recommendations of the Geotechnical Investigation indicate that care should be given to proper moisture conditioning of all building pad subgrade soils to a moisture content of 2 to 4 percent above the Modified Proctor optimum during site grading. In addition to adequately moisture conditioning the subgrade soils and fill soils during grading, special care must be taken to maintain moisture content of these soils at 2 to 4 percent above the Modified Proctor optimum moisture content. This requires the contractor to frequently moisture condition these soils throughout the grading process, unless grading occurs during a period of relatively

wet weather. Further, provisions should be made to limit the potential for surface water to penetrate the soils immediately adjacent to the structure.

Consistent with Perris GP 2030 action items cited above and PVCCSP EIR mitigation measure **MM Geo 1**, the Project would be designed and constructed in accordance with the Geotechnical Investigation recommendations that shall be reviewed and approved by the City Engineer. Therefore, by implementing the Geotechnical Investigation recommendation mentioned above the Project would comply with the Perris GP 2030 action item and PVCCSP EIR mitigation measure **MM Geo 1** resulting in impacts related to expansive soils to be **less than significant**.

Threshold E: Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Existing sewer service is provided to the Project from Eastern Municipal Water District (EMWD). The Project will construct a new sewer line at the intersection of Nevada Avenue and Nance Street, continuing north along Nevada and connecting to the existing sewer line in Harley Knox Boulevard for conveyance of wastewater to treatment facilities. No septic systems are needed nor proposed. **No impacts** would occur.

Threshold F: Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The PVCCSP EIR concluded that, with implementation of identified mitigation measures, development of allowed uses and infrastructure projects identified in the PVCCSP area would not directly or indirectly destroy unique paleontological resources, paleontological sites, or unique geologic features. (PVCCSP EIR, p. 4.4-18.)

As previously discussed in Section 5.6.1 above, no paleontological resources have been identified within the vicinity of the Project area; however, based on Figure 4.4-1 – Geologic Map of the Perris Valley Commerce Center in the PVCCSP EIR, the Project area's surficial geology is categorized as early to middle Pleistocene-age very old alluvial fan deposits. (PVCCSP EIR, p. 4.4-13.)

Additionally, the City has developed a paleontological sensitivity map that divides the City into five areas based on the geological units exposed at or near the surface. (AE, p. 4.) The Project site is located within Area #1 (High Sensitivity). (AE, p. 8, BFSA, p. 9.) Area #1 is ranked High sensitivity because of Pleistocene-age older valley. As previously mentioned in Section 5.6.1 above, AE's records search found that surrounding areas have early to middle Plesistocene-age old alluvial fan deposits across the entire ground surface. (AE, p. 8.) Additionally, the findings from the Geotechnical investigation confirmed the presence of these deposits either exposed at the ground surface or below fill at a depth of 6.5 feet below ground surface (bgs) in the Project area. Additionally, early to middle Pleistocene-age very old alluvial fan deposits are well-known to preserve scientifically significant fossils. (AE, p. 8.) BFSA's research also confirmed the existence of potentially fossiliferous Pleistocene alluvial fan deposits mapped as underlying the MDP Lateral-B Stage 4 extension alignment. (BFSA, p. 9.)

Based on the proposed depths of the Project-related ground-disturbing activities, there is a high likelihood that all activities could potentially impact the old alluvial fan deposits and any fossil resources preserved within them, if present. All activities other than excavation of grading pads will occur at depths greater than 6.5 feet bgs; however, excavation of grading pads in subareas without fill would still impact

the old alluvial-fan deposits at 4 feet bgs. This could result in a significant impact to paleontological resources therefore, paleontological monitoring will need to occur during grading activities as outlined in Project-specific mitigation measure **MM GEO 1**.

Because of the high paleontological sensitivity assigned to the Project site and in conformance with Perris GP 2030 implementation measures IV.A.4 which requires paleontological monitoring of all projects once subsurface excavation reach five feet in depth, a Paleontological Resource Impact Mitigation Monitoring Program (PRIMMP) shall be prepared and approved, as set forth in Project-specific mitigation measure **MM GEO 1**.¹ AE also recommends Worker Environmental Awareness Program (WEAP) training for construction workers prior to ground disturbance in accordance with industrywide best practices. This recommendation is incorporated as Project-specific mitigation measure **MM GEO 2**, impacts with regard to directly or indirectly destroying a unique paleontological resource or site or unique geologic feature would be reduced to less than significant. Compliance with Project-specific mitigation measure **MM GEO 1**, which replaces PVCCSP EIR mitigation measure **MM Cultural 5**, is incorporated into the Project and would ensure that potential impacts to paleontological resources, if present, are **less than significant with mitigation**.

5.6.6 Recommended Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse Impacts. (State CEQA Guidelines Section 15126.4) By preparing the Project-specific Geotechnical Investigation (Appendix F.1), the Project has complied with PVCCSP EIR mitigation measure **MM Geo 1** listed above in Section 5.6.2, subsection Local Regulations. Project-specific mitigation measure **MM GEO 1** below replaces PVCCSP EIR mitigation measure **MM Cultural 5**:

MM GEO 1 Prior to the issuance of grading permits, the Project proponent/developer shall submit to and receive approval from the City, a Paleontological Resource Impact Mitigation Monitoring Program (PRIMMP). The PRIMMP shall include the provision for a qualified professional paleontologist (or his or her trained paleontological representative) to be on-site for any Project-related excavations that exceed three (3) feet below the pregrade surface. Selection of the paleontologist shall be subject to the approval of the City of Perris Planning Manager and no grading activities shall occur at the Project site or within the off-site Project improvement areas until the paleontologist has been approved by the City.

Monitoring shall be restricted to undisturbed subsurface areas of older Quaternary alluvium. The approved paleontologist shall be prepared to quickly salvage fossils as they are unearthed to avoid construction delays. The paleontologist shall also remove samples of sediments which are likely to contain the remains of small fossil invertebrates and vertebrates. The paleontologist shall have the power to temporarily halt or divert grading equipment to allow for removal of abundant or large specimens.

Collected samples of sediments shall be washed to recover small invertebrate and vertebrate fossils. Recovered specimens shall be prepared so that they can be identified and permanently preserved. Specimens shall be identified and curated and placed into

¹ Project-specific mitigation measure **MM GEO 1** replaces PVCCSP EIR mitigation measure **MM Cultural 5**.

an accredited repository (such as the Western Science Center or the Riverside Metropolitan Museum) with permanent curation and retrievable storage.

A report of findings, including an itemized inventory of recovered specimens, shall be prepared upon completion of the steps outlined above. The report shall include a discussion of the significance of all recovered specimens. The report and inventory, when submitted to the City of Perris Planning Division, will signify completion of the program to mitigate impacts to paleontological resources.

MM GEO 2 Prior to the start of construction, a paleontological resources Worker Environmental Awareness Program (WEAP) training program shall be presented to all earthmoving personnel to inform them of the possibility for buried resources and the procedures to follow in the event of fossil discoveries.

5.6.7 Summary of Environmental Effects After Mitigation Measures Are Implemented

Implementation of the proposed Project with incorporation of the mitigation measures identified above will reduce potential impacts to Geology and Soils within the Project site to **less than significant** levels.

5.7 Greenhouse Gas Emissions

The focus of the following analysis is related to potential impacts associated with generating greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment and conflicting with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The analysis in this section is based on the *Air Quality/Greenhouse Gas Analysis for the Duke Warehouse at Patterson Avenue and Nance Street, City of Perris* (AQ Study) prepared for this Project by Albert A. Webb Associates (included as Appendix B.1). The methodology is consistent with draft guidance prepared by the South Coast Air Quality Management District (SCAQMD) for quantification of emissions and evaluation of potential impacts related to GHG emissions. As recommended by SCAQMD staff, the California Emissions Estimator Model (CalEEMod[™]) version 2020.4.0 program was used to quantify project-related emissions. An individual project cannot generate enough GHG emissions to effect a discernible change in global climate. However, the proposed Project may participate in this potential impact by its incremental contribution combined with the cumulative increase of all other sources of GHGs which, when taken together, may influence global climate change. Because these changes may have serious environmental consequences, this section will evaluate the potential for the proposed Project to have a significant effect upon California's environment as a result of its potential contribution to the enhanced greenhouse effect.

In addition to other reference documents, the following references were used in the preparation of this section of the DEIR:

- Albert A. Webb Associates, *Air Quality/Greenhouse Gas Analysis for the Duke Warehouse at Patterson Avenue and Nance Street (DPR No.21-00005)*, City of Perris, July 25, 2022, (Included as Appendix B.1 to this DEIR) [Cited as AQ Study]
- City of Perris, *Perris Comprehensive General Plan 2030, Conservation Element*, adopted July 12, 2005, Sustainable Community Amendment adopted February 18, 2008. (Available at <u>https://www.cityofperris.org/home/showpublisheddocument</u>, accessed May 5, 2022.) [Cited as Perris GP 2030]
- City of Perris, *Perris Comprehensive General Plan 2030, Healthy Community Element,* adopted June 9, 2015. (Available at <u>https://www.cityofperris.org/home/showpublisheddocument,</u> accessed May 5, 2022.) [Cited as Perris GP 2030]
- City of Perris, *Perris Valley Commerce Center Specific Plan Final Environmental Impact Report*, State Clearing house # 2009081086, November 2011, certified January 10, 2012. (Available at the City of Perris.) [Cited as PVCCSP EIR]
- City of Perris, *Climate Action Plan*, adopted February 23, 2016. (Available at https://www.cityofperris.org/Home/ShowDocument, accessed May 5, 2022.) [Cited as Perris CAP]
- California Air Resources Board, Advanced Clean Cars Program About. (Available at <u>https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about</u>, accessed May 11, 2022.) [Cited as CARB ACCP]
- California Air Resources Board, Staff Report, California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit, November 16, 2007. (Available at <u>http://www.arb.ca.gov/cc/inventory/pubs/reports/staff_report_1990_level.pdf</u>, accessed April 19, 2022.) [Cited as CARB 2007a]

Greenhouse Gas Emissions

- California Air Resources Board, Summary of Board Meeting, Consideration of Recommendations for Discrete Early Actions for Climate Change Mitigation in California, June 21-22, 2007. (Available at <u>http://www.arb.ca.gov/board/ms/2007/ms062107.pdf</u>, accessed April 19, 2022.) [Cited as CARB 2007b]
- California Air Resources Board, Summary of Board Meeting, Public Meeting to Consider Approval of Additions to Reduce Greenhouse Gas Emissions under the California Global Warming Solutions Act of 2006 and to Discuss Concepts for Promoting and Recognizing Voluntary Early Actions, October 25-26, 2007. (Available at http://www.arb.ca.gov/board/ms/2007/ms102507.pdf, accessed April 19, 2022.) [Cited as CARB 2007c]
- California Air Resources Board, *Climate Change Scoping Plan*, December 2008. (Available at <u>http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf</u>, accessed April 19, 2022.) [Cited as CARB 2008]
- California Air Resources Board, Initial Statement of Reason for Proposed Regulation for The Management of High Global Warming Potential Refrigerant for Stationary Sources, October 23, 2009. (Available at <u>http://www.arb.ca.gov/regact/2009/gwprmp09/isorref.pdf</u>, accessed April 19, 2022.) [Cited as CARB 2009]
- California Air Resources Board, Regional Plan Targets; SB375 Regional Plan Climate Targets, March 8, 2018. (Available at <u>Regional Plan Targets | California Air Resources Board</u>, accessed May 24, 2022.) [Cited as CARB 2018]
- California Air Resources Board, *Final Statement of Reasons for Rulemaking*, December 16-17, 2010. (Available at <u>http://www.arb.ca.gov/regact/2010/truckbus10/tbfsor.pdf</u>, accessed April 19, 2022.) [Cited as CARB 2010a]
- California Air Resources Board, Proposed Regulation to Implement the California Cap-and-Trade Program, December 16, 2010. (Available at <u>http://www.arb.ca.gov/regact/2010/capandtrade10/capandtrade10.htm</u>, accessed April 29, 2022.) [Cited as CARB 2010b]
- California Air Resources Board, California Cap-and-Trade Program, *Resolution 10-42, December 16, 2010*. (Available at <u>http://www.arb.ca.gov/regact/2010/capandtrade10/res1042.pdf</u>, accessed April 29, 2022.) [Cited as CARB 2010c]
- California Air Resource Board, *Commitment Letter to National Program*, July 28, 2011. (Available at <u>https://www.epa.gov/sites/production/files/2016-10/documents/carb-commitment-ltr.pdf</u>, accessed April 29, 2022.) [Cited as CARB 2011]
- California Air Resources Board, LEV III and ZEV Regulation Amendments for Federal Compliance Option, December 31, 2012. (Available at <u>http://www.arb.ca.gov/regact/2012/leviiidtc12/leviiidtc12.htm</u>, accessed May 11, 2022.) [Cited as CARB 2012]
- California Air Resources Board, *First Update to the Climate Change Scoping Plan: Building on the Framework*, May 2014. (Available at https://www.arb.ca.gov/cc/scopingplan/2013_update/first_update_climate_change_scoping_pla_n.pdf, accessed May 11, 2022.) [Cited as CARB 2014]
- California Air Resources Board, California's 2017 Climate Change Scoping Plan, November 2017. (Available at <u>https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf</u>, accessed May 11, 2022.) [Cited as CARB Scoping 2017]
- California Air Resources Board, *Short-Lived Climate Pollutant Reduction Strategy*, March 2017. (Available at <u>https://ww2.arb.ca.gov/sites/default/files/2018-</u> <u>12/final_slcp_report%20Final%202017.pdf</u>, accessed May 6, 2022.) [Cited as CARB 2017a]

- California Air Resources Board, Clean Car Standards Pavley, Assembly Bill 1493, January 11, 2017. (Available at <u>https://ww3.arb.ca.gov/cc/ccms/ccms.htm</u>, accessed May 11, 2022.) [Cited as CARB 2017b]
- California Air Resources Board, Linkage with Quebec Cap-and Trade System, website. (Available at https://ww2.arb.ca.gov/sites/default/files/cap-andtrade/linkage_archived.pdf, accessed on May 24, 2022.) [Cited as CARB 2019.]
- California Air Resources Board, et al., v. Association of Irritated Residents, et al., (2011). (Available at https://grist.org/wp-content/uploads/2011/05/document_pm_02.pdf, accessed May 6, 2022.) [Cited as AIR 2011]
- California Energy Commission, 2022 Building Energy Efficiency Standards Summary. (Available at https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency, accessed May 25, 2022.) [Cited as CEC 2022]
- California Energy Commission, Appliance Efficiency Regulations-Title 20, 2022. (Available at https://www.energy.ca.gov/rules-and-regulations/appliance-efficiency-regulations-title-20, accessed May 25, 2022.) [Cited as CEC Title 20]
- California Building Standards Commission, Guide to the 2019 California Green Building Standards Code, July 2019. (Available at <u>https://calgreenenergyservices.com/wp/wp-</u> <u>content/uploads/2019_california_green_code.pdf</u>, accessed May 25, 2022.) [Cited as CBSC 2019]
- California Constitution, Article 4, Section 8(b), June 5, 1990. (Available at https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=CONS§ionNu m=SEC.%208&article=IV, accessed May 5, 2022.)
- California Office of the Governor, *Governor's Executive Order B-30-15*. April 29, 2015. (Available at https://www.ca.gov/archive/gov39/2015/04/29/news18938/, accessed May 25, 2022.) [Cited as EO B-30-15]
- California Department of Resources Recycling and Recovery, Glossary of Terms, Integrated Waste Management Act, Last Updated September 5, 2018. (Available at <u>https://www.calrecycle.ca.gov/LGCentral/Glossary/#IWMA</u>, accessed May 17, 2022.) [Cited as CalRecycle 2018]
- California Department of Resources Recycling and Recovery, *Jurisdiction Diversion/Disposal Rate Summary*, Last Updated August 22, 2018. (Available at <u>https://www.calrecycle.ca.gov/LGCentral/Datatools/Reports/DivDispRtSum</u>, accessed May 12, 2022.) [Cited as CalRecycle JD]
- California Department of Resources Recycling and Recovery, *Jurisdiction Diversion/Disposal Rate Summary*, (2007-Current), Jurisdiction Perris. (Available at <u>https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionPost2006</u>, accessed May 11, 2022.) [Cited as CalRecycle Perris]
- California Department of Resources Recycling and Recovery, California's 75 Percent Initiative Defining the Future, Last Updated January 21, 2020. (Available at <u>https://sj-admin.s3-us-west-2.amazonaws.com/2019 0000 CalRecycle 75PercentInitiative.pdf</u>, accessed May 11, 2022.) [Cited as CalRecycle 2020]
- California Energy Commission, *Our Changing Climate*, Publication CEC-500-2006-077, July 2006. (Available at http://400.sydneyplus.com/CaliforniaEnergy_sydneyEnterprise/Portal/public.aspx?lang=en-US&p_AAAIR=tab5&d=d, accessed May 11, 2022.) [Cited as CEC 2006]

Greenhouse Gas Emissions

- California Energy Commission, Guidelines for Certification of Combined Heat and Power Systems Pursuant to the Waste Heat and Carbon Emissions Reduction Act, Public Utilities Code, Sections 2840 et seq. (CEC-200-2015-001CMF), Revised February 2015. (Available at <u>https://www.energy.ca.gov/sites/default/files/2020-01/CEC-200-2015-001-CMF_ada.pdf</u>, accessed May 11, 2022.) [Cited as CEC 2015]
- California Energy Commission, 2022 Building Energy Efficiency Standards, March 2018. (Available at <u>https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency</u>, accessed May 12, 2022.) [Cited as CEC 2021]
- California Natural Resources Agency, *Revised Text of the Proposed Guidelines Amendments*, 2009. (Available at <u>http://resources.ca.gov/ceqa/docs/FINAL_Text_of_Proposed_Amendemts.pdf</u>, accessed May 25, 2022.) [Cited as CNRA 2009a]
- California Natural Resources Agency, Notice of Public Hearings and Notice of Proposed Amendment of Regulations Implementing the California Environmental Quality Act, 2009. (Available at <u>http://resources.ca.gov/ceqa/docs/Notice_of_Proposed_Action.pdf</u> accessed May 5, 2022.) [Cited as CNRA 2009b]
- California Natural Resources Agency, 2009 California Climate Adaptation Strategy, 2009. (Available at <u>http://resources.ca.gov/docs/climate/Statewide Adaptation Strategy.pdf</u>, accessed May 28, 2022.) [Cited as CNRA 2009c]
- California Ocean Protection Council, State of California Sea-Level Rise Guidance 2018 Update, 2018. (Available at <u>http://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-</u> <u>A_OPC_SLR_Guidance-rd3.pdf</u>, accessed May 11, 2022.) [Cited as OPC 2018]
- City of Long Beach, Office of Sustainability, Sustainable City Action Plan, adopted February 2, 2010. (Available at http://www.longbeach.gov/sustainability/media-library/documents/nature-initiatives/action-plan/scap-final/, accessed May 6, 2022.) [Cited as LB 2010]
- City of Los Angeles, Green LA: An Action Plan to Lead the Nation in Fighting Global Warming, May 2007. (Available at <u>http://www.environmentla.org/pdf/GreenLA_CAP_2007.pdf</u>, accessed May 6, 2022.) [Cited as LA 2007a]
- City of Los Angeles, Green LA, City of Los Angeles Harbor Department, Climate Action Plan, December 2007. (Available at <u>https://kentico.portoflosangeles.org/getmedia/7121313c-b303-494c-9f98-834e8282ecd3/report_climate_action_plan</u>, accessed May 24, 2022.) [Cited as LA 2007b]
- Council on Environmental Quality, Memorandum for Heads of Federal Departments and Agencies, Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions, February 18, 2010. (Available at <u>https://obamawhitehouse.archives.gov/sites/default/files/microsites/ceq/20100218-nepaconsideration-effects-ghg-draft-guidance.pdf</u>, accessed May 6, 2022.) [Cited as CEQ 2010]
- Council on Environmental Quality, Memorandum for Heads of Federal Departments and Agencies, Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews, August 1, 2016. (Available at https://obamawhitehouse.archives.gov/sites/whitehouse.gov/files/documents/nepa_final_ghg_g uidance.pdf, accessed May 6, 2022.) [Cited as CEQ 2016]
- Government Printing Office, Federal Register, Vol. 75, No. 101, Presidential Documents, Improving Energy Security, American Competitiveness and Job Creation, and Environmental Protection Through a Transformation of Our Nation's Fleet of Cars and Trucks, May 21, 2010.
Greenhouse Gas Emissions

(Available at http://www.gpo.gov/fdsys/pkg/FR-2010-05-26/html/2010-12757.htm, accessed May 6, 2022.) [Cited as GPO FR 2010]

- Government Printing Office, Federal Register, Vol. 76, No. 153, Proposed Rules, 2017-2025 Model Year Light-Duty Vehicle GHG Emissions and CAFÉ Standards: Supplemental Notice of Intent. (Available at <u>https://www.epa.gov/regulations-emissions-vehicles-and-</u> <u>engines/proposed-rule-and-related-materials-2017-and-later-model</u>, accessed May 6, 2022.) [Cited as GPO FR 2011]
- Intergovernmental Panel on Climate Change, Intergovernmental Panel on Climate Change, Fifth Assessment Report, Climate Change 2013 – The Physical Science Basis, 2013. (Available at http://www.ipcc.ch/report/ar5/wg1/, accessed May 6, 2022.) [Cited as IPCC 2013]
- Legislative Counsel of California, California Assembly Bill 32, September 2006. (Available at http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927 chaptered.pdf, accessed May 6, 2022.) [Cited as AB32]
- Legislative Counsel of California, Senate Bill 375, September 2008. (Available at http://www.leginfo.ca.gov/pub/07-08/bill/sen/sb_0351-0400/sb_375_bill_20080930 chaptered.pdf, accessed May 6, 2022.) [Cited as SB 375]
- Legislative Counsel of California, Senate *Bill 605*, September 21, 2014. (Available at http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB605, accessed May 5, 2022.) [Cited as SB 605]
- Legislative Counsel of California, Senate Bill 1078, September 2002. (Available at <u>Bill Text SB-1078 Sea Level Rise Revolving Loan Pilot Program. (ca.gov)</u>, accessed May 6, 2022.) [Cited as SB 1078]
- Legislative Counsel of California, Senate Bill 1368, September 2006. (Available at <u>Bill Text SB-1368 State of emergency: termination after 45 days: extension by the Legislature. (ca.gov)</u>, accessed May 6, 2022.) [Cited as SB 1368]
- Legislative Counsel of California, *California Senate Bill 1*, August 2006. (Available at http://www.leginfo.ca.gov/pub/05-06/bill/sen/sb_0001-
 <u>0050/sb_1_bill_20060821_chaptered.html</u>, accessed May 11, 2022.) [Cited as SB1]
- Legislative Counsel of California, California Senate Bill 100, September 2018. (Available at https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100, accessed May 11, 2022.) [Cited as SB100]
- Legislative Counsel of California, Senate Bill 7, November 2009. (Available at http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200920107SB7, accessed May 11, 2022.) [Cited as WCA 2009]
- Massachusetts v. Environmental Protection Agency (2007) 549 U.S. 497. (Available at http://www.law.cornell.edu/supct/html/05-1120.ZS.html, accessed May 6, 2022.)
- National Highway Traffic Safety Administration, Laws & Regulations, CAFE Fuel Economy, Average Fuel Economy Standards Passenger Cars and Light Trucks Model Year 2011, Final Rule, March 23, 2009. (Available at <u>http://www.nhtsa.gov/DOT/NHTSA/Rulemaking/Rules/Associated%20Files/CAFE_Updated_Fin_al_Rule_MY2011.pdf</u>, accessed May 6, 2022.) [Cited as NHTSA 2009]
- National Highway Traffic Safety Administration, Federal Register, Vol. 77, No. 199, Rules & Regulations, 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards, effective December 14, 2012. (Available at https://federalregister.gov/a/2012-21972, accessed May 6, 2022.) [Cited as NHTSA 2012a]

- National Highway Traffic Safety Administration, Corporate Average Fuel Economy Standards, Passenger Cars and Light Trucks, Model Years 2017-2025, Final Environmental Impact Statement, July 2012. (Available at <u>http://www.nhtsa.gov/staticfiles/rulemaking/pdf/cafe/FINAL_EIS.pdf</u>, accessed May 6, 2022.) [Cited as NHTSA 2012b]
- National Highway Traffic Safety Administration, *Federal Register Notice, Proposed Rule, Corporate Average Fuel Economy Preemption, (86 FR 25980), May 12, 2021. (Available at: https://www.federalregister.gov/documents/2021/05/12/2021-08758/corporate-average-fuel-economy-cafe-preemption, accessed May 11, 2022.) [Cited as NHTSA 2021]*
- National Highway Traffic Safety Administration, Corporate Average Fuel Economy-Finalizes CAFÉ Standards for MYs 2024-2026. May 2, 2022. (Available at https://www.govinfo.gov/content/pkg/FR-2022-05-02/pdf/2022-07200.pdf, accessed May 13, 2022.) [Cited as NHTSA 2022]
- National Oceanic and Atmospheric Administration, *President Announces Clear Skies & Global Climate Change Initiatives*, February 14, 2002. (Available at http://georgewbush-whitehouse.archives.gov/news/releases/2002/02/20020214-5.html, accessed May 6, 2022.) [Cited as NOAA]
- Office of News and Public Information of the National Academies. California Sea Level Projected to Rise a Higher Rate than Global Average; Slower Rate for Oregon, Washington, But Major Earthquake Could Cause Sudden Rise, June 22, 2012. (Available at <u>http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=13389</u>, accessed May 6, 2022.) [Cited as ONPI 2012]
- Professional Engineers in Cal. Gov't v. Schwarzenegger (2010) 50 Cal.4th 989. (Available at http://appellatecases.courtinfo.ca.gov/search/case/mainCaseScreen.cfm?dist=0&doc_id=1945484&doc_no=S183411, accessed May 25, 2022.)
- Rocky Mountain Farmers Union v. Corey(2013) 730 F.3d 940 (Available at http://cdn.ca9.uscourts.gov/datastore/opinions/2013/09/18/12-15131.pdf, accessed May 6, 2022.)
- San Pedro Bay Ports, Clean Air Action Plan 2010 Update, CAAP Update Overview & Technical Documents, October 2010. (Available at https://kentico.portoflosangeles.org/getmedia/68ad1b1f-2241-4edb-8bf2-d9621af288b2/2010 caap update final, accessed May 25, 2022.) [Cited as SPBP 2010]
- Santa Ana Hospital Medical Center v. Belshe (1997) 56 Cal.App.4th 819 (Available at County of Riverside.)
- South Coast Air Quality Management District, *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, May 6, 2005. (Available at <u>http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf?sfvrsn=4</u>, accessed May 6, 2022.) [Cited as SCAQMD 2005]
- South Coast Air Quality Management District, *Draft AQMD Staff CEQA Greenhouse Gas Significance Threshold*, October 22, 2008. (Available at http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds, accessed May 25, 2022.) [Cited as SCAQMD 2008]
- South Coast Air Quality Management District, Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group Meeting #15, September 28, 2010. (Available at http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqasignificance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-mainpresentation.pdf?sfvrsn=2, accessed May 25, 2022.) [Cited as SCAQMD 2010]

- Southern California Association of Governments, 2012-2035 Regional Transportation *Plan/Sustainable Communities Strategies, adopted April 2012.* (Available at <u>http://libraryarchives.metro.net/DPGTL/scag/2012-2035-regional-transportation-plan.pdf</u>, accessed May 24, 2022.) [Cited as SCAG 2012]
- Southern California Association of Governments, 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, adopted April 7, 2016. (Available at <u>https://scag.ca.gov/sites/main/files</u>, accessed May 5, 2022.) [Cited as SCAG 2016]
- Southern California Association of Governments, Connect SoCal, The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy, adopted September 3, 2020. (Available at https://scag.ca.gov/read-plan-adopted-final-plan, accessed May 11, 2022.) [Cited as SCAG 2020]
- State of California Department of Justice, Office of the Attorney General, *Climate Change Impacts in California*, webpage. (Available at https://oag.ca.gov/environment/impact, accessed May 11, 2022.) [Cited as OAG 2022]
- United Nations, Kyoto Protocol to the United Nations Framework Convention on Climate Change, December 11, 1997. (Available at <u>http://unfccc.int/essential_background/kyoto_protocol/items/1678.php</u>, accessed May 6, 2022.) [Cited as UN 1997]
- United Nations, *Paris Agreement*, December 12, 2015. (Available at <u>http://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement_.pdf</u>, accessed May 6, 2022.) [Cited as UN 2016a]
- United Nations, Paris Agreement Status of Ratification, webpage. (Available at http://unfccc.int/paris_agreement/items/9444.php, accessed May 6, 2022.) [Cited as UN 2016b]
- United States Environmental Protection Agency, *Recovery: EPA Gets Involved*. (Available at <u>http://www.epa.gov/recovery</u>, accessed May 6, 2022.) [Cited as EPA 2009]
- United States Environmental Protection Agency, Light Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, Final Rule, May 7, 2010. (Available at <u>https://www.gpo.gov/fdsys/pkg/FR-2010-05-07/pdf/2010-8159.pdf</u>, accessed May 6, 2022.) [Cited as EPA 2010]
- United States Environmental Protection Agency, Office of Transportation and Air Quality. EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium-and Heavy-Duty Vehicles, August 2011. (Available at <u>https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100BOT1.TXT</u>, accessed May 6, 2022.) [Cited as EPA 2011]
- United States Environmental Protection Agency, Energy Resources for State, Local, and Tribal Governments, Last updated March 8, 2022. (Available at <u>https://www.epa.gov/statelocalenergy</u> accessed May 6, 2022.) [Cited as EPA 2019]
- United States Environmental Protection Agency, Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act. (Available at <u>https://www.epa.gov/climate-change/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a</u>, accessed May 4, 2022.) [Cited as EPA ECCF]
- United States Environmental Protection Agency, *Diesel Emissions Reduction Act (DERA) Funding*, webpage. (Available at <u>https://www.epa.gov/dera</u> accessed May 6, 2022.) [Cited as EPA DERA]
- United States Environmental Protection Agency, *Transportation and Air Quality, SmartWay*, Basic Information, webpage. (Available at <u>https://www3.epa.gov/smartway/about/index.htm</u>, accessed May 6, 2022.) [Cited as EPA SW]

Duke Warehouse at Patterson Avenue and Nance Street DEIR

- Western Climate Initiative, Design for the WCI Regional Program, July 2010. (Available at https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2010/capandtrade10/capv3appi.pdf, accessed May 24, 2022.) [Cited as WCI 2010]
- Western Riverside Council of Governments, Subregional Climate Action Plan, September 2014. (Available at <u>http://www.wrcog.cog.ca.us/DocumentCenter/View/188</u>, accessed May 6, 2022.) [Cited as WRCOG Subregional CAP-A]
- Western Riverside Council of Governments, *Climate Action Plan*, 2021. (Available at https://wrcog.us/172/Planning#:~:text=Climate%20Action%20Plan%20In%202014%2C%20W RCOG%20completed%20a,to%20assist%20with%20implementation%20of%20recommended %20CAP%20measures, accessed May 11, 2022.) [Cited as WRCOG Subregional CAP-B]

5.7.1 Setting

The earth's natural warming process is known as the "greenhouse effect." Certain atmospheric gases act as an insulating blanket for solar energy to keep the global average temperature in a suitable range. These gases are called "greenhouse gases" because they trap heat like the glass walls of a greenhouse. The greenhouse effect raises the temperature of the earth's surface by about 60 degrees Fahrenheit. With the natural greenhouse effect, the average temperature of the earth is about 45 degrees Fahrenheit; without it, the earth would be about minus 15 degrees. It is normal for the earth's temperature to fluctuate over extended periods of time. Over the past one hundred years, however, the earth's average global temperature has generally increased by one degree Fahrenheit. In some regions of the world, the increase has been as much as four degrees Fahrenheit.

Scientists studying the particularly swift rise in global temperatures during the late twentieth century believe that natural variability alone does not account for that rise. Rather, human activity spawned by the industrial revolution has resulted in increased emissions of carbon dioxide and other forms of GHGs, primarily from the burning of fossil fuels (during motorized transport, electricity generation, consumption of natural gas, industrial activity, manufacturing, etc.) and deforestation, as well as agricultural activity and the decomposition of solid waste. The most common GHG is carbon dioxide (CO₂), which constitutes approximately 84 percent of all GHG emissions in California (CEC 2006). Worldwide, the State of California ranks as the 12th to 16th largest emitter of CO₂ and is responsible for approximately two percent of the world's CO₂ emissions. Scientists refer to the global warming context of the past century as the "enhanced greenhouse effect" to distinguish it from the natural greenhouse effect (CEC 2006). While the increase in temperature is known as "global warming," the resulting change in weather patterns is known as "global climate change." Global climate change is evidenced in changes to wind patterns, storms, precipitation, and air temperature.

Global climate change is, by definition, a global issue and California's efforts to reduce GHG emissions will not alone change the impact of global climate change. Global concentrations of GHG rather than locational GHG emissions result in adverse climate change impacts that differentially occur throughout the world, and specific scientific metrics and methodologies to measure the climate change consequences (if any) of locally-specific impacts remain subject to considerable scientific uncertainty. For example, California emits only a tiny fraction of global GHG. The whole of the California economy's GHG emissions have dropped from approximately 1.35 percent of global GHG emissions in 1990 to 0.98 percent in 2011. As Governor Brown once noted about California's GHG reduction efforts, "we can do things in California, but if others don't follow, it will be futile." Thus, reducing California's GHG emissions (even as the 8th eighth largest economy in the world) cannot meaningfully impact the quantity of GHGs in the global atmosphere. To date, the vast majority of other states and nations have not followed California's lead in mandating GHG emission reductions across a broad spectrum of economic sectors

under laws and regulations discussed in greater detail below and have not enacted regulations similar to those adopted in California. California already has nearly the lowest level of GHG per capita of any state.

Project-level emissions for activities that occur as a result of population-based variables (people needing housing, jobs, and services) that occur in California reduces global GHG emissions by facilitating more growth and development in California relative to other states.

Greenhouse Gases

Gases responsible for global climate change in the South Coast Air Basin (Basin) and their relative contribution to the overall warming effect are carbon dioxide (55 percent), chlorofluorocarbons (CFCs) (24 percent), methane (15 percent), and nitrous oxide (6 percent). It is widely accepted that continued increases in GHG will contribute to global climate change although there is uncertainty concerning the magnitude and timing of future emissions and the resultant warming trend (SCAQMD 2005).

"Stratospheric ozone depletion" refers to the slow destruction of naturally occurring ozone, which lies in the upper atmosphere (called the stratosphere) and which protects Earth from the damaging effects of solar ultraviolet radiation. Certain compounds, including CFCs, halons, carbon tetrachloride, methyl chloroform, and other halogenated compounds, accumulate in the lower atmosphere and then gradually migrate into the stratosphere. In the stratosphere, these compounds participate in complex chemical reactions to destroy the upper ozone layer. Destruction of the ozone layer increases the penetration of ultraviolet radiation to the Earth's surface, a known risk factor that can increase the incidence of skin cancers and cataracts, contribute to crop, and fish damage, and further degrade air quality (SCAQMD 2005).

GHG and ozone-depleting gases include, but are not limited to, the following:

- **Carbon dioxide** Carbon dioxide results from fossil fuel combustion in stationary and mobile sources. It contributes to the greenhouse effect, but not to stratospheric ozone depletion. In the Basin, approximately 48 percent of carbon dioxide emissions come from transportation, residential and utility sources which contribute approximately 13 percent each, 20 percent come from industry, and the remainder comes from a variety of other sources (SCAQMD 2005).
- Methane Atmospheric methane is emitted from both non-biogenic and biogenic sources. Non-biogenic sources include fossil fuel mining and burning, biomass burning, waste treatment, geologic sources, and leaks in natural gas pipelines. Biogenic sources include wetlands, rice agriculture, livestock, landfills, forest, oceans, and termites. Methane sources can also be divided into anthropogenic and natural. Anthropogenic sources include rice agriculture, livestock, landfills, waste treatment, some biomass burning, and fossil fuel combustion. Natural sources are wetlands, oceans, forests, fire, termites, and geological sources. Anthropogenic sources currently account for more than 60 percent of the total global emissions. It is a greenhouse gas and traps heat 40–70 times more effectively than carbon dioxide. In the Basin, more than 50 percent of human-induced methane emissions from natural gas pipelines, while landfills contribute 24 percent. Methane emissions from landfills are reduced by SCAQMD Rule 1150.1 Control of Gaseous Emissions from Active Landfills. Methane emissions XI that

control fugitive emissions from petroleum production, refining, and distribution (SCAQMD 2005).

- Other regulated greenhouse gases include Nitrous Oxide, Sulfur Hexafluoride, Hydrofluorocarbons, and Perfluorocarbons – These gases all possess heat-trapping potentials hundreds to thousands of times more effective than carbon dioxide. Emission sources of nitrous oxide gases include, but are not limited to, waste combustion, wastewater treatment, fossil fuel combustion, and fertilizer production. Because the volume of emissions is small, the net effect of nitrous oxide emissions relative to carbon dioxide or methane is relatively small. Sulfur hexafluoride, hydrofluorocarbon, and perfluorocarbon emissions occur at even lower rates.
- Chlorofluorocarbons Chlorofluorocarbons (CFCs) are emitted from blowing agents used in producing foam insulation. They are also used in air conditioners and refrigerators and as solvents to clean electronic microcircuits. CFCs are primary contributors to stratospheric ozone depletion and to global warming. 63 percent of CFC emissions in the Basin come from the industrial sector. Federal regulations require service practices that maximize recycling of ozone-depleting compounds (both CFCs, hydro-chlorofluorocarbons and their blends) during the servicing and disposal of airconditioning and refrigeration equipment. SCAQMD Rule 1415 - Reduction of Refrigerant Emissions from Stationary Refrigeration and Air Conditioning Systems requires CFC refrigerants to be reclaimed or recycled from stationary refrigeration and air conditioning systems. SCAQMD Rule 1405 - Control of Ethylene Oxide and Chlorofluorocarbon Emissions from Sterilization or Fumigant Processes requires recovery of reclamation of CFCs at certain commercial facilities and eliminates the use of some CFCs in the sterilization processes. Some CFCs are classified as Toxic Air Contaminants (TACs) and regulated by SCAQMD Rule 1401 - New Source Review of Toxic Air Contaminants and SCAQMD Rule 1402 Control of Toxic Air Contaminants from Existing Sources.
- Halons These compounds are used in fire extinguishers and behave as both ozonedepleting and GHG. Halon production ended in the United States in 1993. SCAQMD Rule 1418 – Halon Emissions from Fire Extinguishing Equipment requires the recovery and recycling of halons used in fire extinguishing systems and prohibits the sale of halon in small fire extinguishers.
- Hydro-chlorofluorocarbons HCFCs are solvents, similar in use and chemical composition to CFCs. The hydrogen component makes HCFCs more chemically reactive than CFCs, allowing them to break down more quickly in the atmosphere. These compounds deplete the stratospheric ozone layer, but to a much lesser extent than CFCs. HCFCs are regulated under the same SCAQMD rules as CFCs.
- 1,1,1,-trichloroethane (TCA) TCA (methyl chloroform) is a solvent and cleaning agent commonly used by manufacturers. It is less destructive on the environment than CFCs or HCFCs, but its continued use will contribute to global warming and ozone depletion. 1,1,1-trichloroethane (TCA) is a synthetic chemical that does not occur naturally in the environment. No TCA is supposed to be manufactured for domestic use in the United States after January 1, 2002 because it affects the ozone layer. TCA had many industrial

and household uses, including use as a solvent to dissolve other substances, such as glues and paints; to remove oil or grease from manufactured metal parts; and as an ingredient of household products such as spot cleaners, glues, and aerosol sprays. SCAQMD regulates this compound as a toxic air contaminant under Rules 1401 and 1402.

Unlike criteria air pollutants and TACs, which are pollutants of regional and local concern, climate change is a global problem and GHGs are global pollutants. Impacts of GHG emissions are a function of their total atmospheric concentration and most GHGs are globally well mixed atmospheric constituents. This means that the location of a particular GHG emission, in contrast to the situation for criteria pollutants, does not change its environmental impact.

Global Warming Potentials

Individual GHGs have varying global warming potential and atmospheric lifetimes. The Intergovernmental Panel on Climate Change (IPCC) developed the Global Warming Potential (GWP) concept to compare the ability of each GHG to trap heat in the atmosphere relative to another gas. The GWP of individual GHGs is determined through a comparison with the GWP of CO₂. CO₂ has a GWP of one; CH₄ has a GWP of 28, meaning that on a molecule by molecule basis, CH₄ has 28 times the global warming potential of CO₂. CO₂-equivalents (CO₂e) are the emissions of a GHG multiplied by the GWP. The CalEEMod program calculates the CO₂e based on the GWPs reported in the IPCC Fifth Assessment Report (IPCC 2013). A Sixth Assessment Report is in progress and is expected to be finalized in September 2022. **Table 5.7-A, Global Warming Potentials and Atmospheric Lifetimes** shows the GWP and atmospheric lifetimes of various GHGs with relatively long atmospheric lifetimes from the IPCC 2013 report.

Gas	Atmospheric Lifetime	Global Warming Potential (100- Year Time Horizon)
Carbon Dioxide (CO2)		1
Methane (CH ₄)	12.4	28
Nitrous Oxide (N2O)	121	265-298
Hydrofluorocarbons (HFCs) HFC-134a	13.4	1,300-1,550
Perfluoromethane (CF ₄)	50,000	6,630-7,350
Chlorofluorocarbons (CFCs) CFC-11	45	4,660-5,350

Table 5.7-A – Global Warming Potentials and Atmospheric Lifetimes

Source: Intergovernmental Panel on Climate Change, Fifth Assessment Report, *Climate Change 2013– The Physical Science Basis*, 2013, Table 8.7

Effects of Climate Change

Agriculture

Global climate change can cause drought, higher temperatures, saltwater contamination through rising sea levels, flooding, and increased risk of pests. Because California feeds not only its own residents, but the entire U.S. and other countries as well, production declines could lead to food shortages and higher prices. (OAG 2022)

Forest and Biodiversity

Forest and rangelands cover over 80% of California's 100 million acres. Climate change will affect tree survival and growth, reducing these lands' productivity and changing their habitats. In addition, climate change makes forests more vulnerable to fires by increasing temperatures and making forests and brush drier. Today's fire season in the western United States starts earlier, lasts longer, and is more intense than in the last several decades. Wildfire occurrence statewide could increase several fold by the end of the century, increasing fire suppression and emergency response costs and damage to property. (OAG 2022)

California is one of the most biologically diverse regions of the world, with the highest number of unique plant and animal species of all 50 states and the greatest number of endangered species. Climate change will adversely affect plant and wildlife habitats and the ability of the State's varied ecosystems to support clean water, wildlife, fish, timber and other goods and services. (OAG 2022)

Public Health

Californians already experience the worst air quality in the nation. Hotter temperatures lead to more smog, which can damage lungs, and increases childhood asthma, respiratory and heart disease, and death. Certain segments of the population are at greater risk, including the elderly, infants, persons with chronic heart or lung disease, people who cannot afford air conditioning, and those who work outdoors. As temperatures rise, the number of days of extreme heat events also will rise, causing increases in the risk of injury or death from dehydration, heatstroke, heart attack and respiratory problems. (OAG 2022)

Sea Level Rise

The sea level along California's coasts has risen nearly eight inches in the past century and is projected to rise by as much as 20 to 55 inches by the end of the century. A 55-inch sea level rise could put nearly half a million people at risk of flooding by 2100, and threaten property and infrastructure, including roadways, buildings, hazardous waste sites, power plants, and parks and tourist destinations. (OAG 2022)

As sea levels rise, saltwater contamination of the State's delta and levee systems will increase. Saltwater contamination of the Sacramento/San Joaquin Delta will threaten wildlife and the source of drinking water for 20 million Californians. Farmland in low areas may also be harmed by salt-contaminated water. (OAG 2022)

Water Resources

The Sierra Nevada snowpack functions as the most important natural reservoir of water in California. Under current conditions, the snowpack is created in fall and winter and slowly releases about 15 million acre-feet of water in the spring and summer, when California needs it most. California's dams and water storage facilities are built to handle the snow melt as it happened in the past. Higher temperatures are now causing the snowpack to melt earlier and all at once. Earlier and larger releases of water could overwhelm California's water storage facilities, creating risk of floods and water shortages. (OAG 2022)

5.7.2 Related Regulations

International

International Treaties and Other Developments

The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change. It was adopted in Kyoto, Japan, on December 11, 1997, and entered into force on February 16, 2005 for the 141 countries that ratified it. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing GHG emissions. The targets amount to an average of five percent reduction against 1990 levels over the five-year period 2008-2012. The major distinction between the Protocol and the Convention is that while the Convention encouraged industrialized countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities" (UN 1997).

Negotiations after the Kyoto Protocol have continued in an attempt to address the period after the first "commitment period" of the Kyoto Protocol, concluded at the end of 2012. In Durban, South Africa in 2011, parties to the protocol agreed in principle to negotiate a new comprehensive and legally binding climate agreement by 2015 and to enter it into force for all parties starting from 2020. Intensive negotiations took place under the Ad Hoc Group on the Durban Platform for Enhanced Action throughout 2012 through 2015 and culminated in the adoption of the Paris Agreement by the Conference of the Parties on December 12, 2015. The Paris Agreement seeks to accelerate and intensify the actions and investment needed for a sustainable low carbon future. Its central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius (UN 2016a).

In accordance with Article 21, paragraph 1, of the Paris Agreement, the Agreement shall enter into force on the thirtieth day after the date on which at least 55 Parties to the Convention accounting in total for at least an estimated 55 percent of the total global greenhouse gas emissions have deposited their instruments of ratification, acceptance, approval, or accession with the Depositary. As of September 3, 2016, there are 180 signatories to the Paris Agreement. Of these, 26 States have also deposited their instruments of ratification, acceptance, or approval accounting in total for 39.06 percent of the total global greenhouse gas emissions. The United States ratified the Paris agreement on September 3, 2016. In accordance with its Article 20, the Agreement shall be open for signature at the United Nations Headquarters in New York from April 22, 2016 until April 21, 2017 by States and regional economic integration organizations that are Parties to the United Nations Framework Convention on Climate Change (UN 2016b). Although President Trump announced that he was withdrawing the United States from the Paris Agreement, President Biden rejoined in 2021.

Federal

Although the U.S. was not a party to the original Kyoto Protocol, then President George W. Bush and his administration established a national policy goal to reduce the GHG emission intensity (tons of GHG emissions per million dollars of gross domestic product) of the U.S. economy by 18 percent by 2012 (NOAA). The goal did not establish any binding reduction mandates. Rather, the United States Environmental Protection Agency (EPA) began to administer a variety of voluntary programs and

partnerships with industries that produce and utilize synthetic gases to reduce emissions of particularly potent GHGs.

Supreme Court Ruling in Massachusetts et al. v. Environmental Protection Agency

The Bush Administration's approach to addressing climate change was challenged in *Massachusetts et al. v. Environmental Protection Agency* (2007) 549 U.S. 497. In this decision, the United States Supreme Court held that the United States Environmental Protection Agency (EPA) was authorized by the Federal Clean Air Act (CAA) to regulate CO_2 emissions from new motor vehicles. The Court did not mandate that the EPA enact regulations to reduce GHG emissions, but found that the only instance in which the EPA could avoid taking action were if it found that GHGs do not contribute to climate change or if it offered a "reasonable explanation" for not determining that GHGs contribute to climate change.

On December 7, 2009, the EPA issued an "endangerment finding" under the CAA concluding that GHGs threaten the public health and welfare of current and future generations and that motor vehicles contribute to greenhouse gas pollution (EPA ECCF). These findings provide the basis for adopting new national regulations to mandate GHG emission reductions under the federal CAA. The EPA's endangerment finding paved the way for federal regulation of GHGs.

It was expected that Congress would enact GHG legislation primarily for a cap-and-trade system. However, proposals circulated in both the House of Representatives and Senate were controversial and it may be some time before Congress adopts major climate change legislation. Under the Consolidated Appropriations Act of 2008, Congress established mandatory GHG reporting requirements for some emitters of GHGs. In addition, on September 22, 2009, the EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule. The rule requires annual reporting to the EPA of GHG emissions from large sources and suppliers of GHGs, including facilities that emit 25,000 metric tons or more a year of GHGs.

The following sections summarize the EPA's recent regulatory activities with respect to various types of GHG sources.

EPA and NHTSA Joint Rulemaking for Vehicle Standards

In response to the *Massachusetts v. EPA decision*, discussed above, the Bush Administration issued an Executive Order on May 14, 2007, directing the EPA, the Department of Transportation (DOT), and the Department of Energy (DOE) to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008 (White House-A).

On October 10, 2008, the National Highway Traffic Safety Administration (NHTSA) released a final Environmental Impact Statement (EIS) analyzing proposed interim standards for passenger cars and light trucks in model years 2011 through 2015. The NHTSA issued a final rule for model year 2011 on March 30, 2009 (NHTSA 2009).

On May 7, 2010, the EPA and the NHTSA issued a final rule regulating fuel efficiency and GHG pollution from motor vehicles for cars and light-duty trucks for model years 2012–2016 (EPA 2010). On May 21, 2010, President Obama issued a memorandum to the Secretaries of Transportation and Energy, the Administrators of the EPA, and the NHTSA calling for establishment of additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. (GPO FR 2010) In response to this directive, the EPA and NHTSA issued a Supplemental Notice of Intent announcing plans to propose stringent, coordinated federal greenhouse gas and fuel economy standards for model year 2017-2025 light-duty vehicles (GPO FR 2011). The agencies proposed standards projected to achieve

163 grams/mile of CO₂ in model year 2025, on an average industry fleet wide basis, which is equivalent to 54.5 miles per gallon if this level were achieved solely through fuel efficiency.

The California Air Resources Board (CARB) announced its support of this national program (CARB 2011). The final rule was adopted in October 2012 and NHTSA intends to set standards for model years 2022-2025 in a future rulemaking (NHTSA 2012a, NHTSA 2012b).

In 2019, the NHTSA and EPA amended certain existing Corporate Average Fuel Economy (CAFE) and greenhouse gas emissions standards for passenger cars and light trucks and establish new standards, covering model years 2021 through 2026. The rule also revoked California's ability to set its own, higher fuel efficiency standards, which are granted by waiver. California has filed two lawsuits against the EPA over proposed the amendments and repeal of the waiver. In May 2021, NHTFSA proposed to repeal the amended standards, but the decision was not finalized. (NHFTSA 2021) In March 2022, EPAs most recent decision, they rescinded the action to revoke California's ability to set its own higher fuel efficiency standards. This restored California's authority to implement its own GHG emissions standards. (NHTSA-2022)

Heavy-duty Engines and Vehicles Fuel Efficiency Standards

In addition to the regulations applicable to cars and light-duty trucks, on August 9, 2011, the EPA and the NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks, which applies to vehicles from model year 2014-2018 (EPA 2011). The EPA and NHTSA adopted standards for CO₂ emissions and fuel consumption respectively, tailored to each of three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the EPA, this program will reduce GHG emissions and fuel consumption for affected vehicles by nine percent to 23 percent.

In August 2016, the EPA and NHTSA jointly adopted a second round of standards for medium- and heavy-duty vehicles that will cut carbon pollution and improve fuel efficiency, while bolstering energy security and spurring manufacturing innovation. The Phase 2 program promotes a new generation of cleaner, more fuel efficient trucks by encouraging the development and deployment of new and advanced cost-effective technologies through model year 2027. The Phase 2 program achieves 10 percent more GHG reductions (EPA 2016).

USEPA SmartWay® Program

SmartWay is an EPA program that reduces transportation-related emissions by creating incentives to improve supply chain fuel efficiency. There are five primary elements of the program: (1) SmartWay Transport Partnership, a partnership in which freight carriers and shippers commit to benchmark operations, track fuel consumption and improve performance annually; (2) SmartWay Technology Program, a testing, verification, and designation program to help freight companies identify equipment, technologies and strategies that save fuel and lower emissions; (3) SmartWay Finance Program, a competitive grant program that makes investing in fuel-saving equipment easier for freight carriers; (4) SmartWay Vehicles, a program that ranks light-duty cars and small trucks and identifies superior environmental performers with the SmartWay logo; and (5) SmartWay International Interests, which provides guidance and resources for countries seeking to develop freight sustainability programs modeled after SmartWay (EPA SW).

Energy Independence and Security Act

On December 19, 2007, the Energy Independence and Security Act of 2007 (EISA) was signed into law. Among other key measures, the Act would do the following, which would aid in the reduction of national mobile and non-mobile GHG emissions:

- 1. Increase the supply of alternative fuel sources by setting a mandatory Renewable Fuel Standard (RFS) requiring fuel producers to use at least 36 billion gallons of biofuel in 2022.
- 2. Prescribe or revise standards affecting regional efficiency for heating and cooling products, procedures for new or amended standards, energy conservation, energy efficiency labeling for consumer electronic products, residential boiler efficiency, electric motor efficiency, and home appliances.
- 3. While superseded by NHTSA and USEPA actions described above, EISA also set miles per gallon targets for cars and light trucks and directed the NHTSA to establish a fuel economy program for medium- and heavy-duty trucks and create a separate fuel economy standard for work trucks.

Additional provisions of the EISA address energy savings in government and public institutions, promoting research for alternative energy, additional research in carbon capture, international energy programs, and the creation of "green jobs." (White House-B)

American Recovery and Reinvestment Act

On February 17, 2009, President Obama signed the American Recovery and Reinvestment Act (ARRA) of 2009. ARRA was passed in response to the economic crisis of the late 2000s with the primary purpose to maintain existing jobs and create new jobs. Among the secondary objectives of ARRA was investment in "green" energy programs including funding the following through grants, loans, or other funding, private companies developing renewable energy technologies, local and state governments implementing energy efficiency and clean energy programs, research in renewable energy, biofuels, and carbon capture, and development of high efficiency or electric vehicles. (EPA 2009).

CEQ NEPA Guidelines on GHG

On February 18, 2010, the White House Council on Environmental Quality (CEQ) published draft guidance on the consideration of greenhouse gases and climate change for National Environmental Policy Act (NEPA) analyses. It recommends that proposed federal actions that are reasonably expected to directly emit 25,000 million metric tons of CO₂ equivalents (MMTCO₂e) per year should prepare a quantitative and qualitative NEPA analysis of direct and indirect greenhouse gas emissions (CEQ 2010).

The CEQ released *The Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews* on August 1, 2016. Although the final guidance does not recommend the 25,000-MMTCO₂e/year reference point specifically, the final guidance does recommend that agencies quantify a proposed agency action's projected direct and indirect GHG emissions. Agencies should be guided by the principle that the extent of analysis should be commensurate with the quantity of projected GHG emissions and take into account available data and GHG quantification tools that are suitable for and commensurate with the proposed agency action. The rule of reason and the concept of proportionality caution against providing an in-depth analysis of emissions regardless of the insignificance of the quantity of GHG emissions that would be caused by the proposed agency action. The final guidance is applicable to all Federal proposed actions, including individual Federal site-specific actions, Federal grants for or funding of small-scale or broad-scale activities, Federal rulemaking actions, and Federal land and resource

management decisions (CEQ 2016). This guidance was withdrawn in 2017 under the Trump administration and is now under review for revision or updates under the Biden administration.¹

Voluntary Programs

The EPA administers a variety of voluntary programs and partnerships with GHG emitters in which the EPA partners with industries that produce and utilize synthetic gases to reduce emissions of particularly potent GHGs.

For example, the Diesel Emission Reduction Act promotes diesel emission reduction strategies partly through national competitive grants and rebates to fund projects that use EPA or CARB verified or certified diesel emission reduction technologies. This act gave EPA new grant and loan authority for promoting diesel emission reductions and authorized appropriations to the EPA of up to \$200 million per year for fiscal years 2007- 2011. Congress appropriated funds for the first time under this program in fiscal year 2008 (EPA DERA). The EPA also administers the State and Local Energy and Environment Program that provides free tools, data, and technical expertise about energy strategies, including energy efficiency, renewable energy, and other emerging technologies, to help State, local and tribal governments achieve their environmental, energy and economic objectives. (EPA 2019).

Multi-State/Regional Area

The Western Regional Climate Action Initiative (WCI)

The Western Regional Climate Action Initiative (WCI) is a partnership among seven states including California and four Canadian provinces to implement a regional, economy-wide cap-and-trade system to reduce global warming pollution. The WCI will cap GHG emissions from the region's electricity, industrial, and transportation sectors with the goal to reduce the heat trapping emissions that cause global warming to 15 percent below 2005 levels by 2020. (WCI 2010) When the WCI adopted this goal in 2007, it estimated this would require 2007 levels to be reduced worldwide between 50 and 85 percent by 2050. California is working closely with the other states and provinces to design a regional GHG reduction program that includes a cap-and-trade approach. CARB's planned Cap-and-Trade Program, discussed below, is also intended to link California and the other member states and provinces. On October 1, 2013, CARB announced the completion of an agreement that defines the process for working collaboratively and jointly to harmonize and integrate the California and Québec cap-and-trade programs. The Agreement Between the California Air Resources Board and the Gouvernement du Québec Concerning the Harmonization and Integration of Cap-and-Trade Programs Reducing Greenhouse Gas Emissions fulfills the direction in CARB Board Resolution 13-7 (CARB 2019).

State

California has adopted various administrative initiatives and also enacted a variety of legislation relating to climate change, much of which sets aggressive goals for GHG emissions reductions within the state. However, none of this legislation provides definitive direction regarding the treatment of climate change in environmental review documents prepared under CEQA. In particular, the amendments to the CEQA Guidelines do not require or suggest specific methodologies for performing an assessment or thresholds of significance, and do not specify GHG reduction mitigation measures. Instead, the CEQA amendments continue to rely on lead agencies to choose methodologies and make significance determinations based

¹ <u>https://ceq.doe.gov/guidance/ceq_guidance_nepa-ghg.html</u>

on substantial evidence, as discussed in further detail below (CNRA 2009a). In addition, no state agency has promulgated binding regulations for analyzing GHG emissions, determining their significance, or mitigating any significant effects in CEQA documents. Thus, lead agencies exercise their discretion determining how to analyze GHGs.

The discussion below provides a brief overview of CARB and California Governor's Office of Planning and Research (OPR) documents and of the primary legislation that relates to climate change that may affect the emissions associated with the proposed Project. It begins with an overview of the primary regulatory acts that have driven GHG regulation and analysis in California.

Assembly Bill 32

The California Global Warming Solutions Act of 2006 (AB 32) was signed into law in September 2006 after considerable study and expert testimony before the legislature. The law instructs CARB to develop and enforce regulations for the reporting and verifying of statewide GHG emissions. The Act directed CARB to set a GHG emission limit based on 1990 levels to be achieved by 2020. The bill set a timeline for adopting a scoping plan for achieving GHG reductions in a technologically and economically feasible manner (AB32).

The heart of the bill is the requirement that statewide GHG emissions be reduced to 1990 levels by 2020. Based on CARB's calculation of California's 1990 emissions levels, California must reduce GHG emissions by approximately 28.5 percent below "business-as-usual" (BAU) predictions of year 2020 GHG emissions to achieve this goal. The bill required CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions. CARB has accomplished key milestones set forth in AB 32, including the following:

- June 30, 2007. Identification of discrete early action GHG emissions reduction measures. On June 21, 2007, CARB satisfied this requirement by approving three early action measures (CARB 2007b). These were later supplemented by adding six other discrete early action measures (CARB 2007c).
- January 1, 2008. Identification of the 1990 GHG emissions level and approval of a statewide limit equivalent to that level and adoption of reporting and verification requirements concerning GHG emissions. On December 6, 2007, CARB approved a statewide limit on GHG emissions levels for the year 2020 consistent with the determined 1990 emissions inventory (CARB 2007a).
- January 1, 2009. Adoption of a scoping plan for achieving GHG emission reductions. On December 11, 2008, CARB adopted Climate Change Scoping Plan: A Framework for Change (Scoping Plan), discussed in more detail below (CARB 2008).
- January 1, 2010. Adoption and enforcement of regulations to implement the "discrete" actions. Several early action measures have been adopted and became effective on January 1, 2010 (CARB 2007b, CARB 2007c).
- January 1, 2011. Adoption of GHG emissions limits and reduction measures by regulation. On October 28, 2010, CARB released its proposed cap-and-trade regulations, which would cover sources of approximately 85 percent of California's GHG emissions (CARB 2010b). CARB's Board ordered CARB's Executive Director to prepare a final regulatory package for cap-and-trade on December 16, 2010 (CARB 2010c).
- January 1, 2012. GHG emissions limits and reduction measures adopted in 2011 became enforceable.

• On January 1, 2015, cap-and-trade compliance obligations are phased in for suppliers of natural gas, reformulated gasoline blendstock for oxygenate blending (RBOB), distillate fuel oils, and liquefied petroleum gas, with emissions that meet or exceed specified emissions thresholds.

As noted above, on December 11, 2008, CARB adopted the Scoping Plan to achieve the goals of AB 32. The Scoping Plan establishes an overall framework for the measures that will be adopted to reduce California's GHG emissions for various categories of emissions. CARB determined that achieving the 1990 emission levels would require a reduction of GHG emissions of by approximately 28.5 percent to achieve 2020 emissions levels in the absence of new laws and regulations (referred to as "business as usual"(BAU)). The Scoping Plan evaluates opportunities for sector-specific reductions, integrates all CARB and Climate Action Team early actions and additional GHG reduction measures by both entities, identifies additional measures to be pursued as regulations, and outlines the role of a Cap-and-Trade Program. The key elements of the Scoping Plan include: (CARB 2008)

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

The CARB approved the final *First Update to the Climate Change Scoping Plan* in May 2014. The first update describes California's progress towards AB 32 goals stating that "California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32" (CARB 2014, p. ES2). Specifically, "if California realizes the expected benefits of existing policy goals (such as 12,000 megawatts of renewable distributed generation by 2020, net zero energy homes after 2020, existing building retrofits under AB 758, and others) it could reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050" (CARB 2014, p. 34). The first update laid the groundwork for the GHG emission goals set forth in Executive Order S-3-05 and B-16-2012 (Scoping 2017, p. 5), which set an objective for California to reduce GHG emissions to 80 percent below 1990 levels by 2050 (CARB 2014, p. 1).

CARB now has a second update to the Scoping Plan to reflect the 2030 target codified by SB 32. SB 32 affirms the importance of addressing climate change by codifying into statute the GHG emissions reductions target of at least 40 percent below 1990 levels by 2030 contained in Governor Brown's Executive Order B-30-15. Based on the emissions reductions directed by SB 32, the annual 2030 statewide target emissions level for California is 260 MTCO₂e. The companion bill to SB 32, AB 197,

provides additional direction to CARB on the following areas related to the adoption of strategies to reduce GHG emissions (CARB Scoping 2017, pp. 2-3):

- Requires annual posting of GHG, criteria, and TAC data throughout the State, organized by local and sub-county level for stationary sources and by at least a county level for mobile sources.
- Requires CARB, when adopting rules and regulations to achieve emissions reductions and to protect the State's most affected and disadvantaged communities, to consider the social costs of GHG emissions and prioritize both of the following:
 - Emissions reductions rules and regulations that result in direct GHG emissions reductions at large stationary sources of GHG emissions and direct emissions reductions from mobile sources.
 - Emissions reductions rules and regulations that result in direct GHG emissions reductions from sources other than those listed above.
- Directs CARB, in the development of each scoping plan, to identify for each emissions reduction measure:
 - The range of projected GHG emissions reductions that result from the measure.
 - The range of projected air pollution reductions that result from the measure.
 - The cost-effectiveness, including avoided social costs, of the measure.

CARB's 2017 Scoping Plan builds upon the successful framework established by the Initial Scoping Plan and First Update, while identifying new, technologically feasible, and cost-effective strategies to ensure that California meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health, including in disadvantaged communities. The 2017 Scoping Plan includes policies to require direct GHG reductions at some of the State's largest stationary sources and mobile sources. 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 (CARB Scoping 2017, pp. 5-6).

Senate Bill 375 and SCAG Regional Transportation Plan/Sustainable Community Plan

SB 375 provides for a new planning process to coordinate land use planning, regional transportation plans, and funding priorities in order to help California meet the GHG reduction goals established in AB 32 (SB375). SB 375 includes provisions for streamlined CEQA review for some infill projects such as transit-oriented development. SB 375 also requires Metropolitan Planning Organizations (MPOs) relevant to the Project area (including the Southern California Association of Governments (SCAG)) to incorporate a "sustainable communities' strategy" (SCS) into their regional transportation plans (RTPs) that will achieve GHG emission reduction targets by reducing vehicle miles traveled (VMT) from light duty vehicles through development of more compact, complete, and efficient communities.

SB 375 is similar to the Regional Blueprint Planning Program established by the California Department of Transportation, which provides discretionary grants to fund regional transportation and land use plans voluntarily developed by MPOs working in cooperation with Councils of Governments. The Scoping Plan adopted by CARB in December of 2008, relies on the requirements of SB 375 to implement the carbon emissions reductions anticipated from land use decisions.

On September 23, 2010, CARB adopted Regional Targets for the reduction of GHG applying to the years 2020 and 2035. On March 22, 2018 these targets were updated. For the area under SCAG's jurisdiction including the Project area, CARB adopted Regional Targets for reduction of GHG emissions by eight percent for 2020 and by 19 percent for 2035. (CARB 2018)

SCAG's SCS is included in the SCAG 2016-2040 Regional Transportation Plan Sustainable Communities Strategy (RTP/SCS) (SCAG 2016). The document was adopted by SCAG on April 7, 2016. The goals and policies of the RTP/SCS that reduce VMT focus on transportation and land use planning that include building infill projects, locating residents closer to where they work and play and designing communities so there is access to high quality transit service (SCAG 2016, pp. 17, 64-65). The 2016-2040 RTP/SCS would result in an eight percent reduction in GHG emissions per capita by 2020, an 18 percent reduction by 2035 and a 21 percent reduction by 2040—compared with 2005 levels (SCAG 2016, p. 153). This meets or exceeds the State's mandated reductions established by CARB and meets the requirements of SB 375 as codified in Government Code Sections 65080(b) et seq., which are eight percent by 2020 and 13 percent by 2035. The 2016-2040 RTP/SCS is expected to reduce the number of VMT per capita by more than seven percent and Vehicle hours traveled (VHT) per capita by 17 percent (for automobiles and light/medium duty trucks) as a result of more location efficient land use patterns and improved transit service.

On September 3, 2020, SCAG's Regional Council adopted Connect SoCal (2020 - 2045 Regional Transportation Plan/Sustainable Communities Strategy). (SCAG 2020)

CARB updated the regional targets in 2018 to ensure consistency with the more stringent statewide reduction goals subsequently introduced by the California legislature and the Governor's office. For the SCAG region, the updated targets are 8 percent below 2005 per capita emissions levels by 2020 (this value is unchanged from the previous 2020 CARB target), and 19 percent below 2005 per capita emissions levels by 2035. (SCAG 2020)

Connect SoCal SCS has been found to meet State targets for reducing GHG emissions from cars and light trucks. Connect SoCal achieves per capita GHG emission reductions relative to 2005 levels of 8 percent in 2020, and 19 percent in 2035, thereby meeting the GHG reduction targets established by the CARB for the SCAG region. (SCAG 2020)

Senate Bill 605

On September 21, 2014, Governor Edmund Brown signed Senate Bill 605 (SB 605), which requires CARB to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants (SLCP) in the State no later than January 1, 2016. As defined in the statute, short-lived climate pollutant means "an agent that has a relatively short lifetime in the atmosphere, from a few days to a few decades, and a warming influence on the climate that is more potent than that of carbon dioxide." SB 605, however, does not prescribe specific compounds as SLCP or add to the list of GHGs regulated under AB 32. In developing the strategy, CARB must complete an inventory of sources and emissions of SLCP in the State based on available data, identify research needs to address any data gaps, identify existing and potential new control measures to reduce emissions, and prioritize the development of new measures for SLCP that offer co-benefits by improving water quality or reducing other air pollutants that impact community health and benefit disadvantaged communities. The draft strategy released by CARB in September 2015 focuses on methane, black carbon, and fluorinated gases, particularly hydrofluorocarbons, as important short-lived climate pollutants. (SB 605). In March 2017, CARB approved the Short-Lived Climate Pollutants Reduction Strategy that lays out a range of options to reduce SLCP emissions in California, including regulations, incentives, and other market-supporting activities. The SLCP Strategy was also informed by the 2017 Scoping Plan (CARB 2017a).

Executive Order S-3-05 (Statewide GHG Targets)

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05, which proclaimed that California is vulnerable to the impacts of climate change. It declared that increased temperatures could reduce snowpack in the Sierra Nevada Mountains; could further exacerbate California's air quality problems; and could potentially cause a rise in sea levels. In an effort to avoid or reduce the impacts of climate change, Executive Order S-3-05 called for a reduction in GHG emissions to the year 2000 level by 2010, to year 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.²

As discussed in further detail below, executive orders do not have the same status as a law because in California's constitutional system, it is the Legislature, not the Governor, who is entrusted with the role of making statewide laws. (SAHMC 1997, p. 836; CA 1990.). The Legislature declined to include the Executive Order's 2050 goal in AB 32 (discussed below), and again declined to use the EO's 2050 goal in adopting SB 375 (discussed below); nor has it incorporated it in any implementing legislation or applicable plans. Additionally, although CARB has the requisite authority to adopt whatever regulations are necessary beyond the AB 32 horizon year 2020 to meet the target set forth in S-3-05, the agency has not done so. Since the Legislature has never enacted EO S-3-05's 2050 target, and no expert agency has interpreted CEQA to require it, the 2050 target has only the force and effect of an executive order issued by a former Governor. There is no authority that suggests that the constitutional authority to establish CEQA significance thresholds resides in the Governor. CEQA is a statute, and the authority to amend and revise its requirements falls first to the Legislature. The Legislature alone has the authority to enact, amend, or revise legislation, absent some express delegation of authority to the Governor or an executive branch agency through statutory enactments. (PECG 2010, p. 1015.) If the Legislature has delegated any of its authority to define CEQA's requirements, it delegated that authority to OPR and not to the Governor's office.

Moreover, CARB's Scoping Plan to implement AB 32 looked beyond 2020 to assess whether implementing the Scoping Plan would achieve the State's long-term climate goals and determined that it would: "Climate scientists tell us that the 2050 target represents the level of greenhouse gas emissions that advanced economies must reach if the climate is to be stabilized in the latter half of the 21st century. Full implementation of the Scoping Plan will put California on a path toward these required long-term reductions. Just as importantly, it will put into place many of the measures needed to keep us on that path." (CARB 2008, p.117.) The 2014 Scoping Plan Update confirms this: "California is on track to meet the near-term 2020 greenhouse gas limit and is well positioned to maintain and continue reductions beyond 2020 as required by AB 32"; and it recognizes the potential for California to "reduce emissions by 2030 to levels squarely in line with those needed in the developed world and to stay on track to reduce emissions to 80 percent below 1990 levels by 2050." (CARB 2014, p. 2.) However, the 2014 Scoping Plan Update also concludes that additional actions will be needed to continue reducing emissions and meet the 2050 goals in the face of anticipated population and economic growth. (CARB 2014) In fact, overwhelming scientific evidence supports the conclusion that significant technological innovation, well beyond the scope of an individual development project, are absolutely necessary components of any plausible path to achieving the EO S-3-05's 2050 target. These new innovations to change fuel technology and energy generation are entirely outside the jurisdiction and control of the County. Achieving these goals will require wholesale shifts in fuel and energy technology, neither of

² <u>https://www.gov.ca.gov/news.php?id=1861</u>

which are currently available, rendering any further analysis of a given development project's impacts relative to the 2050 target too speculative for purposes of determining CEQA significance.

Executive Order B-30-15 (Statewide Interim GHG Targets)

California EO B-30-15 (April 29, 2015) set an "interim" statewide emission target to reduce greenhouse emissions to 40 percent below 1990 levels by 2030 and directed state agencies with jurisdiction over greenhouse gas emissions to implement measures pursuant to statutory authority to achieve this 2030 target and the 2050 target of 80 percent below 1990 levels. (EO B-30-15) Specifically, the Executive Order directed CARB to update the Scoping Plan to express this 2030 target in metric tons. Since CARB has not yet prepared a GHG Inventory for 2030, it is not possible to prepare a numeric analysis that incorporates the 2030 target. This new Executive Order is subject to all the same limitations and infeasibility as discussed above for EO S-03-05. However, EO B-30-15 is more specific in its direction to state agencies so it remains to be seen how it will be implemented, and like EO S-3-05, neither CARB nor the legislature have incorporated the target set forth in EO B-30-15 in any implementing legislation or applicable plans. However, SB 350 was signed into law and (discussed below) it requires the state to double energy efficiency savings in electricity and natural gas by retail customers by 2030 and raises the Renewable Portfolio Standard (RPS) so that half of the state's electricity must be procured from renewable sources by 2030.

CEQA Guidelines

Senate Bill 97 (CEQA Guidelines)

SB 97 required OPR to prepare amended State CEQA Guidelines for submission to the California Natural Resources Agency (CNRA) regarding GHG analysis and feasible mitigation of the effects of GHG emissions as required by CEQA. These amendments became effective as of March 18, 2010. The adoption of SB 97 and subsequent State CEQA amendments are widely recognized as confirmation that lead agencies are required to include an analysis of climate change impacts in CEQA documents.

The State CEQA Guidelines GHG Amendments adopted pursuant to SB 97 state in Section 15064.4(a) that lead agencies should "make a good faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions. Section 15064.4(a) notes that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance based standards" (CNRA 2009a). Section 15064.4(b) provides that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment:

- The extent a project may increase or reduce GHG emissions as compared to the environmental setting
- Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (CNRA 2009a)

In addition, CEQA State Guidelines Section 15064.7(c) specifies that "[w]hen adopting thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (CNRA 2009a). Similarly, the 2010 revision to the Appendix G, Environmental Checklist Form which is often used as a basis for lead

agencies' selection of significance thresholds, does not prescribe specific thresholds (there were no revisions to the GHG emissions thresholds in the 2022 State CEQA Guideline amendments). Rather, Appendix G asks whether the project would conflict with a plan, policy, or regulation adopted to reduce GHG emissions or generate GHG emissions that would significantly affect the environment, indicating that the determination of what is a significant effect on the environment should be left to the lead agency.

Accordingly, the State CEQA Guidelines do not prescribe specific methodologies for performing an assessment of GHG impacts, do not establish specific thresholds of significance, and do not mandate specific mitigation measures. Rather, the CEQA Amendments emphasize the lead agency's discretion to determine the appropriate thresholds of significance consistent with the manner in which other impact areas are handled in CEQA (CNRA 2009a).

The State CEQA Guidelines indicate that lead agencies should consider all feasible means, supported by substantial evidence and subject to monitoring and reporting, of mitigating the significant effects of GHG emissions. As pertinent to a project, these potential mitigation measures set forth in Section 15126.4(c), may include (1) measures in an existing plan or mitigation program for the reduction of GHG emissions that are required as part of the lead agency's decision; (2) reductions in GHG emissions resulting from a project through implementation of project design features; (3) off-site measures, including offsets, to mitigate a project's emissions; and (4) carbon sequestration measures (CNRA 2009a).

Among other things, the CRNA noted in its Public Notice for these changes that impacts of GHG emissions should focus on the cumulative impact on climate change. The Public Notice states: (CNRA 2009b)

While the Proposed Amendments do not foreclose the possibility that a single project may result in greenhouse gas emissions with a direct impact on the environment, the evidence before [CRNA] indicates that in most cases, the impact will be cumulative. Therefore, the Proposed Amendments emphasize that the analysis of greenhouse gas emissions should center on whether a project's incremental contribution of greenhouse gas emissions is cumulatively considerable.

Thus, the CEQA Amendments continue to make clear that the significance of GHG emissions is most appropriately considered on a cumulative level.

Energy-Related Sources

Renewable Portfolio Standards

Established in 2002 under SB 1078, accelerated in 2006 under SB 107 and again in 2011 under SBX1-2, California's Renewable Portfolio Standard (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020 (SB 1078, SB 1368, AIR 2011). The 33 percent standard is consistent with the RPS goal established in the Scoping Plan (CARB 2008). As interim measures, the RPS requires 20 percent of retail sales to be sourced from renewable energy by 2013 and 25 percent by 2016. Initially, the RPS provisions applied to investor-owned utilities, community choice aggregators, and electric service providers. SBX1-2 added, for the first time, publicly owned utilities to the entities subject to RPS.

Senate Bill 350 (SB 350), signed in 2015, increased the RPS from 33 percent in 2020 to 50 percent by 2030 and will double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation by 2030. (Scoping 2017, p. 2)

Senate Bill 100 (SB 100) was subsequently signed in 2018 and directs the California Public Utilities Commission (CPUC), CEC, and CARB to plan for 100 percent of total retail sales of electricity in California to come from eligible renewable energy resources and zero-carbon resources by December 31, 2045. SB 100 also accelerates the RPS target to 50 percent by 2026 and to 60 percent by 2030. (SB-100)

Senate Bill 1

Senate Bill 1 of 2006 (SB 1) established the statewide California Solar Initiative and also required the California Energy Commission (CEC) to implement regulations that required sellers of production homes to offer a solar energy system option to all prospective homebuyers. Besides offering solar as an option to prospective homebuyers, sellers of homes constructed on land for which an application for a tentative subdivision map has been deemed complete on or after January 1, 2011, must disclose to the prospective homebuyer the total installed cost of the solar option, the estimated cost savings associated with the solar energy system option, information about California solar energy system incentives, and information about the Go Solar California website. Sellers of production homes affected by this law may opt for the solar offset program rather than offer solar as an option to prospective homebuyers. The solar offset program requires sellers to install a solar system elsewhere which is equivalent to the aggregate capacity of solar that would have been installed in an affected subdivision if 20 percent of the buyers had opted for the solar option (SB1).

Assembly Bill 1109

Assembly Bill 1109 (AB 1109), the Lighting Efficiency and Toxic Reduction Act, required the establishment of minimum energy efficiency standards for all general purpose lights. The standards are structured to reduce average statewide electrical energy consumption by not less than 50 percent from the 2007 levels for indoor residential lighting and not less than 25 percent from the 2007 levels for indoor lighting by 2018.

Senate Bill 350

Senate Bill 350 (SB 350), signed October 7, 2015, is the *Clean Energy and Pollution Reduction Act of 2015*. SB 350 is the implementation of some of the goals of EO B-30-15. The objectives of SB 350 are,

- 1) To increase from 33 percent to 50 percent, the procurement of our electricity from renewable sources.
- 2) To double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.

GHG Emissions Standard for Baseload Generation (SB 1368)

Senate Bill 1368 (SB 1368) (September 29, 2006) prohibits any retail seller of electricity in California from entering into a long-term financial commitment for baseload generation if the GHG emissions are higher than those from a combined-cycle natural gas power plant. This performance standard applies to electricity generated both within and outside of California and to publicly owned as well as investor-owned electric utilities.

Mobile Sources

Mobile Source Reductions (AB 1493)

Assembly Bill 1493 ("the Pavley Standard" or AB 1493) required CARB to adopt regulations by January 1, 2005, to reduce GHG emissions from non-commercial passenger vehicles and light-duty trucks starting model year 2009. The bill also required the California Climate Action Registry to develop and adopt protocols for the reporting and certification of GHG emissions reductions from mobile sources for use by CARB in granting emission reduction credits. The bill authorizes CARB to grant emission reduction credits for reductions of GHG emissions prior to the date of enforcement of regulations, using model year 2000 as the starting point for reduction.

In December 2005, CARB applied to the EPA for a waiver under the CAA to authorize implementation of these regulations. The waiver request was initially formally denied by the EPA in March 2008 after California filed suit to prompt federal action. On June 30, 2009, the EPA granted the waiver to California for its GHG emission standards for motor vehicles. (CARB 2017b) As part of this waiver, EPA specified the following provision: CARB may not hold a manufacturer liable or responsible for any noncompliance caused by emission debits generated by a manufacturer for the 2009 model year. CARB has adopted a new approach to passenger vehicles (cars and light trucks) by combining the control of smog-causing pollutants and GHG emissions into a single coordinated package of standards. The new approach also includes efforts to support and accelerate the numbers of plug-in hybrids and zero-emission vehicles in California. These standards will apply to all passenger and light duty trucks used by customers, employees of and deliveries to the proposed Project site.

Low Carbon Fuel Standard

Executive Order S-01-07 (January 18, 2007) requires a 10 percent or greater reduction in the average fuel carbon intensity for transportation fuels in California regulated by CARB. CARB identified the Low Carbon Fuel Standard (LCFS) as a Discrete Early Action item under AB 32 and the final resolution (Resolution 09-31) was issued on April 23, 2009 (CARB 2009). In 2009, CARB approved for adoption the LCFS regulation which became fully effective in April 2010 and is codified at Title 17, California Code Regulations, Sections 95480-95490- (CR 95480-95490). The LCFS will reduce GHG emissions by reducing the carbon intensity of transportation fuels used in California by at least 10 percent by 2020. Carbon intensity is a measure of the GHG emissions associated with the various production, distribution, and use steps in the "lifecycle" of a transportation fuel. On December 29, 2011, the U.S. District Court for the Eastern District of California issued several rulings in the federal lawsuits challenging the LCFS. Opponents argued that the LCFS violates the Supremacy Clause (US Constitution, Article VI, Clause 2)³ and Commerce Clause (US Constitution, Article-1, Section 8, Clause 3)⁴ of the U.S. Constitution by discriminating against fuel produced out-of-state. One of the district court's rulings preliminarily enjoined CARB from enforcing the regulation. In January 2012, CARB appealed that decision to the Ninth Circuit Court of Appeals. On September 18, 2013, in Rocky Mountain Farmers Union v. Corey (2013) 730 F.3d 940, the Ninth Circuit issued its decision affirming the District Court's conclusion that LCFS ethanol and initial crude-oil provisions are not facially discriminatory but remanded to the District Court to determine whether the LCFS ethanol provisions are discriminatory in purpose and effect. Additionally, the Ninth

³ The Supremacy Clause establishes the U.S. Constitution, federal statues, and the U.S. Treaties as "the supreme law of the land," establishing that federal laws take precedence over state laws.

⁴ The Commerce Clause grants the federal government the authority "To regulate Commerce within foreign Nations, and among the several States and with the Indian Tribes." Case law has determined that pollution and hazardous materials can be considered "commerce" because they can be produced in one state but dispersed or transported to other states.

Circuit remanded to the District Court with instructions to vacate the preliminary injunction against CARB's enforcement of the regulation.

On January 22, 2014, the Ninth Circuit denied a petition to rehear the case en banc. On March 20, 2014, Petitioners Rocky Mountain Farmers Union petitioned for a Writ of Certiorari to the United States Supreme Court in this case. On June 30, 2014, the petition for certiorari was denied.

Advanced Clean Cars

In January 2012, CARB approved the Advanced Clean Cars Program, a new emissions-control program for model year 2017 through 2025.

The program combines the control of smog causing pollutants and GHGs with requirements for greater numbers of zero-emission vehicles (ZEVs). By 2025, when the rules will be fully implemented, the new automobiles will emit 34 percent fewer GHG emissions and 75 percent fewer smog-forming emissions.

The program also requires car manufacturers to offer for sale an increasing number of ZEVs each year, including battery electric, fuel cell, and plug-in hybrid electric vehicles (EV) (CARB ACCP).

In December 2012, CARB adopted regulations allowing car manufacturers to comply with California's GHG emissions requirements for model years 2017-2025 through compliance with the EPA GHG requirements for those same model years (CARB 2012). CARB staff is also currently developing the Advanced Clean Cars II program, which will update the state's passenger vehicle emission standards and ZEV requirements. The proposal is set for consideration in summer of 2022.

Additionally, CARB adopted the Advanced Clean Trucks (ACT) Regulation in 2021. The ACT Regulation is part of a holistic approach to accelerate a large-scale transition of zero-emission medium-and heavyduty vehicles from Class 2b to Class 8 and includes a manufacturers ZEV sales requirement and a onetime reporting requirement for large entities and fleets. (CARB ACT) CARB is also developing a medium and heavy-duty zero-emission fleet regulation with the goal of achieving a zero-emission truck and bus California fleet by 2045 everywhere feasible and significantly earlier for certain market segments such as last mile delivery and drayage applications.

Transportation Fuel: Phased-In Cap-and-Trade Compliance Obligation

Pursuant to AB 32, CARB was allowed, but not required, to include among mechanisms intended to reduce GHG emissions a "system of market-based declining annual aggregate emission limits." As noted above, CARB developed a Scoping Plan that directed CARB staff to develop, among other programs, a cap-and-trade mechanism that would apply a declining aggregate cap on GHG emissions and provide a flexible compliance system using tradable instruments. On October 20, 2011, CARB adopted the final cap-and-trade regulation (California Code of Regulations (CCR) Title 17, Subchapter 10, Article 5). The program will impose a "cap" on the total GHG emissions from covered entities in the state and the quantity of emissions allowed under the cap will decrease each year, ultimately reaching the goal of returning state-wide GHG emissions to 1990 levels by 2020. The quantity of allowed emissions actually increases between 2014 and 2015, but that is to account for the addition of the fuel importers and distributors and additional electricity importers to the program as discussed below. The net effect is to reduce overall GHG emissions.

The Cap-and-Trade program started on January 1, 2012 and will proceed in "compliance phases," the first of which began on January 1, 2013. In the first phase, the program applies to electric utilities, importers of electricity, and specified industries, including refineries. Approximately 350 electric utilities

and approximately 600 industrial facilities were included in the initial phase of the program. In 2015, importers and distributors of fossil fuels were added to the program in the second phase. Specifically, on January 1, 2015, cap-and-trade compliance obligations were phased in for suppliers of natural gas, reformulated gasoline blendstock for oxygenate blending (RBOB), distillate fuel oils, and liquefied petroleum gas that meet or exceed specified emissions thresholds. The threshold that triggers a cap-and-trade compliance obligation for a fuel supplier is 25,000 metric tonnes or more of CO₂e annually from the GHG emissions that would result from full combustion or oxidation of quantities of fuels (including natural gas, RBOB, distillate fuel oil, liquefied petroleum gas, and blended fuels that contain these fuels) imported and/or delivered to California. Phasing in of cap-and-trade compliance obligations for transportation fuel providers further reduces GHG emissions attributable to mobile sources, beyond the GHG emissions reductions achieved by the Pavley Standard, LCFS, and Advanced Clean Cars Program discussed above. This analysis does not incorporate GHG emissions reductions based on cap-and-trade compliance obligations applicable to transportation fuel suppliers.

Heavy-duty Vehicle Greenhouse Gas Regulation

In December 2008, CARB adopted the Heavy-duty Vehicle GHG Regulation to reduce GHG emissions by improving the fuel efficiency of heavy-duty tractors that pull 53-foot or longer box-type trailers. Fuel efficiency is improved through improvements in tractor and trailer aerodynamics and the use of low rolling resistance tires. The tractors and trailers subject to this regulation must use EPA SmartWay certified tractors and trailers or retrofit their existing fleet with SmartWay verified technologies. Trucks serving the Projects that are not drayage trucks will be regulated under this statute and required to comply with SmartWay standards to reduce GHG emissions. As part of the regulatory package for the Heavy-duty-Vehicle GHG Regulation, CARB also reviewed and implemented the Drayage Truck Regulation and Truck and Bus Regulation. These three regulations were collectively adopted to address emissions from trucks (CARB 2010a).

Drayage Truck Regulation

The Drayage Truck Regulation is part of the CARB's ongoing efforts to reduce PM and NO_x emissions from diesel-fueled engines and improve air quality associated with goods movement. All truck trips from the port to the Project site are drayage trips (CCR Title 13, Section 2027(15)). According to CARB, this regulation is designed to support local emissions reduction goals such as the Clean Air Action Plan (CAAP) by the ports of Los Angeles and Long Beach. Phase II of the regulation required that after December 31, 2013, all drayage trucks must be equipped with a 1994 or newer model year engine that meets or exceeds 2007 model year California or federal emission standards. Thus, all the incoming drayage trucks from the Port will have to meet the Phase II requirement.

Warehouse Mobile Equipment Regulation

The Project will use on-site equipment (forklifts, etc.) which cause some GHG emissions. This equipment is highly regulated to protect indoor air quality and worker health and safety. California's Division of Occupational Safety and Health (OSHA) sets and enforces limits for exposure to chemicals in the workplace. There are Permissible Exposure Limits (PELs) for some main components of diesel exhaust including carbon monoxide and polycyclic aromatic hydrocarbons (PAHs). Indoor air quality regulations include California Health & Safety Code Sections 105405, 105425, 39930 and 41985–41986 and California Labor Code Section142.3 which involve research, safety, monitoring, and emissions standards. These regulations reduce overall emissions, which has a corresponding benefit to GHG reductions.

Building Standards

Green Building Code (California Code of Regulations, Title 24)

The California Energy Code (CCR Title 24, Part 6) was established in 1978 to reduce California's energy consumption. Energy use standards in the code are updated periodically to reduce per-capita energy use and to include new programs, such as the California Renewable Energy Portfolio Standards and the California Solar Initiative. In 2008, the CPUC adopted the state's first "Long-Term Energy Efficiency Strategic Plan" for achieving energy savings in various sectors throughout California. In 2011, the Strategic Plan was updated to include a chapter related to lighting.

Title 20 of the California Code of Regulations

California's Appliance Efficiency 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. (CEC Title 20)

Title 24 of the California Code of Regulations

The California Energy Code (CCR, Title 24, Part 6) was established in 1978 to reduce California's energy consumption. Energy use standards in the code, referred to as Building Energy Efficiency Standards, are updated on an approximately three-year cycle (CEC Standards). Energy consumption by new buildings in the State is regulated by The California Energy Code via the Building Energy Efficiency Standards. These efficiency standards (commonly referred to as Title 24 standards) apply to newly constructed buildings and additions and alterations to existing buildings. (CEC 2022). They are designed to reduce wasteful, uneconomic, inefficient or unnecessary consumption of energy, and enhance outdoor and indoor environmental quality. The current 2022 Building Energy Efficiency Standards (Energy Code), which goes into effect January 1, 2023, focuses on four key areas in new construction of homes and business by encouraging 1) electric heat pump technology and use, 2) establishing electric-ready requirements when natural gas is installed, 3) expanding solar photovoltaic (PV) system and battery storage standards, and 4) strengthening ventilation standards to improve indoor air quality. Specifically, the 2022 updates require all new homes be electric-ready. That means buildings with gas stoves have the electrical panels and wiring to support a switch to electric stoves. Further advancements and cost reductions will continue to expand electric options for heating, cooking, laundering, and EV charging to meet all Californians' needs. (CEC 2022) The Project will be subject to the Title 24 Standards in effect at the time of building permits.

It is projected that the upcoming 2022 building efficiency standards will reduce 10 million metric tons of GHGs over 30 years. This reduction is equivalent to taking nearly 2.2 million cars off the road for a year. (CEC 2022)

CALGreen Section 5.106.4

The purpose of Title 24, specifically Part 11, known as the California Green Building Standards (CALGreen) Code, is to encourage sustainable construction practices that reduce negative impacts on the environment through planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and environmental quality. The CALGreen Code is applicable to the planning, design, operation, construction, use, and occupancy of every newly constructed building or structure throughout the State. The following are standards applicable to this Project.

Bicycle parking. Comply with Sections 5.106.4.1 and 5.106.4.2; or meet local ordinance, whichever is stricter.

5.106.4.1.1 Short-term bicycle parking. If the project is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of visitor motorized vehicle parking capacity, with a minimum of one two-bike capacity rack.

5.106.4.1.2 Long-term bicycle parking. For buildings with over 10 tenant-occupants, provide secure bicycle parking for 5 percent of motorized vehicle parking capacity, with a minimum of one space. Acceptable parking facilities shall be convenient from the street and may include: 1. Covered, lockable enclosures with permanently anchored racks for bicycles; 2. Lockable bicycle rooms with permanently anchored racks; and 3. Lockable, permanently anchored bicycle lockers.

CALGreen Section 5.106.5.2

Designated parking for clean air vehicles. In new projects or additions or alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles. Projects with 201 parking spaces or over require at least 8 percent of total number of parking spaces. The Project will comply with section 106.5.2 Designated parking for clean air vehicles by including clean air/van pool stalls for at least 8 percent of parking stalls.

CALGreen Section 5.106.5.3

Construction shall facilitate installation of electric vehicle supply equipment (EVSE). When EVSEs are installed it shall be in accordance with the California Building Code.

5.106.5.3.2 Multiple charging space requirements. When multiple charging spaces are required per Table 5.106.5.3.3 (provided below) raceways are required to be installed at the time of construction and shall be installed in accordance with the California Electrical Code. Construction plans and specifications shall include, but are not limited to, the following:

1. The type and location of the EVSE.

2. The raceway(s) shall originate at a service panel or a subpanel(s) serving the area, and shall terminate in close proximity to the proposed location of the charging equipment and into listed suitable cabinet(s), box(es), enclosure(s) or equivalent.

3. Plan design shall be based upon 40-ampere minimum branch circuits.

4. Electrical calculations shall substantiate the design of the electrical system, to include the rating of equipment and any on-site distribution transformers and have sufficient capacity to simultaneously charge all required EVs at its full rated amperage.

5. The service panel or subpanel(s) shall have sufficient capacity to accommodate the required number of dedicated branch circuit(s) for the future installation of the EVSE.

The **Table 5.7-B – California Green Building Code Electric Vehicle Charging Space Calculation**^a shows the number of parking spaces required for future installation of EVSEs per Table 5.106.5.3.3. These future charging spaces qualify as designated parking as described in Section 5.106.5.2 Designated parking for clean air vehicles.

Total Number of Actual Parking Spaces	Number of Required EV Charging Spaces
0-9	0
10-25	1
26-50	2
51-75	4
76-10	5
101-150	7
151-200	10
201 and over	6 percent of total ^b

Table 5.7-B – California Green Building Code Electric Vehicle Charging Space Calculation^a

^a Source: CBSC 2019

^b Calculation for spaces shall be rounded up to the nearest whole number

Waste Diversion

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (AB 939) requires each jurisdiction in California to submit detailed solid waste planning documents for the California Department of Resources, Recycling, and Recovery's (CalRecycle) approval, set diversion requirements of 25 percent in 1995 and 50 percent in 2000, established a comprehensive statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities, and authorized local jurisdictions to impose fees based on the types or amounts of solid waste generated (CalRecycle 2018). As of 2007, jurisdictional diversion rates are no longer calculated; with the passage of the Per Capita Disposal Measurement System (SB1016), only per capita disposal rates are measured. CalRecycle compares each jurisdiction's reported disposal tons to population to calculate per capita disposal in pounds per person per day (CalRecycle JD). The City achieved an annual per capita disposal rate of 6.2 pounds per day per resident, and 23.1 pounds per day per employee in 2020, the most recent data available (CalRecycle Perris)

AB 341 (2011) amended the AB 939 to include a provision declaring that it is the policy goal of the State that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020, and annually thereafter (Public Resources Code Section 41780.01) The state did not meet its 75 percent by 2020 recycling goal set out in AB 341. However, CalRecycle identified five strategies and three additional focus areas that can be pursued by the state to reach the 75 percent goal. (CalRecycle 2020.)

Other Potentially Applicable State Regulations or Policies

Executive Order S-13-08

On November 14, 2008, Governor Arnold Schwarzenegger signed Executive Order S-13-08 (see Appendix B of CNRA 2009) which called on State agencies to develop a strategy for identification of and preparation for expected climate change impacts in California. The resulting 2009 California Climate Adaptation Strategy report was developed by the CNRA in coordination with the Climate Action Team. The report presents the best available science relevant to climate impacts in California and proposes a set of recommendations for California decision-makers to assess vulnerability and promote resiliency in

Duke Warehouse at Patterson Avenue and Nance Street DEIR

order to reduce California's vulnerability to climate change. Guidance regarding adaptation strategies is general in nature and emphasizes incorporation of strategies into existing planning policies and processes (CNRA 2009c, pp. 4-5).

In addition to requiring the Climate Action Team to create a Climate Adaptation Strategy, Executive Order S-13-08 ordered the creation of a comprehensive Sea Level Rise Assessment Report (CNRA 2009c, p. 138). The report, published in June 2012, indicates that the sea level along most of California's coast is expected to rise about one meter over the next century and is likely to increase the risk of damage in the form of flooding, coastal erosion, and wetland loss due to storm surges and high waves. The sea level increase is slightly higher than projected for global sea levels (ONPI 2012).

Executive Order S-13-08 also called for the California Ocean Protection Council to work with the other Climate Action Team State agencies to develop interim guidance for assessing the potential impacts of sea level rise due to climate change in California (CNRA 2009, p. 138). In coordination with National Academy of Sciences efforts, the California Ocean Protection Council published its most recent guidance in 2018 recommending that State agencies consider a range of sea level rise scenarios for the years 2050 and 2100 in order to assess project vulnerability, reduce expected risks, and increase resiliency to sea level rise (OPC 2018).

Assembly Bill 1613 (Waste Heat and Carbon Emissions Reduction Act)

AB 1613 directed the CEC, the CPUC, and CARB to implement the Waste Heat and Carbon Emissions Reduction Act, which is designed to encourage development of new combined heat and power (CHP) systems in California with a generating capacity of not more than 20 megawatts. In June 2010, the CEC adopted final guidelines establishing technical criteria for eligibility of CHP systems for programs to be developed by the CPUC and publicly owned utilities (CEC 2015). Section 2843 of the Act provides that the CEC's guidelines require that CHP systems:

- Be designed to reduce waste energy
- Have a minimum efficiency of 60 percent
- Have NO_x emissions of no more than 0.07 pounds per megawatt-hour
- Be sized to meet the eligible customer generation thermal load
- Operate continuously in a manner that meets the expected thermal load and optimizes the efficient use of waste heat
- Be cost-effective, technologically feasible, and environmentally beneficial

As directed by AB 1613, the CPUC also established (1) a standard tariff for the sale of electricity to electricity corporations for delivery to the electrical grid (State of California, 201 3a); and (2) a "pay as you save" pilot program requiring electricity corporations to finance the installation of qualifying CHP systems by non-profit and government entities. A January 2011 decision by an administrative law judge determined that the pilot program will not be established due to lack of customer interest and difficulties in instituting a program that meets California Department of Corporations requirements (Decision 11 -01 -010 Before the Public Utilities Commission of the State of California, 2011).

Senate Bill X7-7 (Water Conservation Act of 2009)

The Water Conservation Act of 2009 sets an overall goal of reducing per-capita urban water use by 20 percent by December 31, 2020. The state was required to make incremental progress toward this goal by reducing per-capita water use by at least 10 percent by December 31, 2015. Reduction in water consumption directly reduces the energy necessary and the associated emissions to convene, treat, and distribute the water and it also reduces emissions from wastewater treatment. (WCA 2009)

The Department of Water Resources adopted a regulation on February 16, 2011 that sets forth criteria and methods for exclusion of industrial process water from the calculation of gross water use for purposes of urban water management planning. The regulation would apply to all urban retail water suppliers required to submit an Urban Water Management Plan, as set forth in the Water Code, Division 6, Part 2.6, Sections 10617 and 10620.

Model Water Efficient Landscape Ordinance

The Model Water Efficient Landscape Ordinance (Ordinance) was required by AB 1881, the Water Conservation Act. The bill required local agencies to adopt a local landscape ordinance at least as effective in conserving water as the Model Ordinance by January 1, 2010. Reductions in water use of 20 percent consistent with (SB X7-7) 2020 mandate are expected upon compliance with the Ordinance. Governor Brown's Drought Executive Order of April 1, 2015 (EO B-29-15) directed DWR to update the Ordinance through expedited regulation. The California Water Commission approved the revised Ordinance on July 15, 2015, effective December 15, 2015. New development projects that include landscape areas of 500 square feet or more are subject to the Ordinance. The update requires: more efficient irrigation systems; incentives for graywater usage; improvements in on-site stormwater capture; limiting the portion of landscapes that can be planted with high water use plants; and reporting requirements for local agencies.

CARB Refrigerant Management Program

The CARB adopted a regulation in 2009 to reduce refrigerant GHG emissions from stationary sources through refrigerant leak detection and monitoring, leak repair, system retirement and retrofitting, reporting and recordkeeping, and proper refrigerant cylinder use, sale, and disposal. The regulation is set forth in CCR, Title 17, Sections 95380 to 95398. The rules implementing the regulation establish a limit on statewide GHG emissions from stationary facilities with refrigeration systems with more than 50 pounds of a high GWP refrigerant. The refrigerant management program is designed to (1) reduce emissions of high-GWP GHG refrigerants from leaky stationary, non-residential refrigeration equipment; (2) reduce emissions from the installation and servicing of refrigeration and air-conditioning appliances using high-GWP refrigerants; and (3) verify GHG emission reductions.

Regional

South Coast Air Quality Management District Policies

CEQA Guidelines and Proposed GHG Thresholds

The SCAQMD is principally responsible for comprehensive air pollution control for Los Angeles, Orange, and the urbanized portions of Riverside and San Bernardino Counties, including the project site. The SCAQMD works directly with SCAG, County transportation commissions and local governments, and cooperates actively with all federal and state government agencies to regulate air quality.

In April 2008, the SCAQMD convened a Working Group to develop GHG significance thresholds. On December 5, 2008, the SCAQMD Governing Board adopted its staff proposal for an interim CEQA GHG

significance threshold for industrial projects where the SCAQMD is the lead agency. As to all other projects where the SCAQMD is not the lead agency, the Board has, to date, only adopted an interim threshold of 10,000 metric tons of CO₂e (MTCO₂e) per year for industrial stationary source projects for which the SCAQMD is the lead agency (SCAQMD 2008).

For all other projects, SCAQMD staff proposed a multiple tier analysis to determine the appropriate threshold to be used. The draft proposal suggests the following tiers: Tier 1 is any applicable CEQA exemptions; Tier 2 is consistency with a GHG reduction plan; Tier 3 is a screening value or bright line; Tier 4 is a performance based standard; and Tier 5 is GHG mitigation offsets (SCAQMD 2008). According to the presentation given at the September 28, 2010 Working Group meeting, SCAQMD staff proposed a Tier 3 draft threshold of 1,400 to 3,500 MTCO₂e/year depending on if the project was commercial, mixed use, or residential. For the Tier 4 draft threshold, SCAQMD staff presented a percent emission reduction target option but did not provide any specific recommendation for a percent emission reduction target; instead it referenced the San Joaquin Valley Air Pollution Control District (SJVAPCD) approach. The percent reduction target is based on consistency with AB 32 as it was based on the same numeric reductions calculated in the Scoping Plan to reach 1990 levels by 2020. The second Tier 4 option is to utilize an efficiency target for 2020 of 4.8 metric tons per service population per year for project level thresholds (SCAQMD 2010).

The Working Group has not convened since the fall of 2010. As of this writing, the proposal has not been considered or approved for use by the SCAQMD Board. In the meantime, no GHG significance thresholds are approved for use in the Basin. However, that does not preclude lead agencies from utilizing the draft thresholds to evaluate the potential impacts associated with general development projects. The City of Perris utilizes these draft thresholds to determine the significance of new developments within its jurisdiction.

Ports of Los Angeles and Long Beach

As explained above, the Inland Empire is the heart of the region's warehouse Goods Movement network for goods that enter the Ports and are moved east to the rest of the country. The goods that are unloaded at the Ports are transloaded at locations throughout the region before continuing east. There is a need for another 228 million square feet of warehousing space in the region by 2035 (SCAG 2012). SCAG is undertaking significant efforts to improve the efficiency of the Goods Movement network which will reduce overall GHG emissions (SCAG 2012).

The entire Goods Movement network is based on the Ports of Los Angeles/Long Beach (Ports of LA/LB) and all truck trips generated by the Project are conservatively assumed to come from the Ports of Los Angeles/Long Beach (Ports of LA/LB). The Ports have adopted several plans and policies to reduce GHG emissions as described below.

Green LA: An Action Plan to Lead the Nation in Fighting Global Warming

City of Los Angeles released its climate action plan, *Green LA: An Action Plan to Lead the Nation in Fighting Global Warming*, (Green LA Plan) in May 2007. (LA 2007a). The Green LA Plan is a voluntary program that sets a goal of reducing the City's GHG emissions to 35 percent below 1990 level by 2030. Climate LA is the implementation framework that contains the details of the more than fifty action items that are included in Green LA Plan. The measures the City of Los Angeles will take to achieve the 35 percent reduction goal include "greening" the Port of Los Angeles and the four airports operated by the City as of the date the Plan was published (including Los Angeles International Airport). Under the Port-specific actions called for by the Green LA Plan, in addition to the

Drayage Truck Regulation discussed above, all heavy-duty trucks calling at the ports have been required to meet or exceed the USEPA 2007 heavy-duty vehicle on-road emissions standards for particulate matter since the end of 2011. The specific measures for developing the Port-Specific actions are included in the San Pedro Bay Ports Clean Air Action Plan (CAAP).

Port Emission Reduction Plans

The City of Los Angeles Harbor Department (the Port of LA) adopted a Climate Action Plan in 2007 (Port of LA CAP) which addresses emissions from associated trucks. The Port of LA CAP provides that the "landmark plan was developed to reduce criteria pollutant emissions from major tenant operations such as operation of heavy-duty vehicles/trucks, ocean-going vessels, harbor craft, cargo handling equipment, and railroad locomotives" (LA 2007b). The 2007 plan primarily focused upon municipal operations at the harbor but noted the opportunity to reduce emissions through the associated San Pedro Bay Ports Clean Action Air Plan, with which the Project is consistent as described below. (LA 2007b).

The Long Beach Sustainable City Action Plan is intended to guide operational, policy and financial decisions to create a more sustainable Long Beach. Transportation Initiative 4 is to "Implement the CAAP, designed to significantly reduce port related air emissions over a 5-year plan, through a partnership with the Harbor Department and its tenants" (LB 2010). While the CAAP was not specifically designed to reduce GHG emissions, its air emissions reduction strategies would have the added benefit of helping to reduce GHG emissions as well. By utilizing a truck fleet that complies with the Clean Trucks Program, the Project will facilitate these goals.

The San Pedro Bay Ports adopted a Clean Air Action Plan in 2010. This plan is described as a sweeping plan aimed at significantly reducing the health risks posed by air pollution from port-related ships, trains, trucks, terminal equipment and harbor craft (SPBP 2010). While the San Pedro Bay Ports CAAP was not specifically designed to reduce GHG emissions, the identified air pollution reduction strategies would have the added benefit of helping to reduce GHG emissions as well. The San Pedro Bay Ports CAAP emphasizes the Clean Trucks Program and the Technology Advancement Program, through which the port imposes significant efficiency standards on trucks. The Project will comply with this program because the trucks that drive to the warehouse from the Port will comply with the Port's efficiency and engine standards (SPBP 2010).

Western Riverside Council of Governments

The City of Perris is a member of the Western Riverside Council of Governments (WRCOG), the municipal planning organization for Riverside County. WRCOG has been a leader in promoting sustainability through its adopted Sustainability Framework, Western Riverside Energy Leader Partnership (WRELP), HERO Program—an energy efficiency and water conservation financing program, and Western Riverside County Clean Cities Coalition.

Twelve cities in Western Riverside County, including the City of Perris, joined efforts to develop a Subregional Climate Action Plan (CAP), which sets forth a subregional emissions reduction target, emissions reduction measures, and action steps to assist each community to demonstrate consistency with California's Global Warming Solutions Act of 2006 (AB32). An existing GHG emissions inventory was developed and future emissions and reduction goals were set. Existing GHG reduction programs and policies that had already been implemented in the subregion and best practices from other regions influenced the reduction measures and actions identified in the CAP to assist meeting the 2020 subregional reduction target of 15% below 2010 levels. The Subregional CAP does not establish a

reduction target for 2035 or future years; however, the CAP identifies a reduction goal of 49% below baseline emissions levels to set the WRCOG subregion on a trajectory to meet targets identified in SB 375 and Executive Order S-03-05, recognizing that information, methodologies, and data availability may change between now and 2035. (WRCOG Subregional CAP-A). WRCOG is currently preparing an update and expansion to the CAP, which will include a comprehensive update to GHG inventories and GHG emissions reduction strategies for all sectors and will establish GHG targets for the years 2030 and 2050 for all WRCOG member jurisdictions. It was anticipated that the CAP update would be complete by June 2021; however, to date, an update has not been released (WRCOG Subregional CAP-B).

Local

Perris Comprehensive General Plan 2030

The Perris Comprehensive General Plan 2030 contains goals, policies, and implementation measures to reduce GHG emissions within the City in the Conservation and Healthy Community Elements (Perris GP 2030).

Conservation Element

Goal VIII	Create a vision for energy and resource conservation and the use of green building design for the City which provides for the protection of the environment while improving the quality of life and promoting sustainability.
Policy VIII.A	Adopt and maintain development regulations, which encourage water and resource conservation.
Measure VIII.A.2	Use indigenous and/or drought-resistant planting and efficient irrigation systems with smart controls in all new and refurbished commercial and industrial development projects. Also, restrict use of turf to 25% or less of the landscaped areas.
Measure VIII.A.4	Use gray water, and water-conserving appliances and fixtures within all new commercial and industrial developments.
Measure VIII.A.5	Use permeable paving materials within developments to deter water runoff and promote natural filtering of precipitation and irrigation waters.
Measure VIII.A.7	Explore the use of private water well systems for all potable and/or landscaping water use for larger commercial and industrial projects.
Policy VIII.B	Adopt and maintain development regulations that encourage recycling and reduced waste generation by construction projects.
Measure VIII.B.3	Require the installation of recycling bins and provide space for storage and collection of recyclables within development sites.
Measure VIII.B.5	Establish a procurement policy favoring recycling materials.
Measure VIII.B.6	Include text within all demolition permits that encourages recycling of demolition and construction waste within new and refurbished commercial and industrial development projects.
Policy VIII.C	Adopt and maintain development regulations which encourage increased energy efficiency in buildings, and the design of durable buildings that are efficient and economical to own and operate. Encourage green building development by

	5 7-37
Measure X.C.2	When possible, locate driveways and parking on the east and north sides of buildings to reduce heat buildup during hot afternoons.
Measure X.C.1	Promote energy conservation by taking advantage of natural site features such as natural lighting and ventilation, sunlight, shade and topography during the site plan process.
Policy X.C	Encourage strategic shape and placement of new structures within new commercial and industrial projects.
Policy X.B	Encourage the use of trees within project design to lessen energy needs, reduce the urban heat island effect, and improve air quality throughout the region.
Policy X.A	Establish density bonuses, expedited permitting, and possible tax deduction incentives to be made available for developers who exceed current Title 24 requirements for new development.
Goal X	Encourage improved energy performance standards above and beyond the California Title 24 requirements.
Measure IX.A.5	The City shall require all new public and private development to include bike and walking paths wherever feasible.
Measure IX.A.4	Encourage building and site designs that facilitate pedestrian activity, such as locating buildings close to the street and providing direct connections to public walkways and neighboring land uses.
Measure IX.A.2	Install bicycle paths and create secure and accessible bicycle storage for visitors and occupants within new and refurbished commercial and industrial developments.
Measure IX.A.1	Encourage installation of shared vehicle parking and support facilities within new and refurbished commercial and industrial developments, i.e., dual fuel vehicles and charging systems on site, car pool parking, and bus stop shelters.
Policy IX.A	Encourage land uses and new development that support alternatives to the single occupant vehicle.
Goal IX	Encourage project designs that support the use of alternative transportation facilities.
Measure VIII.C.5	Encourage green building density bonuses, expedited permitting, and possible tax deduction incentives to be made available for developers who meet LEED building standards for new developments.
Measure VIII.C.4	Review new development projects for compliance with the design guidelines contained within the Sustainable Community section through Conditions of Approval and a finding that the project conforms to the General Plan.
Measure VIII.C.3	Encourage the design and construction of durable buildings that are efficient and economical to own and operate.
	establishing density bonuses, expedited permitting, and possible tax deduction incentives to be made available for developers who meet LEED building standards for new and refurbished developments (U.S. Green Building Council's Leadership in Energy and Environmental Design green building programs).
Duke Warehouse at F	atterson Avenue and Nance Street DEIR Greenhouse Gas Emission

Greenhouse Gas Er	nissions
-------------------	----------

Healthy Community Element

Policy HC 6.1:	Support regional efforts to improve air quality through energy efficient technology, use of alternative fuels, and land use and transportation planning.
Policy HC 6.2:	Support regional water quality efforts that balance water conservation, use of recycled water, and best practices in watershed management.

- Policy HC 6.3: Promote measures that will be effective in reducing emissions during construction activities.
 - Perris will ensure that construction activities follow existing South Coast Air Quality Management District (SCAQMD) rules and regulations
 - All construction equipment for public and private projects will also comply with California Air Resources Board's vehicle standards. For projects that may exceed daily construction emissions established by the SCAQMD, Best Available Control Measures will be incorporated to reduce construction emissions to below daily emission standards established by the SCAQMD
 - Project proponents will be required to prepare and implement a Construction Management Plan which will include Best Available Control Measures among others. Appropriate control measures will be determined on a project by project basis, and should be specific to the pollutant for which the daily threshold is exceeded

Perris Municipal Code

The Perris Municipal Code does not contain provisions relevant to greenhouse gases.

PVCCSP Standards and Guidelines and Mitigation Measures

There are no specific standards or guidelines related to greenhouse gases identified within the PVCCSP; however, section 13.3.5 does require each new entitlement to attempt to achieve LEED certification:

13.3.5 LEED Certification Eligibility

 LEED Certification Eligibility is based on LEED New Construction and the California Green Building Code (part 11 of Title 24). LEED has four levels of certification: Certified, Silver, Gold, and Platinum. The Project proponent must indicate a commitment to reach a particular level of LEED certification prior to project approval. At a minimum, the City will mandate that any new entitlement shall attempt to achieve a "Certified" status. For each level of LEED Certification that the project proponent intends to meet in excess of "certified" status, the City shall reward a corresponding level of incentive.

Additionally, the PVCCSP EIR includes various mitigation measures to ensure that projects located within the PVCCSP planning area identify GHG impacts from construction and operation and mitigate any potential impacts appropriately. Relevant mitigation measures from the PVCCSP EIR which address GHG include the following:

- **MM Air 2:** Each individual implementing development project shall submit a traffic control plan prior to the issuance of a grading permit. The traffic control plan shall describe in detail safe detours and provide temporary traffic control during construction activities for that project. To reduce traffic congestion, the plan shall include, as necessary, appropriate, and practicable, the following: temporary traffic controls such as a flag person during all phases of construction to maintain smooth traffic flow, dedicated turn lanes for movement of construction trucks and equipment on- and off-site, scheduling of construction activities that affect traffic flow on the arterial system to off-peak hour, consolidating truck deliveries, rerouting of construction to improve traffic flow.
- **MM Air 4**: Building and grading permits shall include a restriction that limits idling of construction equipment on site to no more than five minutes.
- **MM Air 5**: Electricity from power poles shall be used instead of temporary diesel or gasolinepowered generators to reduce the associated emissions. Approval will be required by the City of Perris' Building Division prior to issuance of grading permits.
- **MM Air 6:** The developer of each implementing development project shall require, by contract specifications, the use of alternative fueled off-road construction equipment, the use of construction equipment that demonstrates early compliance with off-road equipment with the CARB in-use off-road diesel vehicle regulation (SCAQMD Rule 2449) and/or meets or exceeds Tier 3 standards with available CARB verified or US EPA certified technologies. Diesel equipment shall use water emulsified diesel fuel such as PuriNOx unless it is unavailable in Riverside County at the time of project construction activities. Contract specifications shall be included in project construction documents, which shall be reviewed by the City of Perris' Building Division prior to issuance of a grading permit.
- **MM Air 7**: During construction, ozone precursor emissions from mobile construction equipment shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications to the satisfaction of the City of Perris' Building Division. Equipment maintenance records and equipment design specification data sheets shall be kept on-site during construction. Compliance with this measure shall be subject to periodic inspections by the City of Perris' Building Division.
- **MM Air 11**: Signage shall be posted at loading docks and all entrances to loading areas prohibiting all on-site truck idling in excess of five minutes.
- **MM Air 12**: Where transport refrigeration units (TRUs) are in use, electrical hookups will be installed at all loading and unloading stalls in order to allow TRUs with electric standby capabilities to use them.
- **MM Air 13:** In order to promote alternative fuels, and help support "clean" truck fleets, the developer/successor-in-interest shall provide building occupants and businesses with information related to SCAQMD's Carl Moyer Program, or other state programs that restrict operations to "clean" trucks, such as 2007 or newer model year or 2010 compliant vehicles and information including, but not limited to, the health effect of diesel particulates, benefits of reduced idling time, CARB regulations, and importance of not parking in residential areas. If trucks older than 2007 model year would be used at a facility with three or more dock-high doors, the developer/successor-in-interest shall require, within one year of signing a lease, future tenants to apply in good-faith for

funding for diesel truck replacement/retrofit through grant programs such as the Carl Moyer, Prop 1B, VIP [On-road Heavy Duty Voucher Incentive Program], HVIP [Hybrid and Zero- Emission Truck and Bus Voucher Incentive Project], and SOON [Surplus Off-Road Opt-in for NOx] funding programs, as identified on SCAQMD's website (http://www.aqmd.gov). Tenants would be required to use those funds, if awarded.

- **MM Air 14**: Each implementing development project shall designate parking spaces for highoccupancy vehicles and provide larger parking spaces to accommodate vans used for ride sharing. Proof of compliance would be required prior to the issuance of occupancy permits.
- **MM Air 18**: Prior to the approval of each implementing development project, the Riverside Transit Agency (RTA) shall be contacted to determine if the RTA has plans for the future provision of bus routing within any street that is adjacent to the implementing development project that would require bus stops at the project access points. If the RTA has future plans for the establishment of a bus route that will serve the implementing development project, road improvements adjacent to the Project site shall be designed to accommodate future bus turnouts at locations established through consultation with the RTA. RTA shall be responsible for the construction and maintenance of the bus stop facilities. The area set aside for bus turnouts shall conform to RTA design standards, including the design of the contact between sidewalks and curb and gutter at bus stops and the use of ADA-compliant paths to the major building entrances in the Project.
- **MM Air 19**: In order to reduce energy consumption from the individual implementing development projects, applicable plans (e.g., electrical plans, improvement maps) submitted to the City shall include the installation of energy-efficient street lighting throughout the Project site. These plans shall be reviewed and approved by the applicable City Department (e.g., City of Perris' Building Division) prior to conveyance of applicable streets.
- **MM Air 20**: Each implementing development project shall be encouraged to implement, at a minimum, an increase in each building's energy efficiency 15 percent beyond Title 24, and reduce indoor water use by 25 percent. All reductions will be documented through a checklist to be submitted prior to issuance of building permits for the implementing development project with building plans and calculations.

Coordination with RTA as required by PVCCSP EIR mitigation measure **MM Air 18** has been completed. In an email dated February 1, 2022, the RTA indicated that no bus stop is required at the Project site.

Perris Community Energy Action Plan (CEAP) and Climate Action Plan (CAP)

The Perris Climate Action Plan (CAP) was adopted by the City Council (Resolution Number 4966) on February 23, 2016. The CAP was developed to address global climate change through the reduction of harmful GHG emissions at the community level, and as part of California's mandated statewide GHG emissions reduction goals under AB 32. Perris's CAP, including the GHG inventories and forecasts contained within, is based on WRCOG's Subregional CAP. The Perris CAP utilized WRCOG's analysis of existing GHG reduction programs and policies that have already been implemented in the subregion and applicable best practices from other regions to assist in meeting the 2020 subregional reduction target. The CAP reduction measures chosen for the City's CAP were based on their GHG reduction potential, cost-benefit characteristics, funding availability, and feasibility of implementation in the City of Perris.
The CAP used an inventory base year of 2010 and included emissions from the following sectors: residential energy, commercial/industrial energy, transportation, waste, and wastewater. The CAP's 2020 reduction target is 15% below 2010 levels, and the 2035 reduction target is 47.5% below 2010 levels. The City of Perris is expected to meet these reduction targets through implementation of statewide and local measures. However, the CAP did not demonstrate compliance with the statewide GHG goal established by SB 32 for 2030 because it was adopted prior to SB 32.

5.7.3 Design Considerations

Design considerations refer to ways in which the proposed Project will reduce potential impacts to air quality. The PVCCSP includes Standards and Guidelines relevant to the analysis of GHG impacts summarized below, which are incorporated as part of the proposed Project; as such, they are assumed in the analysis presented in this section.

The PVCCSP requires each entitlement to attempt to LEED certification. The Project Applicant has committed to achieve LEED "Certified" status for the building. As stated in the Project Description of this DEIR (Section 3.3.6), the Project will meet or exceed all applicable standards under California's Green Building Code (CalGreen) and Title 24. The Project shall implement concepts of efficient design and material use that are consistent with LEED Certification Levels.

- Design building shells and components, such as windows, roof systems and electrical systems to meet California Title 24 Standards for nonresidential buildings.
- Design buildings to achieve U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) features for potential certification. This includes design considerations related to the building envelope, heating, ventilation, and air conditioning (HVAC), lighting, and power systems. Additionally, the architectural expression such as roofs and windows in the buildings will relate to conserving energy.
- Install energy efficient light-emitting diodes (LED) lighting on the site. Provide skylights for natural day light to reduce the lighting load, therefore saving energy. Lighting will incorporate motion sensors that turn them off when not in use.
- Meet City minimum landscape requirements and provide adequate landscape shade for the site to reduce energy use.
- Install light-colored roofing materials over office area spaces and light-colored paving materials.
- For future office space, install energy efficient HVAC systems (seasonal energy efficiency ratio (SEER) 13), appliances and equipment, and control systems that are Energy Star rated.
- For future office improvement, refrigerants and HVAC equipment will be selected to minimize or eliminate the emission of compounds that contribute to ozone depletion and global climate change. Ventilation and HVAC systems will be designed to meet or exceed the minimum outdoor air ventilation rates described in the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) standards and/or per California Title 24 requirements.
- For future office improvement, implement design features to increase the efficiency of the building envelope (i.e., the barrier between conditioned and unconditioned spaces). This includes providing R-19 roof insulation for conditioned space and R-22 between conditioned and unconditioned space to minimize heat transfer and minimize energy consumption.

Greenhouse Gas Emissions

- Duke Warehouse at Patterson Avenue and Nance Street DEIR
- Provide greatly enhanced window glazing insulation for exterior walls at conditioned spaces (0.28 or less U-factor).
- Incorporate Energy Star rated space heating and cooling equipment, light fixtures, appliances, or other applicable electrical equipment.

Water Conservation and Efficiency

- Recycled water shall be used for landscape irrigation.
- Surface parking lots will be landscaped in accordance with City standards to reduce heat island effect.
- Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and sensors for landscaping according to the California Department of Water Resources Model Efficient Landscape Ordinance and Chapter 19.70 (Landscaping) of the Perris Municipal Code.
- Design buildings to be water-efficient. Install water-efficient fixtures in accordance with Section 5.303 of the California Green Building Standards Code Part 11.
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff in accordance with City Standards.
- Provide education about water conservation and available programs and incentives to the building operators to distribute to employees.

Solid Waste Measures

- Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1 of the California Green Building Standards Code Part 11.
- Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance with Section 5.410.1 of the California Green Building Standards Code Part 11.
- The property operator will provide readily available information provided by the City for employee education about reducing waste and available recycling services.

Transportation and Motor Vehicles

- The Project site will include preferred parking locations for clean air/vanpool vehicles in accordance with Section 5.106.5.2, Designated parking for clean air vehicles, of the California Green Building Standards Code Part 11.
- Limit idling time for commercial vehicles to no more than five minutes per Title 13 of the California Code of Regulations, Section 2485.
- Provide at least six percent of the total parking spaces to facilitate future installation of electric vehicle supply equipment in accordance with Section 5.106.5.3.2, Multiple Charging Space Requirements, of the California Green Building Standards Code Part 11.
- Provide up to two electric vehicle charging facilities to encourage the use of low or zeroemission vehicles.

- Signage shall be posted on-site directing truck drivers to use existing City truck routes on Harley Knox Boulevard.
- Maintain existing Class II bike lane on Patterson Avenue.
- Provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience in compliance with Section 5.106.4 of the California Green Building Standards Code Part 11 and standard City code requirements.

On-Site Equipment and Loading Docks

- The Project owner will inform building operators of existing requirements to turn off equipment, including heavy-duty equipment, motor vehicles, and portable equipment, when not in use for more than 5 minutes. Truck idling shall not exceed 5 minutes in time. All facilities will post signs (both interior- and exterior-facing signs, including signs directed at all dock and delivery areas) requiring that trucks shall not be left idling for more than 5 minutes pursuant to Title 13 of the California Code of Regulations, Section 2485, which limits idle times to not more than five minutes and to report violations to California Air Resources Board, the South Coast Air Quality Management District, and the building manager.
- Service equipment (i.e., yard trucks and forklifts) used within the site shall be electric or powered by other alternative fuels.

Construction

- Require Construction Equipment to Turn Off When Not in Use per Title 13 of the California Code of Regulations, Section 2449.
- Use regionally produced and/or manufactured building materials, where feasible, for Project construction.
- Use "green" building materials where feasible, such as those materials that are resource efficient and recycled and manufactured in an environmentally friendly way.

5.7.4 Thresholds of Significance

The City of Perris has not established local CEQA significance thresholds and defers to the thresholds of significance identified in State CEQA Guidelines Appendix G. Impacts related to this Project may be considered potentially significant if the proposed Project would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

5.7.5 Environmental Impacts Before Mitigation

Threshold A: Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

In December 2008, the SCAQMD adopted an interim GHG significance threshold for stationary source projects where SCAQMD is the lead agency. The SCAQMD's interim GHG significance threshold uses a tiered approach to determining significance. Tier 1 consists of evaluating whether or not the project

qualifies for any applicable exemption under CEQA. Tier 2 consists of determining whether or not the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. Tier 3 establishes a screening significance threshold level to determine significance, which corresponds to 10,000 MTCO₂e emissions per year for stationary sources at industrial facilities. This threshold was based on the review of 711 CEQA projects. The SCAQMD found that use of the 10,000 MTCO₂e threshold would result in a capture rate of 90% for all new or modified projects. A 90% emission capture rate means that 90% of total emissions from all new or modified stationary source projects would be subject to some type of CEQA analysis. Tier 4, to be based on performance standards, is yet to be developed. Under Tier 5 the project proponent would allow offsets to reduce GHG emission impacts to less than the proposed screening level.

The SCAQMD has continued to consider adoption of significance thresholds for residential and general development projects. The most recent proposal issued in September 2010 uses the following tiered approach to evaluate potential GHG impacts from various uses. Under option 1, separate screening thresholds are proposed for residential projects (3,500 MTCO₂e/year), commercial projects (1,400 MTCO₂e/year), and mixed-use projects (3,000 MTCO₂e/year). Under option 2 a single numerical screening threshold of 3,000 MTCO₂e/year would be used for all non-industrial projects. These thresholds have not been adopted by the SCAQMD or distributed for widespread public review and comment, and the working group tasked with developing the thresholds has not met since September 2010. The future schedule and likelihood of threshold adoption is uncertain.

If the CARB adopts statewide significance thresholds, SCAQMD staff plans to report back to the SCAQMD Governing Board regarding any recommended changes or additions to the SCAQMD's interim threshold.

Under CEQA, the City has discretion to select an appropriate significance criterion that is based on substantial evidence. The SCAQMD's adopted threshold of10.000 MTCO₂e for industrial stationary source emissions is commonly selected as the significance criterion. The SCAQMD adopted industrial threshold is commonly selected because warehouses, such as the proposed Project, are more comparable to an industrial use than the other land uses such as commercial or residential. This is supported by information released by the SCAQMD working group. The minutes from the January 2009 working group state that the GHG threshold adopted by the Governing Board applies to both emissions from construction and operational phases plus indirect emissions (electricity, water use, etc.) and defines that an industrial project includes "[s]torage and distribution (e.g., warehouse, transfer facility, etc.)."⁵ Minutes from the September 28, 2010 working group meeting subsequently indicate that, at that time, SCAQMD was also proposing to extend the industrial GHG significance threshold for use by all lead agencies.⁶ In addition, the warehouse land use is categorized as industrial in both CalEEMod and the Institute of Transportation Engineers (ITE) Trip Generation Manual which is commonly used in preparation of traffic studies. The use of the10,000 MTCO₂e/yr as a significance threshold is also widely used by various other cities in the Basin. Use of this threshold is also consistent with Approach 2 of the non-zero thresholds provided in the California Air Pollution Control Officer's Association (CAPCOA)

⁵ http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-8/ghg-meeting-8-minutes.pdf

⁶ http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-minutes.pdf

CEQA and Climate Change guidance document.⁷ As such, this threshold is utilized herein to determine if emissions of GHG from this Project will be significant. The City's evaluation of impacts under the 10,000 MTCO₂e/year threshold is also considered to be conservative since it is being applied to all of the GHG emissions generated by the Project (i.e., area sources, energy sources, vehicular sources, solid waste sources, and water sources) whereas the SCAQMD's 10,000 MTCO₂e/year threshold applies only to the new stationary sources generated at industrial facilities. The SCAQMD significance thresholds also evaluate construction emissions by amortizing them over an expected project life of 30 years.

Short-term Analysis

The CalEEMod model calculates GHG emissions from fuel usage by construction equipment and construction-related activities, like construction worker trips, for the Project. The estimated construction period for the proposed Project is approximately 11 months, beginning no sooner than September 2022. The default parameters within CalEEMod were used and these default values reflect a worst-case scenario, which means that Project emissions are expected to be equal to or less than the estimated emissions. The off-road equipment to be used for each construction activity is shown below and represents CalEEMod program defaults. Each piece of equipment listed below is assumed to operate 8 hours per day:

Construction Activity	Off-Road Equipment	Unit Amount
Grading	Excavators	2
	Graders	1
	Rubber Tired Dozers	1
	Tractors/Loaders/Backhoes	2
	Scrapers	8
Building Construction	Crane	1
	Forklifts	3
	Generator Set	1
	Tractor/Loader/Backhoe	3
	Welder	1
Paving	Paver	2
	Paving Equipment	2
	Rollers	2
Architectural Coatings	Air Compressors	1

The CalEEMod estimate does not analyze emissions from construction-related electricity or natural gas. Construction-related electricity and natural gas emissions vary based on the amount of electric power used during construction and other unknown factors which make them too speculative to quantify. The CalEEMod output results for construction-related GHG emissions present the GHG emissions estimates for the Project for CO₂, methane (CH₄), nitrous oxide (N₂O), and CO₂e.⁸ The following table summarizes output results and presents the GHG emissions estimates for the Project in metric tons/year (MT/yr).

⁷ <u>http://www.capcoa.org/wp-content/uploads/downloads/2010/05/CAPCOA-White-Paper.pdf</u>

⁸ CO₂e is the sum of CO₂ emissions estimated plus the sum of CH₄ and N₂O emissions estimated multiplied by their respective global warming potential (GWP).

Greenhouse Gas Emissions

Voor	Metric Tons per year (MT/yr)			
rear	Total CO ₂	Total CH₄	Total N₂O	Total CO₂e
2022	597.00	0.11	0.02	605.83
2023	1,057.29	0.07	0.07	1,078.63
Total	1,654.29	0.18	0.09	1,684.46
	•	•	Amortized	56.15

Table 5.7-C – Project Construction Equipment GHG Emissions

Source: AQ Study, Table 7

Evaluation of the table above indicates that an estimated 1,684.46 MTCO₂e will occur from Project construction equipment over the course of the estimated construction period. The draft SCAQMD GHG threshold Guidance document released in October 2008 recommends that construction emissions be amortized for a project lifetime of 30 years to ensure that GHG reduction measures address construction GHG emissions as part of the operational reduction strategies. Therefore, the total GHG emissions from Project construction were amortized and are included below in **Table 5.7-E** – **Total Project-Related GHG Emissions**.

Vegetation Change

CalEEMod estimates the GHG emissions associated with the one-time change in vegetation resulting from development and the GHG emissions sequestered as a result of planting new trees on a project site. Planting trees as part of the Project will sequester CO_2 while they are actively growing. Approximately 302 trees from miscellaneous species are estimated to be planted as part of this Project based on the conceptual landscaping plan. As shown in the CalEEMod output (Appendix B.1), the estimated one-time sequestration of CO_2 from the planting of Project trees is 213.82 MTCO₂e. Assuming a Project life of 30 years, this equates to a net reduction of 7.13 MTCO₂e annually. These results were included in the analysis of the Project's total operational emissions below in **Table 5.7-E**.

Long-term Analysis

Area Source Emissions

CalEEMod estimates the GHG emissions associated with area sources which include landscape equipment emissions, architectural coating, consumer products, and hearths. Landscape equipment servicing the Project site create CO₂ resulting from fuel combustion based on the Project's land uses. Consumer products consist of consumer use of solvents and personal care products and architectural coatings consist of an average building square footage to be repainted each year. **Table 5.7-E** summarizes the Project's area source emissions.

Energy-Related Emissions

CalEEMod estimates the GHG emissions associated with building electricity and natural gas usage (nonhearth) for each land use type. Electricity and natural gas used in buildings is typically generated at an off-site power plant which indirectly generates GHG emissions. The default energy usage values used in CalEEMod are based on the California Energy Commission-sponsored California Commercial End Use Survey and Residential Appliance Saturation Survey studies and reflect 2019 Title 24 improvements (CalEEMod User's Guide, Appendix A). The following table summarizes the GHG emissions estimates reported by CalEEMod for the Project. To account for the energy used for parking lot and street lighting, the parking lot lighting energy intensity rate was conservatively applied to the Project site's concrete parking lot and landscaped areas and the asphalt and non-asphalt offsite improvements. GHG emissions from the operation of electric forklifts and yard trucks were calculated outside of CalEEMod using data from the SCAQMD for forklift and yard truck usage, annual forklift electricity consumption from the Electric Power Research Institute (EPRI), and the default carbon intensity data from CalEEMod for the electricity provider (Southern California Edison (SCE)). The Project is estimated to use approximately 92 forklifts, based on an average usage of 0.12 forklifts per 1,000 square feet of building area provided by the SCAQMD (769,668 /1,000 *0.12 = 92.36). The typical annual electricity usage from electric forklifts is between12,960 to 25,932 kilowatt-hours (kWh). The mid-point of 19,446 kWh per year per forklift was used, which equals approximately 1,796 megawatt-hours (MWh) per year. The Project is estimated to use approximately three-yard trucks, based on an average of 3.6-yard trucks per million square feet provided by the SCAQMD (0.77 million square feet x 3.6 = 2.77). The estimated annual electricity usage from each electric yard truck is 84 kWh ((84 kWh x 2.77 x 365)/1,000 = 85 MWh), which equals approximately 85 MWh per year for the Project.

The GHG emissions from electricity usage from the future electric vehicle (EV) charging stations serving the Project site's designated 24 EV charging spaces were also estimated outside CalEEMod. Emissions were estimated using data from the SCAQMD for EV charging station usage and the CalEEMod default SCE carbon intensity data. It was assumed that each designated EV charging space would contain one charger and, based on SCAQMD⁹ data, that each charger would be a 50-kilowatt (kW) charger used approximately 10 hours per day or five separate two-hour charging events. Based on these assumptions, each EV charger would use approximately 450 kWh of electricity per day.

The following table summarizes the GHG emissions estimates reported by CalEEMod for the Project based on the assumptions described previously.

Source	Metric Tons per year (MT/yr)			
	CO ₂	CH₄	N ₂ O	Total CO ₂ e
Electricity ¹	375.58	0.03	0.00	1,415.53
Natural Gas	82.56	0.00	0.00	83.05
Total	458.14	0.03	0.00	1,498.58

Table 5.7-D – Energy-Related GHG Emissions

Source: AQ Study, Table 8

Note: Emissions reported as zero are rounded and not necessarily equal to zero.

¹Total MTCO₂e emission include building energy usage estimated in CalEEMod plus the estimated forklift, yard truck, and EV charging station electricity usage calculated outside of CalEEMod.

Mobile Source Emissions

CalEEMod estimates the annual GHG emissions from Project-related vehicle usage based on trip generation data contained in defaults or in a project-specific traffic analyses. The trip generation rate and fleet mix were adjusted based on the rates and ratios found in the TIA (Appendix K.2). Trip length data was based on CalEEMod defaults for passenger cars and the distance of 40 miles for Project trucks was used, which is recommended by the City and based on SCAQMD's *Final Staff Report for*

⁹ Ibid.

*Proposed Rule 2305 and Rule 316.*¹⁰ **Table 5.7-E – Total Project-Related GHG Emissions** shows the mobile source emissions from the Project.

Solid Waste Emissions

CalEEMod also calculates the GHG emissions associated with the disposal of solid waste into landfills based on default data contained within the model for waste disposal rates, composition, and the characteristics of landfills throughout the state. A large percentage of this waste will be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted will be disposed of at a landfill. This analysis assumes a solid waste diversion from the landfills consistent with the most recent data provided by the state, 37 percent. **Table 5.7-E – Total Project-Related GHG Emissions** (on the following page) shows the solid waste emissions from the Project.

Water-Related Energy Usage

Electricity is also indirectly used in water supply, treatment, and distribution, as well as wastewater treatment in Southern California and plays a large role in GHG production.

There are three processes necessary to supply potable water to urban users (i.e., residential, commercial, and industrial): (1) supply and conveyance of the water from the source; (2) treatment of the water to potable standards; and (3) distribution of the water to individual users. After use, the wastewater is treated and either reused as reclaimed/recycled water or returned to the environment. CalEEMod calculates the GHG emissions from these processes based on default emissions factors and water/wastewater generation rates for a project's location. Default values were used for electricity intensity factor associated with the supply and conveyance of water from its source which assumes that the water is being imported from Northern California. Total water demand was obtained from the Water Supply Assessment (Appendix H.3), using the average daily demand. Outdoor water demand was obtained from the Recycled Water Use Exhibit (Appendix J.1). Since the Project's source for outdoor water supply is recycled water (instead of potable), this was evaluated in the model by selecting the mitigation option for reclaimed water for 100 percent outdoor water use. **Table 5.7-E – Total Project-Related GHG Emissions** (on the following page) shows the GHG emissions from water-related energy usage for the Project.

Total Project GHG Emissions

As shown on **Table 5.7-E – Total Project-Related GHG Emissions**, using all the emissions quantified above, the total GHG emissions generated from the Project is approximately 5,154.35 MTCO₂e/yr which includes construction-related emissions amortized over a typical project life of 30 years and vegetation changes.

¹⁰ South Coast Air Quality Management District, Board Meeting Agenda No. 27, May 7, 2021, Attachment I, Final Staff Report, Proposed Rule 2305 – Warehouse Indirect Source Rule - Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program and Proposed Rule 316 – Fees for Rule 2305. (Available at <u>http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10</u>, accessed January 2022.)

Source	Metric Tons per year (MT/yr)			
Source	CO ₂	CH₄	N ₂ O	Total CO₂e
Amortized Construction				56.15
Vegetation				-7.13
Area	0.04	0.00	0.00	0.05
Energy	458.14	0.03	0.00	1,498.58
Mobile	3,280.46	0.12	0.27	3,362.97
Solid Waste	92.52	5.47	0.00	229.22
Water	10.68	0.12	0.00	14.51
Total	3,841.84	5.74	0.27	5,154.35

Table 5.7-E – Total Project-Related GHG Emissions

Source: AQ Study, Table 9

Note: Emissions reported as zero are rounded and not necessarily equal to zero

Conclusion: The total GHG emissions from the Project do not exceed the SCAQMD interim threshold of level of 10,000 MTCO₂e/yr for industrial projects. Therefore, the proposed Project will not generate GHG emissions, directly or indirectly, that have a significant effect on the environment. No Project-specific mitigation is required. Although not considered to be significant, implementation of the applicable PVCCSP EIR air quality mitigation measures **MM Air 2**, **MM Air 4** through **MM Air 7**, **MM Air 11** through **MM Air 19** and **MM Air 20**, as discussed in Section 5.7.2 - Related Regulations above, would further reduce the GHG emissions associated with the proposed Project.

In addition, on May 7, 2021, the Governing Board of the SCAQMD adopted Rule 2305, the Warehouse Indirect Source Rule. Under this rule, the owners and operators of warehouses greater than 100,000 square feet are required to directly reduce NO_x and particulate matter emissions, or to otherwise facilitate emission and exposure reductions of these pollutants in nearby communities. The warehouse rule is a menu-based points system requiring warehouse operators to annually earn a specified number of points. These points can be earned by completing actions from a menu that can include acquiring and using natural gas, Near-Zero Emissions and/or Zero-Emissions on-road trucks, zero-emission cargo handling equipment, solar panels or zero-emission charging and fueling infrastructure, or other options. The SCAQMD expects this rule to reduce emissions from warehouse uses by 10-15 percent. When developed, the proposed warehouse would be subject to this rule, thus further reducing the GHG emissions of the proposed Project.

Threshold B: Would the Project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emission of greenhouse gases?

CEQA allows lead agencies to consider whether regulatory programs are adequate to reduce a project's potentially significant environmental effects. Under AB 32, the State's emission inventory must be reduced to 1990 levels by 2020. Most of the reductions required to reach AB 32's 2020 reduction target will be achieved by regulations that apply to both existing and new development, including the Renewable Portfolio Standard (RPS), Pavley standards, Low Carbon Fuel Standards (LCFS), landfill regulations, regulations and programs on high global warming potential (GWP) gases, initiatives on water conservation (such as SB X7-7), and the indirect influence of the Cap and Trade system on electricity and transportation fuel prices. These regulations are sufficient to achieve AB 32's goal to reduce statewide GHG emissions to 1990 levels by 2020. The CARB 2017 Scoping Plan includes a regulatory strategy that will result in the State achieving the SB 32 target by 2030.

Greenhouse Gas Emissions

Additionally, the City of Perris adopted a CAP in 2016. The CAP includes local measures that achieve the GHG reduction targets of AB 32 for target year 2020 for the City. Local measures in the CAP include creation of an energy action plan to reduce citywide energy consumption; transportation measures that encourage alternative modes of transportation and reduced vehicle use; and solid waste measures that reduce landfilled solid waste in the City.

The Project would comply with the CAP through compliance with the PVCCSP EIR mitigation measures identified previously in Threshold A, which would lessen the Project's contribution of GHG emissions from both construction and operation. It would also be subject to SCAQMD Rule 2305, the Warehouse Indirect Source Rule, which would also lessen the contribution of GHG emissions from Project operation. The Project would not conflict with local strategies and state/regional strategies listed in the Perris CAP.

Conclusion: As described in Threshold A, and the additional discussion below, the proposed Project will not generate a significant amount of GHG emissions. The Project's significance with respect to consistency with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emission have been evaluated below and addressed for each sector. As discussed below, the Project does not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing greenhouse gas emissions and impacts are considered **less than significant without mitigation required**.

Transportation

Approximately 65 percent of the Project's opening year GHG emissions in **Table 5.7-E** are from transportation (mobile sources), heavy-duty trucks in particular. Transportation emissions are heavily regulated at the source, including, but not limited to engine emissions standards and fuel requirements. Because these regulations and policies reduce GHG emissions at the source, the Project will be subject to and therefore not conflict with these transportation measures.

State Regulations

Adopted regulations that will reduce the Project's GHG emissions through engine emission standards and fuel requirements are described in detail in Section 5.7.2, above. These regulations include: AB 1493, or the Pavley Standard, that required CARB to adopt regulations to reduce GHG emissions from non-commercial passenger vehicles and light-duty trucks of model year 2009 through 2016. These standards apply to all passenger and light-duty trucks used by customers, employees of and deliveries to the proposed Project site. The LCFS regulation became fully effective in 2010 and will reduce GHG emissions by reducing the carbon intensity of transportation fuels used in California by at least 10 percent by 2020. The proposed Project will utilize these emissions reductions as they are implemented into 2020 from all operational mobile emissions sources. The Advanced Clean Cars Program combines the control of smog, soot, and GHGs with requirements for greater numbers of zero-emission vehicles. By 2025, when the rules will be fully implemented, the new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming gases. Customers, employees of and deliveries to the proposed Project site will utilize these vehicles as they become available and further reduce GHG emissions.

As part of the Heavy-duty Vehicle Greenhouse Gas Regulation, CARB also implemented the Drayage Truck Regulation and Truck and Bus Regulation. These three regulations were collectively adopted to address and reduce emissions from trucks. Since the proposed Project has a large truck component, these regulations will aid in reducing GHG emissions from the Project.

Notably, the Cap-and-Trade Program covers transportation fuel suppliers to address emissions from fuels and from combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period. While the Cap-and-Trade Program technically covered fuel suppliers as early as 2012, they did not have a compliance obligation until 2015. The Cap-and-Trade Program covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined instate or imported. The point of regulation for transportation fuels is when they are supplied or delivered into commerce. Accordingly, as with stationary source GHG emissions and GHG emissions attributable to electricity use, virtually all of GHG emissions from CEQA projects associated with VMT are covered by the Cap-and-Trade Program.

Since the proposed Project has a large mobile source component and Cap-and-Trade emission reductions are difficult to calculate on a project-level, the proposed Project's mobile source emissions are very conservative, making the total emission calculations conservative. The phase-in of the Capand-Trade Program compliance obligations for transportation fuel providers further reduces GHG emissions attributable to mobile sources, beyond the GHG emissions reductions achieved and modeled by the Pavley Standard and LCFS.

Regional and Local Measures

Southern California is a major hub for importing and exporting goods. SCAG estimates that over \$2 trillion in cargo was moved across the region in 2010 alone, much of which travels through inland Southern California, including western Riverside County. However, the many warehouses and distribution facilities employ non-passenger vehicles that contribute to GHG emissions. At the state level, more standards are being implemented to increase vehicle efficiencies and the 2016 RTP/SCS and SCAQMD are supporting greater penetration of low-emission trucks in the region. While goods will continue to be moved to support local and regional economies, electrification and other low-emission technologies installed in vehicles can reduce the GHG emissions of goods movement. These investments include both policies as well as physical improvements such as "truck climbing" lanes, funded by RCTC. GHG reduction potentials from these anticipated improvements were incorporated into the City's CAP and would be applicable to the proposed Project GHG reduction potential based on the large amount of goods movement associated with the Project.

As explained above, the Inland Empire is the heart of the region's warehouse Goods Movement network for goods that enter the Ports and are moved east to the rest of the country. The entire Goods Movement network is based on the Ports of Los Angeles/Long Beach (Ports of LA/LB) and some truck trips generated by the Project are assumed to come from the Ports of Los Angeles/Long Beach (Ports of LA/LB). The Ports have adopted several plans and policies to reduce GHG emissions including the Green LA Plan, the Port of LA CAP, the Long Beach Sustainable City Action Plan, and the San Pedro Bay Ports Clean Air Action Plan.

The Perris CAP also identifies improvements, such as express lanes and congestion pricing, which would reduce GHG emissions by alleviating freeway congestion. Reduced congestion would cause fewer delays for the distribution trucks and commuting employees traveling to the proposed Project site and would increase fuel efficiency.

Additionally, as described in Measure SR-12 of the Perris CAP, the WRCOG subregion is covered by SCAG's regional plug-in electric vehicle (PEV) readiness plan to identify viable locations for charging stations, changes to development codes, and other strategies to encourage the purchase and use of electric vehicles. PEV chargers are already being installed in the WRCOG subregion to promote

alternative-fuel vehicles as one strategy to reduce GHG emissions associated with passenger vehicles. Once these stations are established, employees that commute to the proposed Project site would have more incentive to invest in alternatively fueled vehicles with lower GHG emissions than fossil fueled vehicles. The City also plans to coordinate traffic signals along local arterials to provide smooth movement of traffic with minimal stops. As the City extends traffic signal coordination to additional roadways, GHG emissions will be reduced by reducing motorist stops and delays and lowering the amount of fuel needed to move a certain distance. Signal coordination also lessens congestion and resulting tail pipe emissions, which reduces GHG emissions and improves air quality. This would apply to both the trucks and employee passenger cars traveling on local streets.

The Perris CAP also identifies bicycle infrastructure improvements and increased bicycle parking as strategies to increase the viability of bicycling as an emission-free commute option. The proposed Project would benefit from these improvements and be able to expand alternative transportation options to commuting employees in order to further lower GHG emissions.

Project Design Features

Lastly, as described in Section 5.7.3, above, the Project will implement the following features which will further reduce the Project's GHG emissions from transportation:

- Limit idling time for commercial vehicles to no more than five minutes.
- Provide up to two electric vehicle charging facilities to encourage the use of low or zeroemission vehicles.
- Provide clean air/vanpool designated parking spots at the Project site,
- Provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience.

Energy

The second largest source, approximately 29 percent, of GHG emissions shown in **Table 5.7-E** from the Project is energy consumption from electricity and natural gas.

State Regulations

Energy-related emissions are also heavily regulated at the source, including, but not limited to energy efficiency standards and renewable energy requirements. Because these regulations and policies reduce GHG emissions at the source, the Project will be subject to, and therefore implement, these energy measures.

Applicable regulations that reduce GHG emissions through energy efficiency standards and renewable energy requirements, which were previously described above in Section 5.7.2, include: RPS; SB 1368; AB 1109; Title 24 building energy efficiency requirements and the CalGreen Code.

As previously described above in Section 5.7.2, California's Renewable Portfolio Standard (RPS) requires retail sellers of electric services to increase procurement from eligible renewable energy sources so that half of the state's electricity must be procured from renewable sources by 2030. Additionally, SB 1368 prohibits any retail seller of electricity in California from entering into a long-term financial commitment for baseload generation if the GHG emissions are higher than those from a combined-cycle natural gas power plant. As a customer of SCE, the proposed Project occupant will purchase from an increasing supply of renewable energy sources and more efficient baseload generations and thereby

reduce GHG emissions. AB 1109, the Lighting Efficiency and Toxic Reduction Act, required the establishment of minimum energy efficiency standards for all general purpose lights. The proposed Project occupant will use these more energy efficient lights and therefore use less electricity and lower GHG emissions in that regard.

The proposed Project is also subject to the CalGreen Code Title 24 building energy efficiency requirements that offer builders better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses. The current 2019 Building Energy Efficiency Standards will reduce energy use by seven and 30 percent for residential and non-residential buildings, respectively. The newly adopted 2022 Standards will further increase energy efficiency. The standards offer builders better windows, insulation, lighting, ventilation systems, and other features that reduce energy consumption in homes and businesses. The Project will be subject to the Building Energy Efficiency Standards in effect at the time of building permit, which will further reduce energy consumption from the proposed Project.

Regional and Local Measures

The HERO Program is a public-private partnership administered by WRCOG, offering financing to business owners in the subregion for the installation of energy-efficient, renewable energy, and water conservation improvements. The proposed Project owner or occupant has the opportunity to participate in this program to aid in financing GHG-reducing energy efficient, renewable energy, and water conservation improvements. SCE also provides various energy savings programs including an energy audit tool and efficient lighting and appliance rebates that the proposed Project owner or occupant can participate in as a customer of SCE.

Project Design Features

The Project will include the following to meet or exceed any efficient energy standards,

- Design building shells and components, such as windows, roof systems and electrical systems to meet California Title 24 Standards for nonresidential buildings.
- Design buildings to achieve U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) features for potential certification. This includes design considerations related to the building envelope, heating, ventilation, and air conditioning (HVAC), lighting, and power systems. Additionally, the architectural expression such as roofs and windows in the buildings will relate to conserving energy.
- Install energy efficient light-emitting diodes (LED) lighting on the site. Provide skylights for natural day light to reduce the lighting load, therefore saving energy. Lighting will incorporate motion sensors that turn them off when not in use.
- Meet City minimum landscape requirements and provide adequate landscape shade for the site to reduce energy use.
- Install light-colored roofing materials over office area spaces and light-colored paving materials.
- For future office space, install energy efficient HVAC systems (seasonal energy efficiency ratio (SEER) 13), appliances and equipment, and control systems that are Energy Star rated.
- For future office improvement, refrigerants and HVAC equipment will be selected to minimize or eliminate the emission of compounds that contribute to ozone depletion and global climate change. Ventilation and HVAC systems will be designed to meet or exceed the minimum

outdoor air ventilation rates described in the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) standards and/or per California Title 24 requirements.

- For future office improvement, implement design features to increase the efficiency of the building envelope (i.e., the barrier between conditioned and unconditioned spaces). This includes providing R-19 roof insulation for conditioned space and R-22 between conditioned and unconditioned space to minimize heat transfer and minimize energy consumption.
- Provide greatly enhanced window glazing insulation for exterior walls at conditioned spaces (0.28 or less U-factor).
- Incorporate Energy Star rated space heating and cooling equipment, light fixtures, appliances, or other applicable electrical equipment.

Water

As stated previously, GHG emissions also result from electricity consumption related to water supply, treatment, and distribution, as well as wastewater treatment. As shown in **Table 5.7-E**, the Project's GHG emissions related to water consumption are approximately 0.3 percent of total GHG emissions.

State Regulations

The Water Conservation Act of 2009 (SB X7-7) sets an overall goal of reducing per-capita urban water use by 20 percent by December 31, 2020. The state is required to make incremental progress toward this goal by reducing per-capita water use by at least 10 percent by December 31, 2015. Reduction in water consumption directly reduces the energy necessary and the associated emissions to convene, treat, and distribute the water and it also reduces emissions from wastewater treatment.

As described above, the 2019 Title 24 standards included in the Project's emissions estimates differ from previous standards by requiring usage of less energy for water heating. Implementation of the CalGreen standards also reduce energy consumptions from water use by requiring the reduction of indoor potable water use from water saving fixtures and/or flow restrictors by the incorporation of sustainability features including installing water-efficient fixtures and appliances (e.g., EPA WaterSense labeled products). The proposed Project will be subject to the current Title 24 standards in effect at the time of construction and therefore is at least as effective as the 2019 standards.

Regional and Local Measures

The Perris CAP water conservation and efficiency goal directly aligns with SB X7-7. While this is considered a state measure, it will be up to the local water retailers, jurisdictions, and water users to meet these targets. A number of policies have been established at the local level within the subregion requiring more efficient use of water, including landscaping ordinances that require native or low-irrigation landscaping.

Water service to the Project site will be provided by EMWD, which has adopted a series of policies aimed at reducing water consumption within its jurisdiction. Current efforts that aid in implementing this goal include adoption of EMWD's Water Efficient Landscape Ordinance (WELO) and other efforts outlined in EMWD's Urban Water Management Plan. Since the proposed Project will be subject to these regulations and ordinances, along with Title 24 standards, the Project will not conflict with any regional or local policy.

Project Design Features

- Recycled water shall be used for landscape irrigation.
- Surface parking lots will be landscaped in accordance with City standards to reduce heat island effect.
- Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and sensors for landscaping according to the California Department of Water Resources Model Efficient Landscape Ordinance and Chapter 19.70 (Landscaping) of the Perris Municipal Code.
- Design buildings to be water-efficient. Install water-efficient fixtures in accordance with Section 5.303 of the California Green Building Standards Code Part 11.
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff in accordance with City Standards.
- Provide education about water conservation and available programs and incentives to the building operators to distribute to employees.

Waste Diversion

Disposal of solid waste in landfills contributes approximately four percent of GHG emissions from the Project (**Table 5.7-E**).

State Regulations

Implementation of the CalGreen code and state measures reduce the amount of solid waste disposed of in landfills. The CalGreen code requires jurisdictions to divert a minimum of 65 percent of their nonhazardous construction and demolition waste from landfills. The City of Perris reported a 51 percent waste diversion rate for the year 2004. In addition, SB 341 amended the California Integrated Waste Management Act of 1989 to include a provision declaring that it is the policy goal of the state that not less than 75 percent of solid waste generated be source reduced, recycled, or composted by the year 2020, and annually thereafter. The proposed Project is subject to these regulations and will utilize Project Design Features discussed below to meet CalGreen code standards as well as SB 341's policy goal and thereby reduce GHG emissions.

Regional and Local Measures

The Perris CAP explains that diverting organic items from landfills helps to reduce landfill methane gas generation, and can help prolong the lifespan of area landfills. The City will implement a collection system for food and paper waste, which the Project may have the opportunity to participate in. The City has the added bonus of CR&R's anaerobic digester to accelerate the processing of household waste products.

Project Design Features

- Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with Section 5.408.1 of the California Green Building Standards Code Part 11.
- Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance with Section 5.410.1 of the California Green Building Standards Code Part 11.

• The property operator will provide readily available information provided by the City for employee education about reducing waste and available recycling services.

5.7.6 Recommended Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (State CEQA Guidelines Section 15126.4). Mitigation measures were evaluated for their ability to reduce or eliminate impacts. The proposed Project is required to implement PVCCSP EIR mitigation measures **MM Air 2, MM Air 4** through **MM Air 7, MM Air 11** through **MM Air 14, MM Air 19,** and **MM Air 20** as discussed in Section 5.7.2. No Project-specific mitigation is required beyond those required by the PVCCSP EIR mitigation measures listed above.

5.7.7 Summary of Environmental Effect After Mitigation Measures Are Implemented

The proposed Project does not result in any significant greenhouse gas impacts, and no mitigation is required beyond those required by the PVCCSP EIR mitigation measures listed above.

5.8 Hazards and Hazardous Materials

The focus of the following analysis is related to potential impacts associated with hazards and hazardous materials, either directly or indirectly, that may have a significant impact on the environment and conflicting with an applicable plan, policy, or regulation adopted for the purpose of reducing impacts caused by hazards or hazardous materials. This section will analyze whether the Project will:

- A. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- B. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- C. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 1-quarter-mile of an existing or proposed school;
- D. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- E. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area;
- F. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and
- G. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

The analysis in this section is based on the Phase I Environmental Site Assessment Update 39 Parcels at 4946-4800 Patterson Avenue Perris, California 92571 by Apex Companies, LLC (included as Appendix G.1). For purposes of this DEIR, the term "toxic substance" is defined as a substance that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may present an unreasonable risk of injury to human health or the environment. Toxic substances include chemical, biological, flammable, explosive, and radioactive substances. The term "hazardous material" is defined as a substance that, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may: 1) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, disposed of, or otherwise mismanaged; or 2) cause or contribute to an increase in mortality or an increase in irreversible or incapacitating illness. Hazardous waste is defined in the California Code of Regulations, Title 22, Section 66261.3. The defining characteristics of hazardous waste are: ignitability (oxidizers, compressed gases, and extremely flammable liquids and solids); corrosivity (strong acids and bases); reactivity (explosives or generates toxic fumes when exposed to air or water); and toxicity (materials listed by the United States Environmental Protection Agency [EPA] as capable of inducing systemic damage to humans or animals). Certain wastes are called "Listed Wastes" and are found in the California Code of Regulations, Title 22, Sections 66261.30 through 66261.35. Wastes appear on the lists because of their known hazardous nature or because the processes that generate them are known to produce hazardous wastes (which are often complex mixtures).

No comments related to hazardous materials were received in response to the Notice of Preparation (NOP) and the scoping meeting held on February 2, 2022.

In addition to other reference documents, the following references were used in the preparation of this section of the DEIR:

- Apex Companies, LLC, *Phase I Environmental Site Assessment Update 39 Parcels at 4946-4800 Patterson Avenue Perris, California 92571*, December 20, 2021. (Included as Appendix G.1 to this DEIR.) [Cited as Apex, 2021]
- City of Perris, *Perris Comprehensive General Plan 2030 Safety Element*. Adopted January 25, 2022. (Available at https://www.cityofperris.org/home/showpublisheddocument/15024/637807110903270000https://www.cityofperris.org/home/showdocument?id=465, accessed January 10, 2022.) [Cited as Perris GP 2030]
- City of Perris, *Perris Valley Commerce Center Specific Plan Amendment No. 12*, Adopted January 10, 2012, and subsequently amended and approved January 11, 2022. (Available at https://www.cityofperris.org/home/showpublisheddocument/2647/637799977032200000, accessed May 4, 2022.) [Cited as PVCCSP]
- City of Perris, *Perris Valley Commerce Center Specific Plan Final Environmental Impact Report*, State Clearing house # 2009081086, November 2011, certified January 10, 2012. (Available at the City of Perris and at <u>https://www.cityofperris.org/home/showpublisheddocument/13874/637455522381730000</u>, accessed May 4, 2022.) [Cited as PVCCSP EIR]
- California Department of Water Resources, *Part III. Destruction of Water Wells.* (Available at https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Standards/Combined-Well-Standards/Water-Destruction, accessed May 11, 2022,) [Cited as DWR Part III]
- California Department of Toxic Substances Control, Official California Code of Regulations (CCR), Title 22, Division 4.5, webpage. (Available at <u>https://dtsc.ca.gov/title22/</u>, accessed May 4, 2022. [Cited as DTSC]
- Department of the Air Force, Air Force Reserve Command, Final Air Installations Compatible Use Zones Study, March Air Reserve Base, Riverside, California, 2018. (Available at <u>https://www.march.afrc.af.mil/Portals/135/documents/MARCH_AICUZ_2018.pdf?ver=2018-02-</u> <u>21-161029-473</u>, accessed May 4, 2022. [Cited as MARB 2018]
- Riverside County Airport Land Use Commission, *Airport Land Use Commission Development Review Findings*, March 10, 2022. (Included as Appendix G.2 to this DEIR.)
- Riverside County Airport Land Use Commission, *Riverside County Airport Land Use Compatibility Plan*, October 14, 2004. (Available at https://www.rcaluc.org/Plans/New-Compatibility-Plan, accessed May 4, 2022.) [Cited as RCALUCP]
- United States Environmental Protection Agency. *Summary of the Occupational Safety and Health Act*, webpage. (Available at: <u>https://www.epa.gov/laws-regulations/summary-occupational-safety-and-health-act</u>, accessed on May 4, 2022.) [Cited as EPA]

5.8.1 Setting

Section 4.6, Hazards and Hazardous Materials, of the Perris Valley Commerce Center Specific Plan (PVCCSP) Final EIR, identifies that the PVCCSP area and surrounding areas are in transition from agricultural land uses to a mix of commerce, industrial and business park uses. Further, the PVCCSP area, including the Project area, is south of and within the Airport Influence Area (AIA) of the March Air Reserve Base/Inland Port Airport (MARB/IPA), and subject to regulations associated with development

near the MARB/IPA. The Project site and site-adjacent off-site improvements (collectively referred to herein as the Project area) are currently undeveloped and vacant, apart from one lot made up of three APNs (APN Nos. 314-153-021, -020, -01), in the northwest corner of the Project site currently utilized for semi-truck trailer storage. (See **Figure 3-2** – **Aerial Map.**) Existing and previous uses of the Project area, and other characteristics of the Project area relevant to the analysis of potential hazards and hazardous materials impacts are described below. The Project site is located approximately 0.1 miles to the southwest of the MARB/IPA, in Zone B2. (See **Figure 5.8-1** – **MARB/IPA Zones**). A discussion of relevant MARB/IPA regulations and hazards is provided in Section 5.8.2, Related Regulations.

Historical Review, Regulatory Records Review and Field Reconnaissance

Apex Companies, LLC (Apex) prepared a Phase I Environmental Site Assessment (Phase I ESA) Update, dated December 21, 2021. The purpose of the Phase I ESA is to identify recognized environmental conditions (RECs)¹ that may pose potential environmental risks associated with the Subject Property, which encompasses 39 parcels at the northeast and southeast corners of Patterson Avenue and Nance Street in Perris, California. In preparing the Phase I ESA, Apex evaluated the following:

- Environmental databases to determine the likelihood of current and historical releases of hazardous substances and petroleum through storage, treatment, and/or disposal on or near the Subject Property where migration could occur;
- Subject Property's history through prior reports on the GeoTracker database, interviews, historical aerial photographs, topographic maps, fire insurance maps, city directories, building permits, and the preliminary title report provided by Applicant;
- The Subject Property's current conditions by conducting an on-site survey of the Subject Property and visual evaluation of surrounding properties, and conducting interviews with representatives of regulatory agency(s), current property owner/operator, and/or consultants for owner/operator; and
- Physical characteristics of the Subject Property including hydrologic and soil data through available environmental files from local agencies including the California Regional Water Quality Control Board (RWQCB), California Department of Toxic Substances Control (DTSC), and other appropriate agencies.

¹ REC means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies.



Sources: Riverside Co. GIS, 2020; USDA NAIP, 2016.



Figure 5.8-1 – MARB/IPA Zones Duke Warehouse at Patterson Avenue and Nance Street



5.8.2 Related Regulations

The PVCCSP EIR (Section 4.6, Hazards and Hazardous Materials) cites the following regulations applicable to the analysis of hazards and hazardous materials: (1) State and federal agencies and associated databases that regulate hazardous materials, and (2) State and Federal Aviation Administration (FAA) airspace protection and land use compatibility regulations. In addition, applicable goals, policies, and measures from the Safety Element of the Perris Comprehensive General Plan (Perris GP 2030) related to hazards and hazardous materials are provided in the PVCCSP EIR. These requirements summarized below are incorporated as part of the proposed Project and are assumed in the analysis presented in this section.

Federal Regulations

Hazardous Materials Regulations and Plans

Resource Conservation and Recovery Act (RCRA)

The Resource Conservation and Recovery Act (RCRA) gives EPA the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances. The Federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for EPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program.

Hazardous Materials Transportation Act (HMTA)

The Hazardous Materials Transportation Act of 1975 (HMTA) empowered the Secretary of Transportation to designate as hazardous material any "particular quantity or form" of a material that "may pose an unreasonable risk to health and safety or property".

Hazardous materials regulations are subdivided by function into four basic areas:

- Procedures and/or Policies 49 Code of Federal Regulations (CFR) Parts 101, 106, and 107
- Material Designations 49 CFR Part 172
- Packaging Requirements 49 CFR Parts 173, 178, 179, and 180
- Operational Rules 49 CFR Parts 171, 173, 174, 175, 176, and 177

The HMTA is enforced by use of compliance orders [49 U.S.C. 1808(a)], civil penalties [49 U.S.C. 1809(b)], and injunctive relief (49 U.S.C. 1810). The HMTA (Section 112, 40 U.S.C. 1811) preempts state and local governmental requirements that are inconsistent with the statute, unless that requirement affords an equal or greater level of protection to the public than the HMTA requirement.

Hazardous Materials Transportation Uniform Safety Act of 1990

In 1990, Congress enacted the Hazardous Materials Transportation Uniform Safety Act (HMTUSA) to clarify the maze of conflicting state, local, and federal regulations. Like the HMTA, the HMTUSA requires the Secretary of Transportation to promulgate regulations for the safe transport of hazardous material in

Hazards and Hazardous Materials

intrastate, interstate, and foreign commerce. The Secretary also retains authority to designate materials as hazardous when they pose unreasonable risks to health, safety, or property. The statute includes provisions to encourage uniformity among different state and local highway routing regulations, to develop criteria for the issuance of federal permits to motor carriers of hazardous materials, and to regulate the transport of radioactive materials.

Occupational Safety and Health Act (OSHA)

Congress passed the Occupational and Safety Health Act (OSHA) to ensure worker and workplace safety. Their goal was to make sure employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. In order to establish standards for workplace health and safety, the Act also created the National Institute for Occupational Safety and Health (NIOSH) as the research institution for OSHA. OSHA is a division of the U.S. Department of Labor that oversees the administration of the Act and enforces standards in all 50 states (EPA).

Airport Regulations

Federal Aviation Regulations Part 77 Surfaces for Compatibility Planning

As discussed in the PVCCSP EIR, Part 77 of the Federal Aviation Regulations (FAR), Objects Affecting Navigable Airspace, establishes standards for determining obstructions to navigable airspace and the effects of such obstructions on the safe and efficient use of that airspace. The regulations require that the FAA be notified of proposed construction or alteration of objects (whether permanent, temporary, or of natural growth) if those objects would be of a height which exceeds FAR Part 77 criteria. The Part 77 regulations define a variety of imaginary surfaces at certain altitudes around airports. The Part 77 surfaces include the primary surface, approach surface, transitional surface, horizontal surface, and conical surface. Penetrations of the Part 77 surface generally are reviewed on a case-by-case basis.

The FAA has additional guidelines regarding protection of airport airspace, which are set forth in other FAA documents. In general, these criteria specify that no use of land or water anywhere within the boundaries encompassed by FAR Part 77 should be allowed if it could endanger or interfere with the landing, take off, or maneuvering of an aircraft at an airport. Specific characteristics to be avoided include creation of electrical interference with navigational signals or radio communication between the airport and aircraft, lighting which is difficult to distinguish from airport lighting, glare in the eyes of pilots using the airport, smoke, or other impairments to visibility in the airport vicinity, and uses which attract birds and create bird strike hazards.

State Regulations

Hazardous Materials Regulations and Plans

Cal/OSHA and the California State Plan

Under an agreement with OSHA, since 1973 California has operated an occupational safety and health program in accordance with Section 18 of the federal OSHA. The State of California's Department of Industrial Relations administers the California Occupational Safety and Health Program, commonly referred to as Cal/OSHA. The State of California's Division of Occupational Safety and Health (DOSH) is the principal agency that oversees plan enforcement and consultation. In addition, the California State program has an independent Standards Board responsible for promulgating State safety and health standards, and reviewing variances. It also has an Appeals Board to adjudicate contested citations and

the Division of Labor Standards Enforcement to investigate complaints of discriminatory retaliation in the workplace.

The California State Plan applies to all public and private sector places of employment in the state, with the exception of federal employees, the United States Postal Service, private sector employers on Native American lands, maritime activities on the navigable waterways of the United States, private contractors working on land designated as exclusively under federal jurisdiction and employers that require federal security clearances. Cal/OSHA is the only agency in the state authorized to adopt, amend, or repeal occupational safety and health standards or orders. Compliance officers inspect workplaces for hazardous conditions and issue citations and orders where violations are identified. Inspections may be the result of regular scheduling, imminent danger reports, fatalities, and worker complaints or referrals.

California Hazardous Control Law

The Hazardous Waste Control Law (HWCL) (Health and Safety Code [HSC], Division 20, Chapter 6.5, Article 2, Section 25100, et seq.) is the primary hazardous waste statute in California. The HWCL implements RCRA as a "cradle-to-grave" waste management system in the state. It specifies that generators have the primary duty to determine whether their wastes are hazardous and to ensure its proper management. The HWCL also establishes criteria for the reuse and recycling of hazardous wastes used or reuse as raw materials. The HWCL exceeds federal requirements by mandating source reduction planning and broadening requirements for permitting facilities that treat hazardous waste. It also regulates a number of waste types and waste management activities not covered by federal law.

California Code of Regulations (CCR), Titles 22 and 26

A variety of California Code of Regulation (CCR) titles address regulations and requirements for generators of hazardous waste. Title 22 contains detailed compliance requirements for hazardous waste generators, transporters, and facilities for treatment, storage, and disposal. Because California is a fully-authorized state according to RCRA, most regulations (i.e., 40 CFR 260, et seq.) have been duplicated and integrated into Title 22. However, because the DTSC regulates hazardous waste more stringently than the EPA, the integration of state and federal hazardous waste regulations that make up Title 22 does not contain as many exemptions or exclusions as does 40 CFR 260. As with the HSC, Title 22 also regulates a wider range of waste types and waste management activities than does RCRA. To aid the regulated community, California has compiled hazardous materials, waste, and toxics-related regulations from CCR, Titles 3, 8, 13, 17, 19, 22, 23, 24 and 27 into one consolidated listing: CCR Title 26 (Toxics). However, the hazardous waste regulations are still commonly referred to collectively as "Title 22" (DTSC).

Aeronautics Act

The Aeronautics Act (Public Utilities Code, Section 21001 et seq.) provides for the right of flight over private property, unless conducted in a dangerous manner or at altitudes below those prescribed by federal authority. The Aeronautics Act gives the State Department of Transportation (Caltrans) and local governments the authority to protect the airspace defined by FAR Part 77 criteria. The Aeronautics Act prohibits any person from constructing a structure or permitting any natural growth of a height that would constitute a hazard to air navigation unless a permit is obtained. No permit is required if it is determined that the structure or growth is not a hazard to aviation. Typically, this has been interpreted to mean that no penetration of FAR Part 77 imaginary surfaces is permitted without a finding by the FAA that the object would not constitute a hazard to air navigation.

Hazards and Hazardous Materials

The State Aeronautics Act also created the requirement for an Airport Land Use Commission (ALUC) in each county and established statewide requirements for the conduct of airport land use compatibility planning. State statutes require that, once an ALUC has adopted or amended an airport land use compatibility plan, the county (where it has land use jurisdiction within the airport influence area) and any affected cities must update their General Plans and any applicable specific plans to be consistent with the ALUC's plan (Government Code, Section 65302.3). The California Airport Land Use Planning Handbook is published by the Caltrans Division of Aeronautics to support and amplify the State regulations. The most recent California Airport Land Use Planning Handbook was published in October 2011 and, as required by CEQA Public Resources Code Section 21096, was used as a technical resourcein the preparation of this EIR.

Regional Regulations

March Air Reserve Base/Inland Port Airport

The Riverside County ALUC is the lead agency responsible for airport land use compatibility planning in Riverside County. The fundamental purpose of ALUC is to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses. The basic function of the airport land use compatibility plan is to promote compatibility between airports and the land uses that surround them. Compatibility plans serve as a tool for use by airport land use commissions in fulfilling their duty to review proposed development plans for airports and surrounding land uses. Additionally, compatibility plans set compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to landowners in their design of new development.

The Project site is located approximately 0.1 miles to the southwest of MARB/IPA. On November 13, 2014, the Riverside County ALUC adopted the MARB/IPA Airport Land Use Compatibility Plan (ALUCP). The compatibility zones and associated criteria set forth in the MARB/IPA ALUCP provide noise and safety compatibility protection (PVCCSP). In 2018, the MARB published an update to its Air Installation Compatible Land Use Zone (AICUZ) study that has not yet been incorporated into the 2014 ALUCP (MARB 2018). The 2018 AICUZ report provides updated information about the Base operations and related safety and noise impacts.

Riverside County Department of Environmental Health

Federal and state hazardous materials regulations require all businesses that handle more than a specified amount of hazardous materials or extremely hazardous materials to obtain applicable permits and submit a business plan to its local Certified Unified Program Agency (CUPA). The CUPA also ensures local compliance with all applicable hazardous materials regulations. The CUPA with responsibility for the City of Perris is Riverside County Department of Environmental Health (RCDEH). The RCDEH oversees six hazardous materials programs in the County of Riverside, including inspecting facilities that handle hazardous materials, generate hazardous waste, treat hazardous waste, own/operate underground storage tanks, own/operate aboveground petroleum storage tanks, or handle other materials subject to the California Accidental Release Program.

County of Riverside Multi-Jurisdictional Local Hazard Mitigation Plan

The purpose of the County of Riverside Multi-Jurisdictional Local Hazard Mitigation Plan is to identify the County's hazards, review and assess past disaster occurrences, estimate the probability of future occurrences and set goals to mitigate potential risks to reduce or eliminate long-term risk to people and

property from natural and man-made hazards. The Plan was prepared pursuant to the requirements of the Disaster Mitigation Act of 2000 to achieve eligibility and potentially secure mitigation funding through Federal Emergency Management Agency (FEMA) Flood Mitigation Assistance, Pre-Disaster Mitigation, and Hazard Mitigation Grant Programs.

Local Regulations

MARB/IPA Airport Overlay Zone

In 2014, and subsequent to approval of the City's 2005 General Plan, the Riverside County ALUC adopted the 2014 MARB/IPA ALUCP. Thus, the City was required to update its General Plan to reflect the new ALUCP. The City created an Airport Overlay Zone (AOZ) to accommodate development within the City consistent with the land use designations of the 2014 MARB/IPA ALUCP. On July 14, 2016 the Riverside County ALUC determined that the City's AOZ is consistent with the 2014 MARB/IPA ALUCP.

In August 2016, the City of Perris approved the following: Resolution 5050 approving General Plan Amendment 15-01522, to amend the Perris GP 2030 Land Use, Noise, and Safety Elements to implement the 2014 MARB/IPA ALUCP; Ordinance Number 1331 approving Ordinance Amendment 16-05024 to update Perris Municipal Code Chapter 19.82 (Districts and Map) to revise the City of Perris Zoning Map to include an Airport Overlay Zoning designation and adopt an AOZ Code Chapter 19 (19.51) to implement the 2014 MARB/IPA ALUCP; and, Ordinance Number 1332 approving Specific Plan Amendment 16-05025 to amend the PVCCSP to update the Airport Overlay Zone Section (Section 12) to implement the 2014 MARB/IPA ALUCP.

On March 10, 2022, the Riverside County Airport Land Use Commission (ALUC) found the Project consistent with the 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan. The ALUC review findings are included in Appendix G.2 of this DEIR.

Perris Comprehensive General Plan 2030

The following are applicable goals and policies from the Perris Comprehensive General Plan 2030 (Perris GP 2030) related to Hazards and Hazardous Materials:

Safety Element

Goal S-1	A community where damage to property and loss of life due to natural or human- caused hazards is reduced.
Policy S-1.1	Periodically participate and update the City's Local Hazard Mitigation Plan.
Goal S-2	A community designed to effectively respond to emergencies and ensure the safety of residents and businesses.
Policy S-2.1	Require road upgrades as part of new developments/major remodels to ensure adequate evacuation and emergency vehicle access. Limit improvements for existing building sites to property frontages.
Policy S-2.2	Require new development or major remodels include backbone infrastructure master plans substantially consistent with the provisions of "Infrastructure Concept Plans" in the Land Use Element.
Policy S-2.5	Require all new developments, redevelopments, and major remodels to provide adequate ingress/egress, including at least two points of access for sites, neighborhoods, and/or subdivisions.

Section 5.8	City of Perris
Hazards and Hazardous	Materials Duke Warehouse at Patterson Avenue and Nance Street DEIR
Goal S-3	A community where residents and businesses are well-informed about disaster preparedness, response and recovery
Policy S-3.2	Develop and maintain a disaster response and evacuation program and share the relevant information with City residents and businesses.
Policy S-3.3	Ensure businesses in Perris are prepared for emergency and disaster situations.
Policy S-3.4	Develop an all-hazards map identifying areas of increased risk within the City
Goal S-4	A community where the potential impacts associated with flood-related hazards are minimized
Policy 4.1	Restrict future development in areas of high flood hazard potential until it can be shown that risk is or can be mitigated.
Policy 4.4	Require flood mitigation plans for all proposed projects in the 100-year floodplain (Flood Zone A and Flood Zone AE).
Policy 4.5	Ensure areas downstream of dams within the City are aware of the hazard potential and educated on the necessary steps to prepare and respond to these risks.
Goal S-5	A community prioritizing fire hazard reduction and mitigation for residents, businesses, and visitors
Policy S-5.1	Require all new development and major remodels within the wildland urban interface (high and very high fire hazard severity zones) to incorporate fuel modification, fire-resistive construction and/or defensible space management strategies consistent with State requirements, and the City's fuel modification program.
Policy S-5.4	Coordinate with Caltrans, Riverside County Transportation Commission, and neighboring communities on vegetation management, brush clearance, and the long-term maintenance of community fire breaks along roadways in the High and Very High Fire Hazard Severity Zones.
Policy S-5.6	All developments throughout the City Zones are required to provide adequate circulation capacity, including connections to at least two roadways for evacuation.
Policy 5.9	Ensure that the City maintains adequate facilities and fire service personnel in conformance with the Riverside County Fire Department's Fire Strategic Plan.
Policy 5.10	Ensure that existing and new developments have adequate water supplies and conveyance capacity to meet daily demands and firefighting requirements.
Policy 5.11	Ensure fuels reduction and fire risk reduction activities occur along key roadways and evacuation routes throughout the City.
Policy 5.12	Coordinate with Southern California Edison on electrical infrastructure that may be impacted by wildfires and/or Public Safety Power Shutoff events.
Goal S-6	Ensure an effective response to aircraft hazards

City of Perris		Section 5.8
Duke Warehouse at Pat	tterson Avenue and Nance Street DEIR	Hazards and Hazardous Materials
Policy S-6.1	Ensure new development and redevelopments requirements of the AICUZ Land Use Compatil Influence Area for March Air Reserve Base	comply with the development bility Guidelines and ALUP Airport
Policy S-6.2	Effectively coordinate with March Air Reserve I March Inland Port Airport Authority on develop	Base, Perris Valley Airport, and the ment within its influence areas.
Policy S-6.3	Effectively coordinate with March Air Reserve I development within its influence areas.	Base and Perris Valley Airport on
Goal 7	A built environment that is resilient to the effect other geologic hazards and better able to recor	ts of seismic ground shaking and ver from these events
Policy 7.1	Require all development to provide adequate p with seismic incidents	protection from damage associated
Policy 7.2	Require geological and geotechnical investigat professionals in areas with potential for seismic the environmental and development review and	ions by State-licensed c and geologic hazards as part of d approval process.
Policy 7.3	Ensure slope stability issues are effectively add developing areas within the City	dressed in both developed and
Policy 7.5	Monitor groundwater elevations beneath the C sensitivity to liquefaction hazards.	ity to identify areas of heightened
Goal S-8	Built and natural environments protected from	exposure to hazardous materials.
Policy S-8.1	Coordinate with the Riverside County Fire Dep industrial activities comply with all federal, stat hazardous materials waste.	artment to ensure commercial and e, county, and local laws regulating
Policy S-8.2	Ensure that the transport, use, storage, and dis in a responsible manner that protects public he	sposal of hazardous materials occur ealth and safety
Policy S-8.3	Facilitate coordinated, effective responses to h the City to minimize health and environmental	azardous materials emergencies in risks
Goal 9	A built environment adapted to changing hazar climate change	d conditions exacerbated by
Policy 9.3	Monitor flooding conditions that occur outside identify new areas of risk as future conditions of	of the 100-year floodplain to change.
Policy 9.4	Monitor wildfire mapping and hazard condition a result of climate change.	s for changing future conditions as

PVCCSP Standards and Guidelines and Mitigation Measures

The PVCCSP includes Standards and Guidelines relevant to hazards and hazardous materials. These Standards and Guidelines summarized below are incorporated as part of the Project and are assumed in the analysis presented in this section. The Project is required to comply with these Standards and Guidelines. The chapters/section numbers provided correspond to the PVCCSP chapters/sections.

Airport Overlay Zone (from Chapter 12.0 of PVCCSP)

12.1 Prohibited Uses in Airport Overlay Zones. This section identifies restrictions within the Clear Zone (CZ), Accident Potential Zone I (APZ-1), and Accident Potential Zone II (APZ-II) which are located within the PVCCSP area.

12.1.1 Compatibility with March Air Reserve Base.

The PVCCSP is located in MARB Airport Influence Zones I and II; therefore, all development within the plan shall comply with the following measures:

- Avigation Easement
- Noise Standard
- Land Use and Activities
- Retention and Water Quality Basins
- Notice of Airport in the Vicinity
- Disclosure
- Lighting Plans
- Height Restrictions per Federal Aviation Regulations Part 77
- Clear Zone (Surface B)
- Approach/Departure Clearance Surface (Surface C)
- Inner Horizontal Surface (Surface E)
- Conical Surface
- Form 7460 (Notice of Proposed Construction or Alteration)

Section 4.2.1, General On-site Project Development Standards and Guidelines, of the PVCCSP, also prohibits uses that could affect MARB/IPA, avigation easements or APZs, consistent with Section 12. Following is a discussion of current regulations that are particularly applicable to construction and/or operation of the Project.

The PVCCSP EIR includes mitigation measures for potential impacts to hazards and hazardous materials. Applicable PVCCSP EIR mitigation measures incorporated into the proposed Project are identified below and are assumed in the analysis presented in this section.

- **MM Haz 2:** Prior to the recordation of a final map, issuance of a building permit, or conveyance to an entity exempt from the Subdivision Map Act, whichever occurs first, the landowner shall convey an avigation easement to the MARB/March Inland Port Airport Authority.
- **MM Haz 3:** Any outdoor lighting installed shall be hooded or shielded to prevent either the spillage of lumens or reflection into the sky or above the horizontal plane.

MM Haz 4: The following notice shall be provided to all potential purchasers and tenants:

"This property is presently located in the vicinity of an airport, within what is known as an airport influence area. For that reason, the property may be subject to some of the annoyances or inconveniences associated with proximity to airport operations (for example, noise, vibration, or odors). Individual sensitivities to those annoyances can vary from person to person. You may wish to consider what airport annoyances, if any, are associated with the property before you complete your purchase and determine whether they are acceptable to you. Business & Profession Code 11010 13(A)".

MM Haz 5: The following uses shall be prohibited:

- a. Any use which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an initial straight climb following takeoff or toward an aircraft engaged in a straight final approach toward a landing at an airport, other than an FAA-approved navigational signal light or visual approach slope indicator.
- b. Any use which would cause sunlight to be reflected towards an aircraft engaged in an initial straight climb following takeoff or towards an aircraft engaged in a straight final approach towards a landing at an airport.
- c. Any use which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area.
- d. Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
- e. All retention and water quality basins shall be designed to dewater within 48 hours of a rainfall event.
- **MM Haz 6:** A minimum of 45 days prior to submittal of an application for a building permit for an implementing development project, the implementing development project applicant shall consult with the City of Perris Planning Department in order to determine whether any implementing project-related vertical structures or construction equipment will encroach into the 100-to-1 imaginary surface surrounding the MARB. If it is determined that there will be an encroachment into the 100-to-1 imaginary surface, the implementing development project applicant shall file a FAA Form 7460-1, Notice of Proposed Construction or Alteration. If FAA determines that the implementing development project applicant and the Perris Planning Division will work with FAA to resolve any adverse effects on aeronautical operations.

5.8.3 Design Considerations

Design considerations refer to ways in which the proposed Project will reduce potential hazardous materials impacts. The Phase I ESA provides hazards design such as: water well identification and soil testing. In addition, the Project is designed to be consistent with the requirements of the MARB/IPA Zone B2 occupancy requirements. Finally, the Project is designed to provide emergency access via the Nevada Avenue driveway.

5.8.4 Thresholds of Significance

The City of Perris has not established local CEQA significance thresholds and defers to the thresholds of significance identified in Appendix G of the State *CEQA Guidelines*. Impacts related to this Project may be considered potentially significant if the proposed Project would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 1-quarter-mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; and
- Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

5.8.5 Environmental Impacts Before Mitigation

Threshold A: Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

As identified in Section 4.6 of the PVCCSP EIR, new commercial and industrial uses in the PVCCSP area could involve the transport, use, storage, and disposal of hazardous materials. However, with required compliance with federal, State, and City regulations, standards, and guidelines pertaining to hazardous materials management, proposed commercial and industrial developments would not create a significant hazard to the public or the environment through routine use, storage, or disposal of hazardous materials; the impact was determined to be less than significant.

Impact Analysis for Temporary Construction Activities

Heavy equipment (e.g., dozers, excavators) would operate in the Project area during construction of the Project and associated improvements. Heavy equipment is typically fueled and maintained by petroleum-based substances such as diesel fuel, gasoline, oil, and hydraulic fluid, which is considered hazardous if improperly stored or handled. In addition, materials such as paints, adhesives, solvents, and other substances typically used in building construction would be located in the Project area during construction. Improper use, storage, or transportation of hazardous materials can result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment. This is a standard risk on all construction sites, and there would be no greater risk for improper handling, transportation, or spills associated with the Project than would occur on any other similar construction site. Construction contractors would be required to comply with all applicable federal, State, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related

materials, including but not limited to requirements imposed by the EPA, California Department of Toxic Substances Control (DTSC), SCAQMD (discussed in Section 5.2, Air Quality, of this EIR), and RWQCB (discussed in Section 5.9, Hydrology and Water Quality, of this EIR). With mandatory compliance to applicable hazardous materials regulations, the Project would not create a significant hazard to the public or the environment through routine transport, use, or disposal of hazardous materials during the construction phase. **Impacts would be less than significant from construction and no mitigation measures are required**.

Impact Analysis for Long-Term Operational Activities

Operation of the Project would involve the use of materials common to all urban development that are labeled hazardous (e.g., solvents and commercial cleansers; petroleum products; and pesticides, fertilizers, and other landscape maintenance materials). There is the potential for routine use, storage, or transport of other hazardous materials; however, the precise materials are not known, as the tenants of the proposed warehouses are not yet known.

In the event that hazardous materials, other than those common materials described above, are associated with future warehouse operations, the hazardous materials would likely be stored and transported to and from the building sites. Exposure of people or the environment to hazardous materials during operation of the Project may result from (1) the improper handling or use of common hazardous substances; (2) transportation accidents; or (3) an unforeseen event (e.g., fire, flood, or earthquake). The severity of any such exposure is dependent upon the type and amount of the hazardous material involved; the timing, location, and nature of the event; and the sensitivity of the individuals or environment affected. As discussed above, the U.S. Department of Transportation prescribes strict regulations for hazardous materials transport, as described in Title 49 of the Code of Federal Regulations (i.e., the Hazardous Materials Transportation Act); these are implemented by Title 13 of the California Code of Regulations. It is possible that vendors may transport hazardous materials to and from the Project; and the drivers of the transport vehicles must comply with the Hazardous Materials Transportation Act. Hazardous materials or wastes stored on site are subject to requirements associated with accumulation time limits, amounts, and proper storage locations and containers, and proper labeling. The amount of materials that would be handled at any one time for the proposed warehouse operations would be relatively small. Additionally, for removal of hazardous waste from the site, hazardous waste generators are required to use a certified hazardous waste transportation company which must ship hazardous waste to a permitted facility for treatment, storage, recycling, or disposal.

Consistent with the conclusion of the PVCCSP EIR, with compliance with applicable regulations, operation of the Project would result in a **less than significant impact** related to a significant risk to the public or the environment through the potential routine transport, use, or disposal of hazardous materials. **No mitigation measures are required**.

Threshold B: Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Hazards from Existing and Previous Uses

The Phase I ESA prepared for the Project concludes that the Project area was historically undeveloped and/or agricultural in use from at least 1901 until the present. There are no structures or issues of concern noted within the Project area. No chemical use, storage, spills, or trash build up was identified

Hazards and Hazardous Materials

within the Project area during site visits. The Project area is located in an area that has had historical agricultural activities, and the Phase I ESA did not find evidence of off-site facilities that have impacted the Project area. The Phase I ESA concludes there are no RECs, Controlled Recognized Environmental Conditions (CRECs), or Historical Recognized Environmental Conditions (HRECs) or other significant issues of concern (Apex 2021). However, Apex identified Business Environmental Risks associated with the Project site: The Project site has historically been used for agricultural purposes dating from prior to 1938 until between 2009-2012. Organochlorine pesticides (OCPs) were used extensively from the 1940s through the 1960s in the agricultural industry. Arsenic may also be found in old agricultural soils. Although not an REC, based these findings, Apex recommends collecting four surface (0-0.5 feet below ground surface) soil samples at a minimum in each guarter of the Project site and have them analyzed for OCPs and metals for worker soil handling safety purposes. In order to ensure this testing takes place, Project-specific mitigation measure **MM HAZ 1** requires soil testing. Additionally, a possible water well was identified on the historic topographic maps from 1967 through the most recent 2012 map, located on the southeast corner, south of Nance Street. A record search was performed to determine the status of the well. Apex considers the water well to be a Business Environmental Risk and although it is not an REC, recommends performing an investigation to determine if the well is still present on the Project site. If the well is found it should be properly abandoned. (Apex 2021). In order to ensure that any well located is properly abandoned, Project-specific mitigation measure MM HAZ 2 requires that prior to grading, the Project Applicant will perform an investigation of the Project site to determine if the well is still present on the property, and if so, ensure it is properly abandoned.

Hazards from Construction and Operation

As identified in Section 4.6 of the PVCCSP EIR, the handling and transport of hazardous materials can result in accidental releases. However, with required compliance with federal, State, and City regulations, standards, and guidelines pertaining to hazardous materials management, proposed commercial and industrial developments would not create a significant hazard to the public or the environment from accident conditions related to the routine transport, use, or storage of hazardous materials. The impact was determined to be less than significant.

Accidents involving hazardous materials that could pose a significant hazard to the public or the environment would be highly unlikely during the construction and long-term operation of the Project and are not reasonably foreseeable. As discussed above under Threshold "A", the transport, use, and handling of hazardous materials in the Project area during construction is a standard risk on all construction sites, and there would be no greater risk for upset and accidents than would occur on any other similar construction site. Upon buildout, the Project would operate as warehouse facilities. Based on the operational characteristics of warehouse distribution and light industrial centers, it is possible that hazardous materials could be used during the course of a future occupant's routine, daily operations; however, as discussed above under Threshold "A", the Project would be required to comply with all applicable local, State, and federal regulations related to the transport, handling, and usage of hazardous material. The Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65952.5. Further, the Phase I Environmental Site Assessment determined that no existing hazardous environmental conditions or materials occur at the Project site (Apex 2021).

Because the use of hazardous materials during construction and operation is expected to be common materials such as fuels, lubricants, cleaners, and since the construction and operation of a warehouse facility would not likely create a condition conducive to accidents or upset, the likelihood of having an

upset or accident whereby substantial amounts of hazardous materials are released into the environment is very low. Because of this, impacts are considered **less than significant, and no mitigation is necessary**.

Threshold C: Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

There are no existing or proposed schools within one-quarter mile of the Project area. The closest school is Val Verde Academy, located approximately 2 miles south of the Project site. Additionally, no schools are located along truck routes that would be used for the Project. As outlined above in Threshold A and B, the proposed construction and operation of the proposed warehouse would not involve the emissions or handling of hazardous materials and substances which would pose a hazard to people or the environment. Therefore, impacts are considered **less than significant and no mitigation is required** related to emissions of hazardous materials within one-quarter mile of a school.

Threshold D: Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result would it create a significant hazard to the public or the environment?

Based on review of the California Environmental Protection Agency (CalEPA) Cortese List Data Resources, the Project area is not located on any list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

According to the EDR Report included in the Phase I ESA Update (Appendix G.1 of this EIR), the Project area is not included on any regulatory agency database reports (Apex, 2021). The Project site is not located on a "Cortese" Hazardous Waste & Substances Sites List. (Apex 2021).

The Phase I ESA Update did not identify past operations on the Project site that could affect the listing of the site on a hazardous site list. Accordingly, a **less than significant impact** would occur.

Threshold E: For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the project area?

As previously identified, the nearest airport to the Project area is the MARB/IPA located approximately 0.1 miles to the northeast. The Project area is within the AIA and the City's AOZ. Safety of people and property on the ground near the MARB/IPA is of primary importance in achieving compatible land use. By limiting the number of people in a project area based on its proximity to the airport and the associated runway, the risk to these people is reduced. The safety zones and occupancy limits for the MARB/IPA are established in the 2014 MARB/IPA ALUCP.

Pursuant to the MARB/IPA ALUCP, the site is located within Compatibility Zone B2, which limits average intensity to 100 people per acre or 250 people/single acre and has no open land requirements. Pursuant to Appendix C, Table C-1, of the Riverside County ALUCP (RCALUCP) and the Additional Compatibility Policies included in Section 2.4(f) of the MARB/IPA ALUCP, the following rates were used to calculate the occupancy for the proposed Project:

Land Use	Occupancy Rate (Person/SF) ¹	Intensity Adjustments	Building Size (SF)	Occupancy (people)
Office	1 person/100	50% ²	20,000	100
Warehouse	1 person/500	35% ³	749,668	525
Total			769,668	625

Table 5.8-A – Building Average Land Use Intensity Calculation

1. Occupancy rates per RCALUCP Table C-1. Rates are shown for one person per square foot (SF).

 Section 2.4(f)(3) of the MARB/IPA ALUCP that states that offices within high-cube warehouses, distribution centers, and commerce centers and fulfillment centers, shall be evaluated on the basis of 50% of the usage intensity that results from the occupancy level indicated in Table C1

3. Section 2.4(f)(1) of the MARB/IPA ALUCP states that high-cube warehouses and distribution centers, other than e-commerce centers and fulfillment centers, shall be evaluated on the basis of 35% of the usage intensity that results from the occupancy level indicated in Table C1.

The Project Applicant proposes to construct a 769,668-square-foot high-cube warehouse building with mezzanines on 35.7 net acres, which includes 749,668 square feet of warehouse area and20,000 square feet of supporting office uses. The Project would accommodate a total occupancy of approximately 625 people, resulting in an average intensity of approximately 36 people per acre of the building area, which is less than the Compatibility Zone B2 average intensity criterion of 100 people per acre.

A second method for determining total occupancy involves multiplying the number of parking spaces provided or required (whichever is greater) by average vehicle occupancy (assumed to be 1.5 persons per vehicle and 1.0 for commercial vehicles). Based on the number of parking spaces provided (374 standard vehicles and 141 trailer spaces) the total occupancy would be estimated at 702 people for an average intensity of 21 people per acre, which is also less than the Compatibility Zone B2 average intensity criterion of 100 people per acre.

Compatibility Zone B2 also limits maximum single-acre intensity to 250 people. Based on the site plan and the occupancies as previously noted, the maximum single-acre area would include 33,560 square feet of warehouse area, 5,000 square feet of first floor office area, and 5,000 square feet of second floor office mezzanine area, resulting in a single acre occupancy of approximately 74 people which is consistent with the Compatibility Zone B2 single acre criterion of 250. Thus, the proposed Project would comply with the MARB/IPA ALUCP density requirements.

Although the proposed Project is consistent with the City's AOZ and therefore consistent with the land use designations of the MARB/IPA ALUCP, the Project is required to go through Airport Land Use Commission (ALUC) review and consistency determination because there is a legislative action (i.e., specific plan amendment) required for the circulation plan changes.

On March 10, 2022, the ALUC determined that the Project's proposed amendment to the PVCCSP, Development Plan Review, and Tentative Parcel Map are consistent with the MARB/IPA ALUCP subject to the following conditions listed below and included in Appendix G.2:

- 1. Any new outdoor lighting that is installed shall be hooded or shielded so as to prevent either the spillage of lumens or reflection into the sky. Outdoor lighting shall be downward facing.
- 2. The following uses/activities are not included in the proposed project and shall be prohibited at this site:
 - a. Any use or activity which would direct a steady light or flashing light of red, white, green, or amber colors associated with airport operations toward an aircraft engaged in an

initial straight or circling climb following takeoff or toward an aircraft engaged in a straight or circling final approach toward a landing at an airport, other than a DOD or FAA-approved navigational signal light or visual approach slope indicator.

- b. Any use or activity which would cause sunlight to be reflected towards an aircraft engaged in an initial straight or circling climb following takeoff or towards an aircraft engaged in a straight or circling final approach towards a landing at an airport.
- c. Any use or activity which would generate smoke or water vapor or which would attract large concentrations of birds, or which may otherwise affect safe air navigation within the area. (Such uses include landscaping utilizing water features, aquaculture, production of cereal grains, sunflower, and row crops, composting operations, wastewater management facilities, artificial marshes, trash transfer stations that are open on one or more sides, recycling centers containing putrescible wastes, construction and demolition debris facilities, fly ash disposal, and incinerators.)
- d. Any use which would generate electrical interference that may be detrimental to the operation of aircraft and/or aircraft instrumentation.
- e. Children's schools, day care centers, libraries, hospitals, skilled nursing and care facilities, congregate care facilities, hotels/motels, places of assembly (including but not limited to places of worship and theaters), buildings with more than 3 above-ground habitable floors, and critical community infrastructure facilities.
- f. Highly noise-sensitive outdoor nonresidential uses. Examples of noise-sensitive outdoor nonresidential uses that are prohibited include, but are not limited to, major spectator-oriented sports stadiums, amphitheaters, concert halls and drive-in theaters.
- g. Other Hazards to flight.
- 3. Prior to issuance of building permits, the landowner shall convey an avigation easement to the March Inland Port Airport Authority or its successor in interest, or provide evidence that such easement has been previously conveyed. The Airport Authority may waive this requirement in the event that the Authority determines that pre-existing avigation easements dedicated to the United States of America are sufficient to address its needs. Contact the March Joint Powers Authority at (951) 656-7000 for additional information.
- 4. The attached "Notice of Airport in Vicinity" shall be provided to all prospective purchasers and occupants of the property and be recorded as a deed notice.
- 5. The project has been conditioned to utilize underground detention systems, which shall not contain surface water or attract wildlife. Any other proposed basin would require review and approval by the ALUC. Any proposed stormwater basins or facilities shall be designed and maintained to provide for a maximum 48-hour detention period following the design storm, and remain totally dry between rainfalls. Vegetation in and around the basins that would provide food or cover for birds would be incompatible with airport operations and shall not be utilized in project landscaping. Trees shall be spaced so as to prevent large expanses of contiguous canopy, when mature. Landscaping in and around the basin(s) shall not include trees or shrubs that produce seeds, fruits, or berries.

Landscaping in the detention basin, if not rip-rap, should be in accordance with the guidance provided in ALUC "LANDSCAPING NEAR AIRPORTS" brochure, and the "AIRPORTS, WILDLIFE AND STORMWATER MANAGEMENT" brochure available at RCALUC.ORG which list acceptable plants from Riverside County Landscaping Guide or other alternative landscaping as may be recommended by a qualified wildlife hazard biologist.

Hazards and Hazardous Materials

Duke Warehouse at Patterson Avenue and Nance Street DEIR

A notice sign, in a form similar to that attached hereto, shall be permanently affixed to the stormwater basin with the following language: "There is an airport nearby. This stormwater basin is designed to hold stormwater for only 48 hours and not attract birds. Proper maintenance is necessary to avoid bird strikes". The sign will also include the name, telephone number or other contact information of the person or entity responsible to monitor the stormwater basin.

- 6. March Air Reserve Base must be notified of any land use having an electromagnetic radiation component to assess whether a potential conflict with Air Base radio communications could result. Sources of electromagnetic radiation include radio wave transmission in conjunction with remote equipment inclusive of irrigation controllers, access gates, etc.
- 7. Noise attenuation measures shall be incorporated into the design of the office areas of the building, to the extent such measures are necessary to ensure that interior noise levels from aircraft operations are at or below 45 CNEL.
- 8. The project has been evaluated for 769,668 square foot industrial warehouse building, including 751,668 square feet of warehouse area, 8,000 square feet of first floor office area, and 10,000 square feet of second floor office mezzanine area.² Any increase in building area, change in use to any higher intensity use, change in building location, or modification of the tentative parcel map lot lines and areas will require an amended review to evaluate consistency with the ALUCP compatibility criteria, at the discretion of the ALUC Director.
- 9. The project does not propose rooftop solar panels at this time. However, if the project were to propose solar rooftop panels in the future, the applicant/developer shall prepare a solar glare study that analyzes glare impacts, and this study shall be reviewed by the Airport Land Use Commission and March Air Reserve Base.
- 10. The Federal Aviation Administration has conducted an aeronautical study of the proposed project (Aeronautical Study No. 2021-AWP-20728-OE) and has determined that neither marking nor lighting of the structure(s) is necessary for aviation safety. However, if marking and/or lighting for aviation safety are accomplished on a voluntary basis, such marking and/or lighting (if any) shall be installed in accordance with FAA Advisory Circular 70/7460-1 M and shall be maintained in accordance therewith for the life of the project.
- 11. The proposed structures shall not exceed a height of 45 feet above ground level and a maximum elevation at top point of 1,539 feet above mean sea level.
- 12. The maximum height and top point elevation specified above shall not be amended without further review by the Airport Land Use Commission and the Federal Aviation Administration; provided, however, that reduction in structure height or elevation shall not require further review by the Airport Land Use Commission. The specific coordinates, frequencies, and power shall not be amended without further review by the Federal Aviation Administration
- 13. Temporary construction equipment used during actual construction of the structure(s) shall not exceed 45 feet in height and a maximum elevation of 1,539 feet above mean sea level, unless separate notice is provided to the Federal Aviation Administration through the Form 7460-1 process.

² Note the current site plan evaluated in this DEIR identifies the warehouse area is 749,668 square feet and the first floor office area is 10,000 square feet. This minor change required review and approval by ALUC's Director, which was received on August 23, 2022.
14. Within five (5) days after construction of the structure reaches its greatest height, FAA Form 7460-2 (Part II), Notice of Actual Construction or Alteration, shall be completed by the project proponent or his/her designee and e-filed with the Federal Aviation Administration. (Go to https://oeaaa.faa.gov for instructions.) This requirement is also applicable in the event the project is abandoned or a decision is made not to construct the applicable structure.

The proposed Project site is within the 60-70 CNEL aircraft noise contour (**Figure 5.11-2**). Since the proposed Project use is not a noise-sensitive land use, the proposed Project would not expose people working in the Project area to excessive noise levels from airport operations.

Based on the analysis presented above, and with incorporation of PVCCSP EIR mitigation measures **MM Haz 2** through **MM Haz 6**, identified in Section 5.8.2, the Project would not result in a conflict with any of the policies or requirements outlined in the MARB/IPA ALUCP. Because the ALUCP is intended to minimize potential hazards associated with the MARB/IPA, it is concluded that the Project would not result in a safety hazard for people residing or excessive noise for people working in the Project area. Accordingly, **impacts would be less than significant**.

Threshold F: Would the Project impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The City of Perris participates in the County of Riverside Multi-Jurisdictional Hazard Mitigation Plan (MHMP), which outlines requirements for emergency access and standards for emergency responses. The PVCCSP EIR Initial Study (Section 9, Hazards and Hazardous Materials) concluded that because emergency access would be maintained and improved throughout the PVCCSP area in accordance with the MHMP, development within the PVCCSP would not interfere with adopted emergency response plans.

As part of the Perris GP 2030 Safety Element Update adopted by the City in January 2022, the City's designed evacuation routes have been identified. (Perris GP SE, Figure S-1). Construction and operation of the Project will not affect these emergency evacuation routes.

Once the Project is constructed, emergency access to the Project site will be maintained via two driveways on Patterson Avenue. Access is also available via the Nevada Avenue driveway, which is intended exclusively for emergency access. Implementation of the circulation system pursuant to the PVCCSP would improve emergency access to the site and the area. Accordingly, operation of the Project would not impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan, and **no impact** would occur.

Threshold G: Would the Project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

The Project is not adjacent to any wildlands or undeveloped areas where wildland fires would be expected to occur, and the Perris GP 2030 does not designate the PVCCSP area as being at risk from wildfires. Also, according to the California Department of Forestry and Fire Protection (Cal Fire) the Project area is not located in a "Very High Fire Hazard Severity Zone" (CAL FIRE, 2009). No wildlands are located on the Project area and the Project area is surrounded by developed properties, paved roads, and maintained vacant sites. Accordingly, implementation of the Project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires. Impacts are considered **less than significant and no mitigation is necessary**.

Hazards and Hazardous Materials

5.8.6 Recommended Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures which could minimize significant adverse impacts (State *CEQA Guidelines*, Section 15126.4). Mitigation measures were evaluated for their ability to eliminate or reduce the potential significant adverse impacts to special-status species and loss of foraging habitat. The proposed Project will implement applicable and feasible PVCCSP EIR mitigation measures (**MM Haz 2** through **MM Haz 6**) listed in Section 5.8.2 as well as the following Project-specific mitigation measures to eliminate or reduce potentially significant impacts:

- **MM HAZ 1:** To avoid the exposure of construction workers to potentially contaminated soil during Project construction, prior to the issuance of a grading permit, the Project Applicant shall retain a qualified professional to collect a minimum of four (4) samples at a depth of 0- to 0.5-feet below ground surface in each quarter of the Project site and have them analyzed for organochlorine pesticides (OCPs) and metals. If the levels of OCPs and metals exceed applicable safety standards, a remediation plan shall be developed and implemented for worker soil handling safety purposes.
- **MM HAZ 2:** Prior to issuance of a grading permit, the Project Applicant shall perform an investigation of the Project site to confirm the presence or absence of a well on the Project site. If a well is determined to be present, the Project Applicant shall ensure said well is properly destructed and abandoned in accordance with the provisions of the California Department of Water Resources *Water Well Standards Part III. Destruction of Water Wells (available at https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Standards/Combined-Well-Standards/Water-Destruction).*

5.8.7 Summary of Environmental Effect After Mitigation Measures Are Implemented

Implementation of the proposed Project with incorporation of the mitigation measures identified above will reduce potential impacts to Hazards and Hazardous Materials within the Project site to less than significant.

5.9 Hydrology and Water Quality

The focus of the following analysis is whether the proposed Project will have potentially adverse impacts on water quality, drainage patterns, drainage systems, structures within a flood hazard, tsunami, or seiche zone, and groundwater supplies. Refer to Section 5.2 – Biological Resources for analyses of Project impacts to potentially regulable aquatic features.

Two comment letters related to hydrology and water quality were received in response to the Notice of Preparation (NOP): one comment from the Riverside County Flood Control & Water Conservation District (RCFC&WCD) and one comment from the Eastern Municipal Water District (EMWD). Copies of said comment letters are included in Appendix A.2 of this DEIR.

The RCFC&WCD requested in its email dated February 17, 2022 that "the DEIR should address impacts to MDP facilities within the proposed project area." The RCFC&WCD reminded the Applicant that, "any connection to District [RCFC&WCD] facilities or work in District rights-of-way or easement will require an encroachment permit from the District." Furthermore, "if an encroachment permit from the District will be required, please list the District as a Responsible Agency in the EIR..." The RCFC&WCD reminds the Applicant that RCFC&WCD would consider accepting ownership of any storm drains 36 inches or larger in diameter; though, they must be built to RCFC&WCD standards, with plan check and inspection required for acceptance.

The EMWD reminded the Applicant in its letter dated March 3, 2022 to consult with the EMWD's Development Services Department to "...compare proposed and existing water demands and sewer flows, and prepare a Design Conditions Report (DC)...to detail all pertinent facilities necessary [for the Project to be served], resulting in an approved DC, prior to final design and plan check of such facilities." The EMWD reminds the Applicant that dialogue should begin early in the site design process and they should set up a one-hour complimentary Due Diligence meeting, which would be followed by the DC preparation process.

In addition to the technical studies prepared for the Project that are found in Appendix H, the following references were used during the preparation of this section of the DEIR:

- Albert A. Webb Associates, *Duke Patterson and Nance, P21-00005, Preliminary Drainage Study*, April 2021, revised March 2022. (Included as Appendix H.1 to this DEIR.) [Cited as WEBB(a)]
- Albert A. Webb Associates, Project Specific Water Quality Management Plan, Duke Patterson & Nance, P21-00005, April 2021, revised March 2022. (Included as Appendix H.2 to this DEIR.) [Cited as WEBB(b)]
- California Regional Water Quality Control Board, Santa Ana Region. Water Quality Control Plan Santa Ana River Basin (aka "Basin Plan"). January 24, 1995, updated February 2016 to include approved amendments. (Available at <u>www.swrcb.ca.gov/rwqcb8/water issues/programs/basin plan/index.shtml</u>, accessed March 18, 2022.) [Cited as RWQCB(a)]
- City of Perris. *Perris Comprehensive General Plan 2030,* originally approved July 12, 2005. (Available at <u>https://www.cityofperris.org/departments/development-services/general-plan,</u> accessed March 18, 2022.) [cited as Perris GP 2030]

- City of Perris. *Perris Valley Commerce Center Specific Plan Amendment No. 12.* Approved January 10, 2012 and subsequently amended and approved January 11, 2022. (Available at https://www.cityofperris.org/departments/development-services/specific-plans, accessed March 18, 2022.) [Cited as PVCCSP]
- City of Perris. *Draft Environmental Impact Report for Perris Valley Commerce Center, SCH No.* 2009081086. July 2011. (Available at the City of Perris Planning Department.) [Cited as PVCCSP EIR]
- Dudek. Groundwater Sustainability Plan for the San Jacinto Groundwater Basin. September 2021. (Available at <u>https://www.emwd.org/sites/main/files/file-</u> <u>attachments/00 cover and table of contents.pdf?1633990715</u>, accessed March 18, 2022.) [Cited as Dudek 2021]
- Eastern Municipal Water District. *Water Supply Assessment Report for Patterson and Nance Project.* February 16, 2022 (included as Appendix H.3 to this DEIR). [Cited as WSA]
- Federal Emergency Management Agency, *National Flood Insurance Program Flood Insurance Rate Map Panel 1410 of 3805 (Map No. 06065C1410G)*, effective 28, 2008. (Available at https://msc.fema.gov/portal/home, accessed March 18, 2022.) [Cited as FIRM 2008].
- Federal Emergency Management Agency, *National Flood Insurance Program Flood Insurance Rate Map Panel 1430 of 3805 (Map No. 06065C1430H)*, map revised August 18, 2014. (Available at <u>https://msc.fema.gov/portal/home</u>, accessed March 18, 2022.) [Cited as FIRM 2014].
- Riverside County. *Rules and Regulations for Administration of Area Drainage Plans*. Adopted June 10, 1980 by Resolution no. 80-244. (Available at https://rcflood.org/Portals/0/Downloads/ADP Rules and Regulations 9-17-2019.pdf?ver=2020-03-06-115822-727, accessed March 18, 2022.)
- Riverside County. Ordinance No. 460, Regulating the Division of Land of the County of Riverside. As amended through Ordinance No. 460-152, effective 8/14/14. (Available at <u>http://www.rivcocob.org/ords/400/460.pdf</u>, accessed March 18, 2022.)
- Riverside County Flood Control and Water Conservation District. *Master Drainage Plan for the Perris Valley Area.* July 1987, revised June 1991. (Available at <u>http://rcflood.org/downloads/Master%20Drainage%20Plans/MDP_Reports/Zone%204/Perris%</u> <u>20Valley%20MDP.pdf</u>, accessed November 30, 2021.) [Cited as MDP 1991]
- Riverside County Flood Control and Water Conservation District. *Perris Valley Area Drainage Plan and Exhibit.* July 1987, revised June 1991. (Available at <u>http://www.floodcontrol.co.riverside.ca.us/Downloads/Area%20Drainage%20Plans/Updated/Re</u> <u>ports/Perris%20Valley%20ADP.pdf</u>, accessed March 18, 2022.) [Cited as ADP 1991]
- Riverside County Flood Control and Water Conservation District. Water Quality Management Plan: A Guidance Document for the Santa Ana Region of Riverside County. Approved October 22, 2012. (Available at <u>http://rcflood.org/NPDES/SantaAnaWS.aspx</u>, accessed March 18, 2022.) [Cited as WQMP Guidance]
- Riverside County Flood Control and Water Conservation District. Low Impact Development: Guidance and Standards for Transportation Projects for the Santa Ana Region Riverside County Co-Permittees. October 2012. (Available at <u>http://www.floodcontrol.co.riverside.ca.us/NPDES/LIDBMP.aspx</u>, accessed March 18, 2022.) [Cited as LID 2012]

- Southern California Geotechnical. *Geotechnical Investigation Proposed Warehouse, NEC Patterson Avenue and Nance Street, Perris, CA for Duke Realty. Project No. 20G239-3,* Updated December 13, 2021. (Included as Appendix F.1 of this DEIR) [Cited as SCG 2021]
- State Water Resources Control Board. Order No. 2009-0009-DWQ, NPDES No. CAS000002, National Pollutant Discharge Elimination System General Permit (and Waste Discharge Requirements) for Storm Water Discharges Associated with Construction and Land Disturbance Activities. Adopted September 2, 2009. (Available at <u>https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2009/wqo/wqo</u> 2009_0009_dwq.pdf, accessed April 11, 2022.) [Cited as CGP]
- State of California, Regional Water Quality Control Board, Santa Ana Region. Order No. R8-2010-0033, NPDES No. CAS 618033, National Pollutant Discharge Elimination System Permit and Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the Count of Riverside, and the Incorporated Cities of Riverside County within the Santa Ana Region, Area-Wide Urban Runoff Management Program. Adopted January 29, 2010. (Available at https://www.waterboards.ca.gov/santaana/board_decisions/adopted_orders/orders/2010/10_03_3_RC_MS4_Permit_01_29_10.pdf, accessed March 18, 2022.) [Cited as MS4]
- State of California, Department of Water Resources. Sustainable Groundwater Management Act 2019 Basin Prioritization Process and Results. (Available at https://data.cnra.ca.gov/dataset/13ebd2d3-4e62-4fee-9342-d7c3ef3e0079/resource/ffafd27b-5e7e-4db3-b846-e7b3cb5c614c/download/sgma_bp_process_document.pdf, accessed March 18, 2022.) [Cited as CASGEM]
- State of California, Department of Water Resources. *Sustainable Groundwater Management Act* (*SGMA*) *Portal* website. Available at <u>https://sgma.water.ca.gov/portal/#intro</u>, accessed March 18, 2022.) [Cited as SGMA]
- U.S. Environmental Protection Agency, *Basic Information about Nonpoint Source (NPS) Pollution* website. (Available at <u>https://www.epa.gov/nps/basic-information-about-nonpoint-source-nps-pollutionhttps://oceanservice.noaa.gov/education/kits/pollution/03pointsource.html</u>, accessed
 March 18, 2022.) [Cited as USEPA]

5.9.1 Setting

Generally, the area of the Perris Valley in which the Project site is located drains to the Perris Valley Storm Drain (PVSD), a regional man-made channel designed to collect and convey the stormwater runoff from a 100-year return frequency storm event. The PVSD conveys flow in a southerly direction to the San Jacinto River, which was dammed at Railroad Canyon in 1928 to create Canyon Lake (aka Railroad Canyon Reservoir). During the rare occasion that Canyon Lake overflows into the spillway/San Jacinto River channel, it flows into Lake Elsinore. In turn, on the rare occasion that Lake Elsinore overflows, it outlets into Temescal Wash, which flows to the Santa Ana River that ultimately outlets at the Pacific Ocean.

The San Jacinto River is the main drainage feature in the San Jacinto River watershed, in which the Project site is located, as shown in **Figure 5.9-1 – Watershed Map**. The headwaters of the San Jacinto River begin at Lake Hemet and flow north to Mystic Lake and then turn south toward Canyon Lake. For management purposes, it is divided into seven "reaches" or segments. The PVSD merges with Reach 3 of the San Jacinto River and Canyon Lake is considered Reach 2.

Hydrology and Water Quality

Duke Warehouse at Patterson Avenue and Nance Street DEIR

The Project site and surrounding area are generally flat with slopes at approximately 1.0% in a southwest to northeast direction. Existing elevations on the Project site range from approximately 1,499 feet above mean sea level (amsl) in the southwest corner to 1,486 feet amsl in the northeast corner. The existing drainage path of the Project site is characterized by sheet flows that follow the existing topography. (WEBB(a), p. 1-1) Currently, stormwater flows onto the southwest corner of the Project site from an offsite area of approximately 2 acres ("offsite run-on"), as shown in **Figure 5.9-2 – Existing Drainage Condition** (WEBB(b), p. 7).

The Project site is located within an area determined to be exempt from a requirement to match proposed flow rates to not more than existing flow rates; this is referred to as hydromodification requirement or hydrologic condition of concern (HCOC) (WEBB(b), p. 7).

Remainder of Page Intentionally Left Blank













Groundwater Basins

The Project site overlies the San Jacinto Groundwater Basin (DWR Basin No. 8-5), as defined by the California Department of Water Resources (DWR) (refer to **Figure 5.9-3 – Groundwater Basins**). The state has assigned this basin a priority ranking of "high" according to data assembled by the California Statewide Groundwater Elevation Monitoring (CASGEM) Program pursuant to Senate Bill X7-6 (2009).

The portion of the basin on which the Project site is located is not adjudicated.¹ However, pursuant to the Sustainable Groundwater Management Act of 2014 (SGMA), management of this basin will be done by the newly formed "West San Jacinto Groundwater Sustainability Agency (GSA)" led by EMWD. Their Groundwater Sustainability Plan (GSP) dated September 2021 is currently (2022) under review by DWR and the purpose of the plan is to outline how the non-adjudicated portions of the San Jacinto Basin will achieve sustainability by 2042.

For regulatory purposes regarding water quality, the Project site is located within the Perris-North Groundwater Management Zone (GMZ), as defined by the Santa Ana Regional Water Quality Control Board (RWQCB) 2016 Basin Plan Amendments. (RWQCB(a).)

The EMWD is the water supplier for the Project area and has prepared a Water Supply Assessment (WSA) for the Project pursuant to SB 610 (Appendix H.3). Some of the Project's water supply may come from local groundwater. As required by the EMWD's New Development Process, a Design Conditions Report (formally known as a Plan of Service) from the EMWD will be required before the EMWD can serve the Project.

Flood Hazard Area

Flood hazard mapping is an important part of the National Flood Insurance Program (NFIP), which is a program of the Federal Emergency Management Agency (FEMA). FEMA maintains and updates flood hazard and risk data through the Flood Insurance Rate Maps (FIRMs) and risk assessments. FEMA has mapped the expected flood hazard area of the PVSD for both the 1% annual chance (100-year) and 0.2% annual chance (500-year) storm events.

The approximate eastern half of the Project site can be found in FIRM No. 06065C1430H (effective 8/18/2014) and the western half is within FIRM No. 06065C1410G (effective 8/28/2008). Both maps identify the Project site as located within "Zone X" or, "Areas determined to be outside the 0.2% annual chance floodplain," as shown on **Figure 5.9-4 – Flood Insurance Rate Maps**.

¹ Adjudicated groundwater basins are those where the Court has defined water rights in a "Judgment," and provide Courtsupervised basin management by a Watermaster.



0 0.13 0.25 0.5 Miles







Hydrology and Water Quality

City of Perris

Water Quality and Drainage Infrastructure

Water quality may be impacted by point-source and nonpoint source discharges of pollutants. Common examples of point-source pollution include smokestacks and discharge pipes, which are typically regulated by waste discharge requirements. Nonpoint source pollution, on the other hand, comes from many diffuse sources such as stormwater runoff. Stormwater is considered the leading cause of pollution to surface water and groundwater and is generally regulated through the National Pollutant Discharge Elimination System (NPDES) permit system (EPA). Ideally, point and nonpoint source discharges that drain to the groundwater basin, San Jacinto River and Canyon Lake are regulated such that the quality of these receiving waters, and thus beneficial uses, are not impacted.

The types of pollutants commonly found in stormwater runoff coming from commercial and industrial developments include metals, nutrients, pesticides, sediment, toxic organic compounds (specifically, solvents), trash/debris, and oil/grease.² Likewise, parking lots are potential sources of bacterial indicators, metals, nutrients, pesticides, sediment, toxic organic compounds (specifically, petroleum hydrocarbons), trash and oil/grease. (WEBB(a), p. 20)

The Project site is located within the Perris Valley Commerce Center Specific Plan (PVCCSP) planning area of the City of Perris. The Project site is also located within the Master Drainage Plan for the Perris Valley Area (MDP 1991.) Developed and updated by the RCFC&WCD, the MDP outlines a master drainage plan for ultimate development, or "buildout" of the area. Since the area has not reached buildout conditions, the stormwater drainage systems in the valley are in differing stages of interim and ultimate designs.

The Perris Valley MDP identifies Lateral B-6 to be built along Patterson Avenue and former Oleander Avenue (now Harley Knox Boulevard), as well as Lateral B-6.1 to be built within Nevada Avenue. Some of the Perris Valley MDP facilities required an updated design to meet the development goals of the PVCCSP (PVCCSP, p. 3.0-27). However, neither Lateral B-6 nor Lateral B-6.1 were identified in the PVCCSP for design changes.

5.9.2 Related Regulations

Federal Regulations

The federal Clean Water Act is addressed under State Regulations. There are no other federal regulations related to Hydrology and Water Quality.

State Regulations

Clean Water Act and Porter-Cologne Water Quality Control Act

The Federal Water Pollution Control Act, more commonly known as the Clean Water Act (CWA), requires all states to conduct assessments of water quality to identify water bodies that do not meet water quality standards. In California, the CWA is implemented by the State Water Resources Control Board, and nine Regional Water Quality Control Boards (RWQCB). The California Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code) authorizes the oversight of regulatory activities within each RWQCB basin. The Project site is located in "Region 8", or the Santa Ana RWQCB. Each RWQCB develops its own Water Quality Control Plan, or "Basin Plan," which establishes both the "beneficial"

² If the proposed land use would involve animal waste, bacterial indicators would also be likely. Nutrients, pesticides, and sediment are potential pollutants seeing that non-native landscaping currently exists on the Project site.

uses" of specific waterbodies and the levels of quality (or "water quality objectives") that must be met and maintained to protect those uses. Beneficial uses are all the various ways that water can be used for the benefit of people and/or wildlife. A total of 23 beneficial uses are defined statewide, of which 19 beneficial uses are recognized within the Santa Ana Region. (RWQCB(a), p. 3-2.) Each Reach of the San Jacinto River and the local groundwater basins have assigned beneficial uses, which are threatened or lost when water quality objectives are violated. Together, beneficial uses and water quality objectives make up the water quality standards. See **Table 5.9-A – Constituents and Beneficial Uses for Receiving Waters** and **Table 5.9-B – Numeric Water Quality Objectives for Receiving Waters** on the following pages.

The Project site is located within the Perris-North Groundwater Management Zone, as defined by the Santa Ana RWQCB 2016 Basin Plan Amendments. (RWQCB(a).)

Remainder of Page Intentionally Left Blank

Hydrology and Water Quality

Duke Warehouse at Patterson Avenue and Nance Street DEIR

Table 5.9-A – Constituents and Be	neficial Uses for Receiving Waters
-----------------------------------	------------------------------------

Receiving Water		303(d) List Constituents	TMDL Constituents	Beneficial Uses ^a	
Perris-No Managen	is-North Groundwater agement Zone			MUN, AGR, IND, PROC	
San Jacinto River, Reach 3				Intermittent: AGR, GWR, REC1, REC2, WARM, WILD (excepted from MUN)	
Canyon Lake		Nutrients, Pathogens	Nutrients, Pathogens	MUN, AGR, GWR, REC1, REC2, WARM, WILD	
		Definitions o	f Beneficial Uses ^a		
MUN	Municipal and domestic supply waters are used for community, military, municipal or individual water supply systems. These uses may include, but are not limited to, drinking water supply.				
AGR	Waters are used for farming, horticulture or ranching. Uses may include, but are not limited to, irrigation, stock watering, and support of vegetation for range grazing.				
IND	Industrial service supply waters are used for industrial activities that do not depend primarily on water quality, including mining, cooling water supply, gravel washing, and fire protection.				
PROC	Like IND, industrial process supply waters are used for industrial activities that do not depend primarily on water quality, and include process water supply, product manufacturing and food preparation.				
GWR	Groundwater recharge waters, used for natural or artificial recharge of groundwater for purposes that may include future extraction, maintaining water quality, or halting saltwater intrusion in freshwater aquifers.				
REC1	REC1 Water contact recreation waters, used for recreational activities involving body contact with water where ingestion of water is reasonably possible. Uses may include swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, and use of natural hot springs.				
REC2	EC2 Non-contact water recreation waters, used for recreational activities involving proximity to water, but not normally involving body contact with water where ingestion of water would be reasonably possible. These uses may include picnicking, sunbathing, hiking, beachcombing, camping, boating, sightseeing, and aesthetic enjoyment in conjunction of the above activities.				
WARM	Warm freshwater habitat waters support warm water ecosystems that may include preservation and enhancement of aquatic habitats, vegetation, fish and wildlife, including invertebrates.				
WILD	Wildlife habitat waters support wildlife habitats that may include the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife.				

Notes:

a RWQCB(a) (chapter 3 updated February 2016 to include approved amendments), Table 3-1, p. 3-25; definitions adapted from pp. 3-2 – 3-3. "Intermittent" beneficial uses are so designated because water conditions do not allow the beneficial use to occur year-round. Waste discharges that could impair intermittent beneficial uses, whether they are made while those uses occur or not, are not permitted. (RWQCB(a), p. 3-21.)

The Basin Plan outlines both narrative and numeric water quality objectives to protect beneficial uses of identified surface waters and groundwater. Narrative objectives apply to all surface waters within the region. (RWQCB(a), p. 4-6.) In addition, certain numeric objectives listed in **Table 5.9-B – Numeric Water Quality Objectives for Receiving Waters** have been developed. When more than one objective is applicable, the stricter shall apply.

	Water Quality Objectives (mg/L) ^a						
Water Body	Total Dissolved Solids	Hardness	Sodium	Chloride	Total Inorganic Nitrogen	Sulfate	Chemical Oxygen Demand
Perris-North Groundwater Management Zone	570				5.2 (nitrate as nitrogen)		
San Jacinto River, Reach 3	820	400		250	6		15
Canyon Lake	700	325	100	90	8	290	

Table 5.9-B – Numeric Water Quality Objectives for Receiving Waters

Notes:

(a) RWQCB(a) (chapter 4 updated February 2016 to include approved amendments), Table 4-1.

Pursuant to CWA Section 303(d), water bodies that fail to meet certain water quality standards are placed on a list of impaired waters. Canyon Lake was placed on the 303(d) list of impaired waters in 1998 for two pollutants coming from nonpoint sources: nutrients (phosphorus and nitrogen) and pathogens (fecal coliform and E. coli). Once listed, the RWQCB develops a Total Maximum Daily Load (TMDL) that addresses each pollutant causing the impairment. The TMDL defines how much of a pollutant a waterbody can tolerate and still meet water quality standards. The Canyon Lake Nutrient TMDL was adopted by the USEPA in 2005 and is currently in the implementation phase and includes Lake Elsinore. The TMDL for bacterial indicators in Canyon Lake is still in the development stage.

The CWA prohibits the discharge of pollutants to waters of the United States unless the discharge is in compliance with a NPDES permit. Some of the NPDES permits are managed on a statewide basis by the State Water Resources Control Board (i.e., General Permits), including the General Industrial Activities Stormwater Permit and the General Construction Activity Stormwater Permit. In addition, the State Board issues two statewide municipal permits for Caltrans-managed storm sewer systems and Municipal Separate Storm Sewer Systems (MS4).

The statewide General Construction Activity Stormwater Permit (Order 2009-0009-DWQ) applies to construction sites that disturb one or more acres of soil, or construction projects less than one acre but are part of a larger common plan of development. The primary requirement of the general construction permit is development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer (QSD) and implemented/monitored onsite by a certified Qualified SWPPP Practitioner (QSP). The purpose of the SWPPP is to apply appropriate and effective sediment and erosion control Best Management Practices (BMPs) to reduce or eliminate pollutants in stormwater runoff. BMPs can include source control methods such as site housekeeping and secondary containment structures, as well as detention basins for capture and containment of sediments; use of silt fencing, sandbags, and/or straw bales.

The statewide General Industrial Activities Stormwater Permit (Order 2014-0057-DWQ) regulates postconstruction discharges associated with ten federally defined categories of industrial activities based on Hydrology and Water Quality

Duke Warehouse at Patterson Avenue and Nance Street DEIR

the appropriate SIC code. This permit also requires certain BMPs, a site-specific SWPPP and monitoring plan. The Santa Ana RWQCB also adopted a sector-specific general permit specifically for metal scrap recyclers within the Santa Ana River Watershed, which includes the Perris Valley. (Order R8-2012-0012.)

The MS4 permit program regulates all stormwater discharges from municipal storm drains, including the City of Perris. The Santa Ana RWQCB oversees three MS4 permits: one each for Orange, Riverside, and San Bernardino Counties. The Riverside County MS4 permit (Order RB8-2010-0033) requires the principal permittee (RCFC&WCD) and co-permittees (County of Riverside and cities, including the City of Perris) to develop several items that generally reduce pollutants in urban runoff to the Maximum Extent Practicable (MEP).³ This includes "Local Implementation Plans" describing the enforceable elements of an agency's urban runoff compliance program, as well as a "Watershed Action Plan" and "Hydromodification Management Plan" to address impacts from urbanization. Likewise, a "Drainage Area Management Plan" is periodically updated by the principal permittee to document MS4 permit compliance programs and to provide guidance to co-permittees for Local Implementation Plans. The principal permittee also developed a "Comprehensive Nutrient Reduction Plan" to identify specific actions that Permittees will perform to achieve compliance with the Lake Elsinore and Canyon Lake Nutrient TMDL. In addition, the "Consolidated Monitoring Program" defines the monitoring locations and methods to evaluate BMP effectiveness. Lastly, the MS4 permit requires a "Water Quality Management Plan" (WQMP) for most new development and certain redevelopment projects. Like the construction SWPPP, the WQMP identifies how site design elements, source control methods and treatment control BMPs in the post-construction phase will minimize pollutant loads to the municipal storm drain in the long-term.

Qualifying projects submitted to the City of Perris are required to provide a project specific WQMP prior to the first discretionary project approval or permit. Project Applicants may submit a preliminary project specific WQMP for discretionary project approval (i.e., land use permit); however, a final version would be submitted for review and approval prior to the issuance of any grading or building permits.

Senate Bill 610 – Water Supply Assessments

SB 610, effective January 1, 2002, requires an assessment of whether available water supplies are sufficient to serve the demand generated by a proposed project, as well as the reasonably foreseeable cumulative demand in the region over the next 20 years under average normal year, single dry year, and multiple dry year conditions. Under SB 610, a Water Supply Assessment (WSA) must be prepared in conjunction with the land use approval process associated with a project and is required for any "project" that is subject to CEQA and meets certain criteria relative to size. Proposed industrial, manufacturing, processing plant, or industrial park planned to house more than 1,000 persons,

³ The term, Maximum Extent Practicable (or MEP) comes from the federal Clean Water Act, Section 402(p)(3)(B). The MEP standard involves applying BMPs that are effective in reducing the discharge of pollutants in storm water runoff. In discussing the MEP standard, the State Board has said the following: "There must be a serious attempt to comply, and practical solutions may not be lightly rejected. If, from the list of BMPs, a permittee chooses only a few of the least expensive methods, it is likely that MEP has not been met. On the other hand, if a permittee employs all applicable BMPs except those where it can show that they are not technically feasible in the locality, or whose cost would exceed any benefit to be derived, it would have met the standard. MEP requires permittees to choose effective BMPs, and to reject applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the cost would be prohibitive." (Order WQ 00-11, p.20).

occupying more than 40 acres of land, or having more than 650,000 square feet of floor area require a WSA by the water supplier.

Sustainable Groundwater Management Act of 2014

The Sustainable Groundwater Management Act of 2014 (SGMA) requires for the first-time statewide groundwater management for the purpose of bringing groundwater basins into balanced levels of pumping and recharge. Groundwater Sustainability Agencies are created to create Groundwater Sustainability Plans for each high- and medium-priority basin, as ranked by DWR. GSPs are detailed road maps for how groundwater basins will reach long term sustainability. Under SGMA, these basins should reach sustainability within 20 years of implementing their sustainability plans (2042).

Urban Water Management Planning Act

The Urban Water Management Planning Act (UWMP Act) (California Water Code Section10610 et. seq.) was enacted in 1983 and applies to municipal water suppliers, such as the EMWD, that serve more than 3,000 customers or provide more than 3,000 acre-feet per year (AFY) of water. The UWMP Act requires these suppliers to prepare and update their Urban Water Management Plan (UWMP) every five years to demonstrate an appropriate level of reliability in supplying anticipated short-term and long-term water demands during normal, single-dry, and multiple-dry years.

Regional Drainage

Perris Valley Master Drainage Plan and Perris Valley Area Drainage Plan

The RCFC&WCD (or District) adopted the Perris Valley MDP and the Perris Valley Area Drainage Plan (July 1987, revised June 1991), the boundaries of which include the Project site. According to the District, the primary responsibility for the design and construction of all Area Drainage Plan (ADP) facilities lies with the District so that the maximum control and accountability for costs accruing to the ADP funds can be maintained. The following criteria will be applied by the District Chief Engineer to assist in the evaluation of the engineering and administration responsibility for construction contracts related to the proposed Project storm drain connections: (1) design responsibility for major facilities, including channels, retention basins, and storm drains with diameters of more than 60 inches will be designed by the District (or through private engineering contracts administered by the District), unless otherwise authorized in writing by the Chief Engineer; (2) local facilities and lateral storm drains with diameters of 60 inches or less will normally be designed by the developer's engineer using District standards, providing that the Chief Engineer has authorized the developer (in writing) to proceed in this manner.

Since the Project site is located within the Perris Valley ADP, development proponents will be subject to applicable ADP fees. ADP fees are paid at the time of tentative map recordation, unless deferred by the developer to the grading permit or building permit stage. The actual ADP fee paid by developments may be less than the current fee amount per acre, due to credits for drainage infrastructure previously constructed or drainage facilities constructed, as part of development proposals. On the other hand, the fee amount may be greater at the discretion of the City. Although the ADP fee is established for subdivisions, Riverside County's *Rules and Regulations for Administration of Area Drainage Plans* provides for the payment of ADP fees for other discretionary land uses when a determination has been made that the approved land use will increase runoff which may require earlier construction of downstream Area Drainage Plan facilities (pursuant to Riverside County Ordinance No. 460).

Local Regulations

Perris Comprehensive General Plan 2030

The following are applicable goals and policies from the Perris Comprehensive General Plan (Perris GP 2030) related to impacts from hydrology and water quality:

Conservation Element

Goal II	Preservation of areas with significant biotic communities.	
Policy II.A	Comply with state and federal regulations to ensure protection and preservation of significant biological resources.	
Measure II.A.3	For those public and private projects that are also subject to federal or State approval with respect to impacts to the Waters of the U.S. and/or Streambeds, require evidence of completion of the applicable federal permit process prior to the issuance of a grading permit.	
Goal V	Provide an adequate water supply to support existing and future land uses, as anticipated in the Land Use Element.	
Policy V.A	Coordinate land-planning efforts with local water purveyors.	
Measure V.A.1	Work with Eastern Municipal Water District to ensure that development does not outpace projections consistent with Eastern Municipal Water District's Urban Water Management Plan.	
Measure V.A.2	Require use of new technologies and water conserving plant materials for landscaping.	
Measure V.A.3	Participate with the Eastern Municipal Water District to develop and implement water conservation programs and to encourage use of water conserving technologies.	
Goal VI	Achieve regional water quality objectives and protect the beneficial uses of the region's surface and groundwater.	
Policy VI.A	Comply with requirements of the National Pollutant Discharge Elimination System (NPDES).	
Measure VI.A.1	Adopt a Stormwater Ordinance per Santa Ana Regional Area Management Plan (DAMP) requirements for stormwater management and discharge control.	
Measure VI.A.2	Evaluate the Planning Department's CEQA implementation procedures to ensure adequate consideration of water quality impacts and mitigation measures as part of Initial Studies/Mitigated Negative Declarations and Environmental Impact Reports.	

City of Perris		Section 5.9
Duke Warehouse at F	Patterson Avenue and Nance Street DEIR	Hydrology and Water Quality
Measure VI.A.3	Prior to issuance of any grading permit involving a distroit of land requires proof of a RWQCB San Jacinto Waters Permit ⁴ and a Storm Water Pollution Prevention Plan.	urbance of one or more acres shed Construction Activities
Measure VI.A.4	Review water quality impacts during the project review ensure that appropriate BMPs are incorporated into the term operations.	and approval phases to e project design and long-
Measure VI.A.5	In accordance with the Riverside County NPDES, enac Management Plan to review and regulate new develop	t a Water Quality ment approvals.
Measure VI.A.6	Continue to fulfill the City's obligation as Co-Permittee permit for Riverside County.	under the [MS4] NPDES
Goal VIII	Create a vision for energy and resource conservation a design for the City which provides for the protection of improving the quality of life and promoting sustainabilit	nd the use of green building the environment while y.
Policy VIII.A	Adopt and maintain development regulations, which er conservation.	ncourage water and resource
Measure VIII.A.2	Use indigenous and/or drought-resistant planting and e with smart controls in all new and refurbished commerce development projects. Also, restrict use of turf to 25% areas.	efficient irrigation systems cial and industrial or less of the landscaped
Measure VIII.A.4	Use gray water, and water-conserving appliances and commercial and industrial developments.	fixtures within all new
Measure VIII.A.5	Use permeable paving materials within developments t promote natural filtering of precipitation and irrigation v	to deter water runoff and waters.
Measure VIII.A.7	Create and maintain reclaimed water systems to provid irrigation of municipal and commercial landscaping.	de reclaimed water for
Land Use Element		
Goal II	New development consistent with infrastructure capac capabilities.	ity and municipal services
Policy II.A	Require new development to pay its full, fair-share of ir	nfrastructure costs.
Measure II.A.1	Prepare and adopt a revised Area Drainage Plan includ detentions basins capable of serving contributory areas	ling "regional" stormwater s of at least 100 acres.

⁴ The San Jacinto Watershed Construction Activities Permit expired January 1, 2006. Permittees, developers, and engineers under this Order were notified November 23, 2005 to obtain coverage under the Statewide Construction General Permit. All proposed and ongoing construction activities under the San Jacinto watershed should now be covered by the General Permit.

Section 5.9	City of Perris
Hydrology and Water Q	uality Duke Warehouse at Patterson Avenue and Nance Street DEIR
Safety Element	
Goal S-2	A community designed to effectively respond to emergencies and ensure the safety of residents and businesses.
Policy S-2.2	Require new development or major remodels include backbone infrastructure master plans substantially consistent with the provisions of "Infrastructure Concept Plans" in the Land Use Element.
Measure S-2.4b	Revise the development impact fee program to fully fund all infrastructure construction and improvements identified as attributable to new development.
Goal S-4	A community where the potential impacts associated with flood-related hazards are minimized.
Policy S-4.1	Restrict future development in areas of high flood hazard potential until it can be shown that risk is or can be mitigated.
Policy S-4.3	Require new development projects and major remodels to control stormwater run- off on site.
Policy S-4.4	Require flood mitigation plans for all proposed projects in the 100-year floodplain (Flood Zone A and Flood Zone AE).
Policy S-4.5	Ensure areas downstream of dams within the City are aware of the hazard potential and educated on the necessary steps to prepare and respond to these risks.
Measure S-4.2b	Periodically update the Master Drainage Plan Fees to fund drainage improvements.

PVCCSP Standards and Guidelines and Mitigation Measures

The proposed Project site is within the PVCCSP and is therefore subject to the design guidelines of the PVCCSP. The PVCCSP includes Standards and Guidelines relevant to water quality site design features (on pages 4.0-17, 7.0-6, and 8.0-3), and storm drain standards and guidelines (page 5.0-17). The Standards and Guidelines summarized below are incorporated as part of the proposed Project and are assumed in the analysis presented in this section. The chapters/section numbers provided below correspond to the PVCCSP chapters/sections.

On-Site Design Standards and Guidelines (from Chapter 4.0 of the PVCCSP)

4.2.2.7 Water Quality Site Design

General Standards - Refer to NPDES Permit Board Order R8-2010-0033 for complete and current information on water quality management standards. Current requirements can be obtained by visiting the Riverside County Flood Control website at http://rcflood.org/NPDES/SantaAnaWS.aspx specifically to review the current WQMP Manual and the Low Impact Development Manual.

Water Quality Management Plan – Prepare a WQMP in accordance with the Riverside County MS4 NPDES Permit. Receive approval from the City of Perris on the WQMP. The MS4 Permit requires that applicable new development and redevelopment project: (i) design the site to minimize

imperviousness, detain runoff, and infiltrate, reuse or evapotranspirate runoff where feasible; (ii) cover or control sources of stormwater pollutants; (iii) use LID to infiltrate, evapotranspirate, harvest and use, or treat runoff from impervious surfaces; (iv) ensure runoff does not create a hydrologic condition of concern; and (v) maintain Stormwater BMPs.

Low Impact Design - As stated in the Riverside County LID Manual, when LID is implemented correctly on a site, it provides two primary benefits: 1) hydromodification flows are managed across the site and 2) expected pollutants are reduced in the remaining runoff. The NPDES Permit requires that the design capture volume be first infiltrated, evapotranspirated, or harvested and reused. When such retention methods are infeasible, the remainder of the volume can be biotreated.

Source Control - Source Control features are also required to be implemented for each project as part of the Final WQMP. Source Control Features are those measures which can be taken to eliminate the presence of pollutants through prevention.

BMP Features in "Visibility Zone" - Sites that necessitate the placement of Water Quality BMPs adjacent to public rights-of-way shall follow the landscaping requirements of the Specific Plan. Treatment control BMP's adjacent to the public right-of-way must drain properly to adequate storm drain facilities. If no storm drain is available, alternative drainage shall be proposed for approval by City Engineer. Treatment control BMPs are not to be placed within public right-of-way.

The following elements shall be considered and/or required in site design pursuant to the PVCCSP (page 4.0-23):

- Open Jointed Surfaces for Sidewalks
- Open Jointed Surfaces in Low Traffic Areas
- Filter Strips
- Filter Strip Adjoining Impervious Surfaces
- Roof Runoff Discharge into Landscape Area
- Second Treatment of Roof Water
- Covered Trash Enclosures

Commercial and Industrial Design Standards and Guidelines (from Chapters 7.0 and 8.0 of the PVCCSP)

Runoff From Truck Docks - Runoff from truck docks must be treated for pollutants of concern prior to discharge from the site.

Truck-wells - Truck-wells are discouraged due to potential clogging of sump-condition storm drain inlets. If used, run-off-needs to run through landscape before discharging from site.

Off-Site Design Standards and Guidelines (from Chapter 5.0 of the PVCCSP)

5.4.4 Storm Drain Standards and Guidelines

Riverside County Flood Control and Water Conservation District Standard - Drainage and flood control facilities shall be provided in accordance with the City of Perris standards which are based on Riverside County Flood Control and Water Conservation District Standards.

Collect and Discharge Storm Water - Storm drain facilities shall be designed to collect and discharge storm water runoff without damage to streets or adjacent properties.

FEMA Floodplain - All projects within a designated FEMA Floodplain should adhere to all local and federal ordinances for developing within a FEMA Floodplain.

San Jacinto River - The intent of the San Jacinto River Plan is to achieve a balance between resource protection and reasonable economic development by creating higher development standards for projects posing potential impacts to the San Jacinto River. Once the Perris Valley Master Drainage Plan has been updated, projects will be required to meet these guidelines. In the meantime, all projects shall adhere to the adopted interim development criteria for the San Jacinto River.

On-site Retention - Installation of a nuisance storm drain line within landscaped median is required where possible or where storm drain is available.

Perris Valley Commerce Center Specific Plan EIR

There are no mitigation measures for hydrology/water quality included in the PVCCSP EIR.

Perris Municipal Code

- Chapter 14.22 *Stormwater/Urban Runoff Management and Discharge Control*, Section 14.22.020 *Purpose and Intent.* The purpose of this chapter is to ensure the environmental protection and public health, safety, and general welfare of City residents by:
 - A. Prohibiting non-stormwater discharges into the stormwater conveyance system;
 - B. Eliminating discharges into the stormwater conveyance system from spills, dumping, or disposal of materials, other than stormwater or permitted or exempted discharges;
 - C. Reducing pollutants in stormwater discharges, including those pollutants taken up by stormwater as it flows over urban areas (urban runoff), to the maximum extent practicable; and
 - D. Reducing pollutants in stormwater discharges to achieve applicable water quality objectives for receiving waters within the City and Santa Ana River Watershed.

The intent of this chapter of the Perris Municipal Code is to protect and enhance the water quality of the City of Perris water courses, water bodies, groundwater, wetlands, and regional receiving waters in a manner pursuant to and consistent with the Federal CWA (33 U.S.C. Section 1342), and California RWQCB NPDES Order No. R8-2010-0033 (NPDES No. CAS 618033) and any amendment, revision, or re-issuance thereof. (Ord. 1194 Section 3(part), 2006.)

5.9.3 Design Considerations

The hydrology and water quality design considerations required by the PVCCSP are described above under "Local Regulations," which include complying with NPDES Order No. R8-2010-0033 (MS4 permit) in the form of a City-approved WQMP that incorporates LID principles when feasible and source control features, as well as consistency with City and RCFC&WCD standards.

In addition to the design considerations required by the PVCCSP, the Project includes construction of offsite and onsite drainage facilities. Refer to **Figure 5.9-5 – Proposed On-Site Drainage Facilities** for on-site facilities. Six offsite drainage facilities will be constructed as part of the Project consistent with Perris Valley MDP and PVCCSP. Refer to **Figure 5.9-6 – Proposed Off-Site Drainage Facilities**.

- 790 linear feet of MDP Lateral B-6 within Patterson Avenue (48-inch diameter),
- 40 linear feet of Lateral B-6-1 in Patterson Avenue (24-inch diameter) with inlet,
- 35 linear feet of Lateral B-6-2 in Patterson Avenue (18-inch diameter),
- 40 linear feet of Lateral B-6-3 in Patterson Avenue (30-inch diameter) with inlet; and
- 800 linear feet of MDP Lateral B-6.1 in Nevada Avenue (48-inch diameter). (WEBB(a), pp. 3-4, 3-5)
- Approximately 900 linear feet of MDP Lateral-B Stage 4 extension between the Lateral-B Stage 4 stub out and the existing facility in Patterson Avenue.

MDP Lateral B-6 in Patterson Avenue is designed to convey the ultimate condition flow rates and is a necessary component of the Project to flood-protect the Project site from the offsite, upstream tributary area between Patterson Avenue and Interstate 215. Laterals B-6-1, B-6-2, and B-6-3 stem off of Lateral B-6 and they will be designed for the interim condition with the expectation that the offsite tributary areas that will drain to them will connect in the future to Lateral B-6 via future additional connections when those properties are fully developed. Construction of MDP Lateral B-6.1 in Nevada Avenue is necessary to drain the runoff generated on the Project site. MDP Lateral B-6 in Patterson Avenue and Lateral B-6.1 in Nevada Avenue will both convey flows to the existing Caltrans reinforced concrete box (RCB) storm drain (8-feet wide and 7-feet high to 8-feet wide and 6-feet high) located parallel to Harley Knox Boulevard. The Caltrans RCB outlets to the PVSD approximately 2 miles to the east. (WEBB(a), pp. 1-2, 3-4, 3-5)

Additionally, the proposed Project Applicant will be responsible for the construction of the offsite lateral extension between the Lateral B Stage 4 stub out and the existing Caltrans RCB, across APN(s) 294-220-007 and/or -010 to the existing Caltrans RCB where it turns south along Patterson Avenue. This connection will allow the Caltrans RCB to have capacity for unrestricted runoff from MDP Lateral-B6 and -B6.1 under ultimate conditions. This lateral extension was evaluated under CEQA by RCFC&WCD in the 1991 Perris Valley Master Drainage Plan Initial Study and Negative Declaration (State Clearinghouse No. 91042072) (hereinafter referred to as the 1991 PV MDP CEQA). The 1991 PV MDP and the 1991 PV MDP CEQA document were approved on June 11, 1991 and are incorporated by reference.

Within the Project site, two storm drain lines will be constructed: Line 1 and Line 2. Line 1 will be 1,700 linear feet of 24 to 36-inch diameter to collect all runoff from the northern half of the Project site. Line 2

will be 1,940 linear feet of 27 to 36-inch diameter storm drain to collect all runoff from the southern half of the Project site. Both Line 1 and Line 2 are sized to convey the 100-year flow rate and both will convey flows to an underground detention chamber system located onsite. The underground detention system (underground "chambers") will fully store the water quality volume from the Project via proposed Lines 1 and 2. The chambers will have an emergency outlet capable of bypassing the peak 100-year flow rate (WEBB(a), p. 3-4). A pump will be used to convey the water quality volume held in the chambers into a Contech® Filterra Bioscape[™] modular wetland for treatment and discharge into proposed MDP Lateral B-6.1 in Nevada Avenue via 350 linear feet of maximum 42-inch diameter storm drain line. The modular wetland provides the equivalent of "bioretention" treatment and can treat the water quality volume. Flows in excess of the water quality volume will bypass the modular wetland treatment and exit the site directly into Lateral B-6.1 within Nevada Avenue. (WEBB(b), p. 7).

In addition to Line 1 and Line 2, the Project will construct an onsite West Collector Channel to convey offsite run-on coming onto the Project site from three corrugated metal pipe culverts currently located under Patterson Avenue. The West Collector Channel will be 280 linear feet, 2-feet deep at 2:1 side slope with a 4-foot bottom width totaling 6,330 square feet and will convey flow directly to MDP Lateral B-6 via Lateral B-6-2. (WEBB(a), p. 3-4)

The proposed drainage facilities and water quality treatment system are consistent with the design standards of the PVCCSP.

Remainder of Page Intentionally Left Blank



Source: DPR 21-00005, 3-16-2022



5.9-5 – Proposed On-site Drainage Facilities

Duke Warehouse at Patterson Avenue and Nance Street





Figure 5.9-6 – Proposed Off-site Drainage Facilities



Duke Warehouse at Patterson Avenue and Nance Street



0 125 250 500 Feet

5.9.4 Thresholds of Significance

The City of Perris has not established local CEQA significance thresholds and instead, defers to the Thresholds of Significance identified in State CEQA Guidelines Appendix G. Impacts related to this Project may be considered potentially significant if the proposed Project would:

- Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.
- Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
 - (1) Result in substantial erosion or siltation on- or off-site;
 - (2) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
 - (3) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or
 - (4) Impede or redirect flood flows.
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to provide inundation.
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

5.9.5 Environmental Impacts Before Mitigation

Threshold A: Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

Construction

Construction of the proposed Project would have the potential to result in discharges from soil disturbances that could violate water quality standards if not adequately addressed. The Project would be required to comply with the NPDES Statewide General Construction Permit (Order No. 09-09-DWQ), which also includes Waste Discharge Requirements (WDRs) for discharges of storm water runoff associated with construction and land disturbance activities. The permit requires preparation of an effective SWPPP, which describes erosion and sediment control BMPs to prevent stormwater pollution during construction. The SWPPP must be prepared by a Qualified SWPPP Developer and implemented onsite by a Qualified SWPPP Practitioner. (CGP, pp. 32-33.) The Project is anticipated to be a "Risk Level 1" construction site according to the General Construction Permit (p. 34 and Attachment C). Risk Level 1 requirements include the following:

- Narrative (and not numeric) effluent standards;
- Good Site Management or "housekeeping" measures for construction materials, waste management, vehicle storage and maintenance, landscape materials, and potential pollutant sources;

- Non-Storm Water Management;
- Erosion Control;
- Sediment Controls;
- Run-On and Runoff Controls;
- Inspection, Maintenance and Repair;
- Construction Site Monitoring Program:
 - Visual inspections for non-storm water discharges (quarterly), pre-storm event (baseline), daily during qualifying storm events of BMPs, and post-storm; and
- Provide documentation in Annual Report and pay annual fee.
- Terminate permit coverage when the site is proven 70% stabilized with photos, computational proof or a custom method.

Through compliance with the regulatory requirements of the NPDES Statewide General Construction Permit and on-site drainage facilities, the Project is not expected to violate water quality standards or waste discharge requirements during construction.

Operation

Post-construction operations of the proposed Project would also have the potential to discharge pollutants that could violate water quality standards of downstream waterbodies. The City of Perris is responsible for discharges into its municipal storm drain facilities (or MS4 facilities) to the extent of its legal authority and as required by federal regulations (40 CFR Section 122.26(d)(2)(i)), the City of Perris shall control discharges of pollutants into the MS4 to the maximum extent practicable (MEP). The Project would be required to comply with the NPDES permit and Waste Discharge Requirements for Riverside County, of which the City of Perris is a co-permittee (i.e., MS4 Permit).⁵ As described previously in Section 5.5.2 under the subheading Federal and State Regulations, the permittees (including the City) are responsible for several plans to reduce pollutants in urban runoff, including a WQMP for certain new development and redevelopment projects. The proposed Project meets the threshold of a Priority Development Project since it involves more than 10,000 square feet of impervious surface. The City is required by the MS4 Permit to approve a written WQMP describing postconstruction BMPs to control the discharges of pollutants into the MS4 to the MEP (MS4, p. 6 of 117.) Potential pollutants from commercial/industrial development include bacterial indicators,⁶ metals, nutrients, pesticides, toxic organic compounds (solvents), sediments, trash/debris, and oil/grease (WQMP Guidance, p. 66).⁷ Because the Project area is tributary to Canyon Lake, which is on the 303(d) list of impaired waterbodies and for which TMDL's are approved, the treatment system proposed by the WQMP should also treat for the impairments, which are nutrients and pathogens (Table 5.9-A).

The Project Applicant has submitted to the City two studies: 1) *Preliminary Project Specific Water Quality Management Plan,* which is included as Appendix H.2 to this DEIR; and 2) *Preliminary Drainage Study,*

⁵ City of Perris owns and/or operates a portion of the municipal separate storm sewer system (MS4) through which urban runoff is discharged into Waters of the U.S. that are located within the jurisdiction of the Santa Ana RWQCB. Section 402(p) of the CWA requires that discharges of urban runoff from MS4 be regulated under a NPDES permit.

⁶ If the land use involves animal waste (WQMP Guidance, p. 66).

⁷ Nutrients, pesticides and sediments are potential pollutants if non-native landscaping exists or is proposed on-site; otherwise not expected (WQMP Guidance, p. 66).

which is included in Appendix H.1 to this DEIR. Prior to the issuance of grading permits, a final Project-Specific WQMP shall be prepared and submitted to the City for additional review and approval. The final Project Specific WQMP is required to be in substantial conformance with the Preliminary WQMP that was submitted during the entitlement process. (WQMP Guidance)

The Project WQMP proposes to collect, store, and treat the required water quality volume, which is approximately 64,632 cubic feet and the Project proposes to have sufficient capacity for up to 64,650 cubic feet (WEBB(b), p. 18). Runoff in excess of the water quality volume will bypass the storage and treatment system to flow directly into the proposed storm drain Lateral B-6.1 in Nevada Avenue (WEBB(b), p. 7). The water quality volume will be collected in underground chambers, then pumped into a modular wetland for treatment that mimics bioretention principles of stormwater treatment. According to Appendix E – BMP Pollutant Removal Effectiveness of the LID BMP Design Handbook (revised September 2011), bioretention has a "high" removal efficiency for sediment, trash, metals, bacteria, oil/grease, organic compounds, and pesticides; nutrient removal is dependent on soil media depth (minimum 24-inches for medium effectiveness and maximum 30-36 inches for high effectiveness). No treatment of offsite run-on entering the West Collector Channel is required prior to discharge into the proposed Lateral B-6 in Patterson Avenue.

Because the proposed stormwater runoff treatment system design is consistent with the standards of the MS4 Permit for sizing and pollutant removal effectiveness, the Projects' potential to violate water quality standards or waste discharge requirements is considered less than significant due to the ability of the proposed drainage system to adequately treat and manage the water quality and water discharge requirements of the Project site. Project design features are included to address any impacts, and therefore no mitigation measures are necessary.

Threshold B: Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

The Project site is located within the San Jacinto Groundwater Basin. Currently, the Project site does not contain groundwater recharge facilities nor groundwater production wells. According to *Results of Infiltration Testing* performed by Southern California Geotechnical for this Project, infiltration rates at a depth of eight feet were 0.2 and 0.3 inch per hour, and "Based on the results of the infiltration testing, infiltration is not considered feasible at the proposed depth and location due to dense clayey soils" (SCG, p. 4).

The proposed Project does not include the development of new groundwater production wells; however, groundwater from the San Jacinto Groundwater Basin may be a source of water supply to the Project site as supplied by EMWD. According to the *Water Supply Assessment* (WSA) prepared by EMWD for this DEIR (a copy of which is located in Appendix H.3), "Approximately half of EMWD's existing and future retail [water] demand will be supplied through local sources such as groundwater, brackish groundwater desalination, and recycled water, with the balance coming from imported water delivered by MWD" (p. 3). The WSA goes on to clarify that water supplied to the Project site may be a blend of sources: "While EMWD does not plan to develop new groundwater supplies specifically for this project, the advancement of new local supplies represents a major component of EMWD's planned water supply portfolio. Therefore, new developments, including the Project, may be supplied with a combination of additional imported water and/or projects and programs expanding EMWD's local supplies, including groundwater" (p. 8). Finally, the WSA makes the conclusion that "...it [EMWD] will be able to provide

adequate water supplies to meet the potable water demand for this project as part of its existing and future [water] demands" (p. 23). EMWD's water demand projections accounted for a water demand that is much greater for the site (i.e., 118.87 acre-feet per year) then that which is projected for the proposed Project (i.e., 20.78 acre-feet per year). The WSA does not identify the Project site as a potential future recharge area as part of future management activities.

Prior to SGMA, the San Jacinto Groundwater Basin was managed under two groundwater management plans: the Hemet/San Jacinto Groundwater Management Plan (HSJ) and the West San Jacinto Groundwater Basin Management Plan (WSJ). The Project site is located within the WSJ Management Plan boundary and groundwater management efforts by EMWD pursuant to the WSJ plan have been ongoing since its adoption in 1995. Pursuant to SGMA, a GSP for the WSJ area has been drafted and is currently under review by DWR. "The purpose of the GSP is to define the conditions under which the groundwater resources of the West San Jacinto GSA Plan Area, which support agricultural, domestic, municipal and industrial, and environmental uses, will be managed sustainably in the future" (WSA, p. 11).

The Project site does not currently provide recharge facilities nor is it identified as a future recharge site. It has poor soil infiltration rates and the water suppliers' demand projections more than accounted for the Project's future water demand. Management of the subject basin has been actively ongoing since 1995 and will continue with a GSP beginning in 2022 through 2042. Therefore, impacts from the proposed Project on groundwater supplies, recharge, and management will be **less than significant and no mitigation measures are necessary.**

Threshold C(1): Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

The existing drainage pattern of the Project site consists of surface flows in a southwest to northeast direction at a slope of approximately 1.0% (WEBB(a), p. 1-1). Off-site flows enter the Project site from the west (**Figure 5.9-2**). There are no drainage features, like a stream or river, on the Project site. The Project will add roughly 28 acres of new impervious surfaces (i.e., 677,563.2 square feet roof and 561,317.8 square feet hardscape) (WEBB(b), p. 18).

The proposed drainage system will route offsite flows into the new offsite storm drain lines in Patterson Avenue instead of flowing across the Project site. Onsite runoff will be directed into the new storm drain system in Nevada Avenue; all of which will be conveyed to the Caltrans RCB to ultimately outlet into the PVSD approximately 2 miles to the east (**Figure 5.9-6**).

There is potential for erosion and siltation to occur on- and off-site from construction of the Project. As described in Threshold A above, a SWPPP will be implemented to minimize to the extent practicable any non-stormwater discharges resulting from construction activities. The WQMP for the Project will include biotreatment for the water quality volume of stormwater generated onsite during the operational phase of the Project. Biotreatment has a high removal effectiveness for sediment. All onsite flows will be conveyed in underground pipes to ultimately discharge into the PVSD and are therefore unlikely to cause erosion. With implementation of the biotreatment system to treat onsite flows, downstream siltation is also unlikely to result from the Project. Therefore, through implementation of existing regulations of stormwater quality, as well as project design features, impacts to on- and off-site erosion and siltation are **less than significant and no mitigation measures are necessary**.

Threshold C(2): Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

As described in Threshold C(1) above, the existing drainage pattern of the Project site consists of surface flows in a southwest to northeast direction at a slope of approximately 1.0% (WEBB(a), p. 1-1). Off-site flows enter the Project site from the west (**Figure 5.9-2**). There are no drainage features, like a stream or river, on the Project site. The Project will add roughly 28 acres of new impervious surfaces (i.e., 677,563.2 square feet roof and 561,317.8 square feet hardscape) (WEBB(b), p. 18).

With the addition of new impervious surfaces, stormwater runoff across the site will flow at a faster rate and would have the potential to result in flooding on- or offsite. However, the Project includes new drainage facilities to convey offsite flows and onsite flows into new storm drain systems that are sized to sufficiently to drain the Project site as well as convey offsite flows for the interim and ultimate conditions such that it will not result in flooding (**Figures 5.9-5 and 5.9-6**). All flows from the Project ultimately discharge into the PVSD, which is a regional drainage facility sized to handle the runoff from development in the MDP area including additional flows from the Project. Therefore, through implementation of project design features to adequately handle on-site and off-site flows, impacts from flooding on- or off-site are **less than significant and no mitigation measures are necessary**.

Threshold C(3): Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

As described in Threshold C(2) above, the existing drainage pattern of the Project site consists of surface flows in a southwest to northeast direction at a slope of approximately 1.0% (WEBB(a), p. 1-1). Off-site flows enter the Project site from the west (**Figure 5.9-2**). There are no drainage features, like a stream or river, on the Project site. The Project will add roughly 28 acres of new impervious surfaces (i.e., 677,563.2 square feet roof and 561,317.8 square feet hardscape) (WEBB(b), p. 18).

With the addition of new impervious surfaces, the amount of runoff generated on the Project site will increase; however, the proposed Project will include offsite and onsite drainage improvements designed to accommodate these flows (**Figures 5.9-5 and 5.9-6**). As described in the Project Drainage Study and WQMP, offsite flows will be conveyed into the proposed MDP Lateral B-6 in Patterson Avenue and onsite flows will be conveyed into the proposed MDP Lateral B-6.1 in Nevada Avenue (Appendix H.1 and H.2). Lateral segments B-6-1, B-6-2, and B-6-3 and their associated inlets are sized for the interim condition because they will be improved to ultimate condition when properties west of Patterson Avenue are developed (WEBB(a), p. 3-5).

Proposed MDP Lateral B-6.1 in Nevada Avenue will be sized for the ultimate build-out condition of the Project area. The tributary drainage capacities of Lateral B-6 and Lateral B-6.1 are highly dependent on the capacity of the Caltrans RCB running parallel to Harley Knox Boulevard. Currently, there is roughly 50 cfs of capacity in the Caltrans RCB (assuming 5-inch of freeboard) and Laterals B-6 and B-6.1 will add approximately 180 cfs during the ultimate condition. (WEBB(a), p. 1-2) Therefore, connections of Lateral B-6 and B-6.1 to the existing Caltrans RCB are not feasible since capacity does not exist in the Caltrans RCB to handle the flows from these Laterals.

In order to address the limited capacity of the Caltrans RCB, completion of MDP Lateral-B, Stage 4 (currently under design by the RCFC&WCD) will cut off roughly 300 cfs of tributary runoff from the existing Caltrans RCB, after accounting for the effects of confluences. The effect of a confluence, or a coming together of stream paths, will result in a flow rate that is less than the sum of the individual streams. The connection of MDP Lateral-B, Stage 4 must be made for the Caltrans RCB to have capacity for unrestricted runoff from MDP Lateral B-6 and Lateral B-6.1 under ultimate conditions. In the interim condition when the Project is completed, the runoff coming from the Project site is such that the time to drain down is significantly less than the time of concentration for upstream areas to reach the same connection point to the Caltrans RCB at Lateral B-6 and Lateral B-6.1. This means the Project's ability to exceed the capacity of the Caltrans RCB is unlikely even in the interim condition before Lateral-B, Stage 4 is completed. Because the capacity of the Caltrans RCB will not be exceeded before and after MDP Lateral-B, Stage 4 is completed, combined with implementing the SWPPP and WQMP regulations described in Threshold A above to address pollutants generated by the Project, substantial additional sources of pollutants are also unlikely to result from the Project.

Therefore, through implementation of existing regulations, Project design features and drainage systems to be constructed in the future by RCFC&WCD which are being designed to benefit this Project, impacts to drainage system capacity and sources of polluted runoff are **less than significant and no mitigation measures are necessary**.

Threshold C(4): Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?

The approximate eastern half of the Project site can be found in FIRM No. 06065C1430H (effective 8/18/2014) and the western half is within FIRM No. 06065C1410G (effective 8/28/2008). Both maps identify the Project site as located within "Zone X" or, "Areas determined to be outside the 0.2% annual chance floodplain" (**Figure 5.9-4**). This means the Project site is not located in an area with existing flood flows and therefore implementation of the Project would not impede or redirect flood flows and impacts are **less than significant and no mitigation measures are necessary**.

Threshold D: Would the Project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

As described in Threshold C(4) above, the Project site is not located in a flood hazard zone and therefore would not risk release of pollutants as a result of project inundation due to a flood (**Figure 5.9-4**).

A tsunami is a very large ocean wave caused by an underwater earthquake or volcanic eruption. The Project area is located approximately 40 miles east of the Pacific Ocean and, as such, a tsunami would not affect the Project area. No impacts related to inundation due to a tsunami would occur.

A seiche occurs when a wave oscillates in lakes, bays, gulfs, or other enclosed bodies of water including water tanks due to seismic disturbances. The Project area is located approximately 3 miles west of the Lake Perris Reservoir and, as such, a seiche from this water body would not impact the Project area (**Figure 5.9-1**). No other large waterbodies are located near the Project site that could have a seiche.

Regarding Lake Perris Dam, the Project site is not within the dam inundation zone of Lake Perris as shown in Figure S-4 – Dam Inundation Zones in the Perris GP 2030 Safety Element (p. 17). Therefore, because the Project site is not within a flood zone and due to its distance from the ocean and large

bodies of water, would not risk release of pollutants due to project inundation and impacts are **less than** significant and no mitigation measures are necessary.

Threshold E: Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

As discussed in Section 5.9.2 – State Regulations, the Project site is within the regulatory boundary of the Santa Ana RWQCB. The governing regulatory document of the RWQCB is the Water Quality Control Plan (i.e., Basin Plan) for the Santa Ana Region. For new developments, the Basin Plan requires compliance with applicable NPDES permits, including the Construction General Permit for construction activities and the MS4 Permit for WQMPs. Because the Project will implement these existing regulations, the Project is consistent with the Basin Plan.

The Project site is located within the boundary of the West San Jacinto GSA which has prepared a GSP for the San Jacinto Groundwater Basin (**Figure 5.9-3**), which is currently under review with DWR. The Project site is not a designated groundwater production or recharge site and is not slated to become one in the future. Therefore, development of the Project will not conflict or obstruct the intent of the GSP to reach sustainability of the basin by 2042. Through implementation of existing regulations related to water quality and groundwater management, the Project will not conflict with or obstruct a water quality control plan or groundwater management plan and impacts are **less than significant and no mitigation measures are necessary**.

5.9.6 Recommended Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (State CEQA Guidelines Section15126.4). No significant impacts related to hydrology and water quality are anticipated from implementation of the Project. Project design features have been included to provide the necessary conveyance and treatment of stormwater such that the Project's impacts to hydrology and water quality will not result in significant environmental effects. Therefore, no mitigation measures are required.

5.9.7 Summary of Environmental Effects after Mitigation Measures Are Implemented

There are no anticipated adverse environmental impacts related to hydrology and water quality that would result from implementation of the Project; therefore, no mitigation measures are required and potential impacts from hydrology and water quality remain **less than significant**.

5.10 Land Use and Planning

The focus of the following discussion relates to the Project site and existing land uses in the surrounding area and the evaluation of the proposed Project's consistency with the Perris Comprehensive General Plan 2030 (Perris GP 2030), Perris Municipal Code, Zoning and the Perris Valley Commerce Center Specific Plan (PVCCSP). The discussion also includes discussion of the Specific Plan Amendment proposed along with the Project.

One comment letter regarding land use was received from Southern California Association of Governments (SCAG) in response to the Notice of Preparation (NOP). A copy of this letter is included in Appendix A.2 of this Draft Environmental Impact Report (DEIR). SCAG recommends a review of certain SCAG policies for Project consistency and the review of the Final EIR for the 2020 – 2024 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) for guidance, as appropriate. This review is included in **Table 5.10-B – Proposed Project Consistency with the Connect SoCal Goals**.

The following references were used in the preparation of this section of the DEIR:

- City of Perris, *Perris Comprehensive General Plan 2030*, originally approved July 12, 2005. (Available at the City of Perris and at <u>https://www.cityofperris.org/departments/development-services/general-plan</u>, accessed January 28, 2022.) [Cited as Perris GP 2030]
- City of Perris, Perris Valley Commerce Center Specific Plan Final Environmental Impact Report, State Clearing house # 2009081086 November 2011, certified January 10, 2012. (Available at the City of Perris and at <u>https://www.cityofperris.org/home/showpublisheddocument/13874/637455522381730000</u>, accessed January 28, 2022.) [Cited as PVCCSP EIR]
- City of Perris, *Perris Valley Commerce Center Amendment No. 12 Specific Plan.* January 10, 2012, and subsequently amended and approved January 11, 2022. (Available at https://www.cityofperris.org/home/showpublisheddocument/2647/637799977032200000, accessed April 20, 2022.) [Cited as PVCCSP]
- Mead & Hunt, March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, November 13, 2014. (Available at https://rcaluc.org/Portals/13/17%20-%20Vol.%201%20March%20Air%20Reserve%20Base%20Final.pdf?ver=2016-08-15-145812-700, accessed April 6, 2022.) [Cited as MARB/IPA ALUCP]
- Southern California Association of Governments, 2020 2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments Connect SoCal Amendment No.1, adopted September 3, 2020. (Available at <u>https://scag.ca.gov/read-plan-adopted-final-plan</u>, accessed April 20, 2022.) [Cited as SCAG 2020]

5.10.1 Setting

The Project site is located in the northwestern portion of the City of Perris, south of Harley Knox Boulevard, between Patterson Avenue on the west and Nevada Avenue to the east, within the PVCCSP. An industrial warehouse abuts the Project site on the south, commercial businesses to the north, vacant land and residences to the east and commercial business to the west.

As previously stated in Section 3.0, Project Description of this DEIR, the Project site is currently unimproved and vacant with the exception of a three parcel lot in the northwest corner (Accessor Parcel Number (APNs) 314-153-021, -020, -019) totaling 2.7 acres that is utilized for semi-truck trailer storage.

The existing vegetation is dominated by fallow field croplands. There is evidence of illegal dumping of trash on the Project site. The Project site is generally surrounded by West Markham Street to the south, Nevada Avenue to the east, Harley Knox Boulevard to the north and Patterson Avenue to the west.

General Plan and Zoning Designation

The Project site land use designation under the Perris GP 2030 is PVCCSP. The proposed Project site is within the northern portion of the PVCCSP planning area. The PVCCSP was adopted by the City of Perris on January 12, 2012 (Ordinance No. 1284) and has been amended 12 times; the latest amendment was adopted on January 11, 2022 (Ordinance No. 1414). **Figure 3-6 – Specific Plan Land Use** depicts the PVCCSP Land Use designation and the Project site boundary. As shown, the northern portion of the Project site is designated for General Industrial (GI) and the southern portion of the Project site is designated for General Industrial uses which may support a wide range of manufacturing and non-manufacturing uses, from large-scale warehouse and warehouse/distribution facilities to outdoor industrial activities. The LI zone provides for light industrial uses and related activities including manufacturing, research, warehouse and distribution, assembly of non-hazardous materials and retail related to manufacturing.

The Project site is surrounded by areas also designated GI to the east and north as well as LI to the south and west (**Figure 3-6**).

5.10.2 Related Regulations

Federal Regulations

No federal regulations would be applicable to land use and planning with respect to the proposed Project.

State Regulations

Article XI, Section 7 of the California State Constitution is the primary authority for cities and counties to regulate land use. California State Planning and Land Use Law (Government Code Section 65000 et seq.) sets forth minimum standards to be observed in local land use regulatory practices, reserving in cities and counties the maximum degree of control in such matters.

Regional Regulations

March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan

The Riverside County Airport Land Use Commission (ALUC) is the lead agency responsible for airport land use compatibility planning in Riverside County. The fundamental purpose of ALUC is to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses. The basic function of the airport land use compatibility plans is to promote compatibility between airports and the land uses that surround them. Compatibility plans serve as a tool for use by airport land use commissions in fulfilling their duty to review proposed development plans for airports and surrounding land uses. Additionally, compatibility plans set compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to landowners in their design of new development. On November 13, 2014, ALUC adopted the March Air Reserve Base (MARB)/Inland Port Airport (IPA) Land Use Compatibility Plan (LUCP); hereinafter referred to as the ALUCP. The

compatibility zones and associated criteria set forth in the ALUCP provide noise and safety compatibility protection. The Project site is located within Zone B2 of the ALUCP. A discussion of Project consistency with the ALUCP is provided in Section 5.8, Hazards and Hazardous Materials, of this DEIR.

The City of Perris amended the Perris GP 2030, Perris Municipal Code, and PVCCSP to include an Airport Overlay Zone (AOZ), consistent with the land uses and densities outlined in the ALUCP. As such, Projects that are consistent with the Municipal Code and AOZ and outside of the Accident Potential Zone I and II can be reviewed by City staff and are not subject to Airport Land Use Commission review. The proposed Project site will consist of light industrial uses, which is a permitted use at the Project site and the Project site plan has been designed to meet the height and density requirements of the ALUCP for Zone B2. Although the proposed Project is consistent with the City's AOZ and therefore consistent with the land use designations of the MARB/IPA ALUCP, the Project is required to go through ALUC review and consistency determination because there is a legislative action (i.e., specific plan amendment) required for the circulation plan changes. On March 10, 2022, the ALUC determined that the Project's proposed amendment to the PVCCSP, Development Plan Review, and Tentative Parcel Map are consistent with the MARB/IPA ALUCP, subject to the conditions included in Appendix G.2.

Southern California Association of Governments

SCAG is the Metropolitan Planning Organization (MPO) for six counties: Riverside, Los Angeles, Orange, San Bernardino, Ventura, and Imperial. The region encompasses a population exceeding 19 million persons in an area of more than 38,000 square miles. As the designated MPO, the federal government mandates that SCAG researches and prepares plans for transportation, growth management, hazardous waste management, and air quality. Additionally, SCAG provides informational resources to regionally significant plans, projects, and programs per the California Environmental Quality Act (CEQA) to facilitate the consistency of these projects with SCAG's adopted regional plans, to be determined by the lead agencies.

Connect SoCal

The SCAG regional council adopted the 2020 – 2045 RTP/SCS or *Connect SoCal* in September 2020. *Connect SoCal* seeks to improve mobility and promote a more sustainable growth pattern. The long-range vision plan builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. The goals included in *Connect SoCal* are meant to provide guidance for considering projects within the context of regional goals and policies. (SCAG 2020)

Connect SoCal includes population, housing, and employment growth projections for 2045. These growth projections are used in SCAG's transportation modeling and shape SCAG's regional planning efforts, as outlined in *Connect SoCal*. *Connect SoCal* minimizes increases in regional traffic congestion by focusing growth, density, and land use intensity within existing urbanized area as the general land use growth pattern for the region while enhancing the existing transportation system and integrating land use into transportation planning. *Connect SoCal* recommends local governments accommodate future growth within existing urbanized areas to reduce VMT, congestion, and greenhouse gas emissions. (SCAG 2020)

The Project's consistency with *Connect SoCal* is included in **Table 5.10-B – Proposed Project Consistency with** *Connect SoCal* **Goals**.
Local Regulations

Perris Comprehensive General Plan 2030

The Perris Comprehensive General Plan 2030 (Perris GP 2030) Land Use Element contains the following goal and policy related to land use:

Land Use Element

Goal III	Commerce and industry to provide jobs for residents at all economic levels
Policy III.A	Accommodate diversity in the local economy

PVCCSP Standards and Guidelines and Mitigation Measures

The PVCCSP and the PVCCSP EIR do not include Standards and Guidelines or mitigation measures specifically for potential impacts related to Land Use and Planning.

5.10.3 Design Considerations

Design considerations refer to ways in which the proposed Project will avoid or minimize potential impacts through the design of the Project. As mentioned in Section 5.10.1 above, the Project is located within the PVCCSP and has a PVCCSP land use designation of GI and LI. The proposed Project site includes enhanced architectural features such as, but not limited to, screening walls, pedestrian walkways, and light fixtures that creates a cohesive design aesthetic.

5.10.4 Thresholds of Significance

The City of Perris has not established local CEQA significance thresholds and instead, defers to the thresholds of significance identified in State CEQA Guidelines Appendix G. Impacts related to this Project may be considered potentially significant if the proposed Project would:

- Physically divide an established community: or
- Cause a significant environmental impact due to conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

5.10.5 Environmental Impacts Before Mitigation

Threshold A: Would the Project physically divide an established community?

The proposed Project site is undeveloped and is bordered by an industrial warehouse to the south and commercial business to the north and west with vacant land and residences to the east. The land uses in the vicinity of the proposed Project site have PVCCSP land use designations of GI and LI. Rather than dividing a community, the PVCCSP intends to bring the area together as a unified neighborhood for higher quality business development including industrial, commercial, and office uses. (PVCCSP, pp. 1.0-1–1.0-2.) Therefore, the proposed Project is consistent with the surrounding land uses and **no impacts** are anticipated with regard to the division of an established community.

Threshold B: Would the Project cause a significant environmental impact due to conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

State *CEQA Guidelines* Section 15125(d) requires EIRs to "...discuss any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans." The objective of such a discussion is to find ways to modify a proposed project, if warranted, to reduce any identified inconsistencies with relevant plans and policies. Pursuant to Section 15125(d), this DEIR includes an evaluation of the consistency of the proposed Project with applicable goals and policies of adopted local and regional plans that have been adopted for the purpose of avoiding or mitigating an environmental effect. **Table 5.10-A – Consistency Perris GP 2030 Goals and Policies** considers how the Project is consistent with the Perris GP 2030 land use policies applicable to new industrial development.

Perris GP 2030 Goal / Policy	Consistency Analysis	
Circulation Element		
Policy I.B Support development of a variety of transportation options for major employment and activity centers including direct access to commuter facilities, primary arterial highways, bikeways, park- and-ride facilities, and pedestrian facilities.	Consistent: Roadway improvements included as part of the Project would be constructed according to the standards of the City of Perris and would include sidewalks required by the PVCCSP. The Riverside Transit Agency (RTA) operates Routes 19, and 41 in the Project vicinity. The PVCCSP also includes pedestrian paths and sidewalks into roadway design, and bike trails into its Standards and Design Guidelines to accommodate non-motorized forms of transportation along roadways within the Specific Plan area and to encourage bus stops to be provided at large commercial and employment centers along existing and future bus routes. Bike racks will be installed at the Project site to encourage employees to bike to work. The Project Applicant will also pay applicable development impact fees (DIF), which may be used by the City to support development of transportation options. Therefore, compliance with these policies will ensure that the Project will not conflict with the City's adopted policies, plans, or programs supporting alternative modes of transportation.	
Policy II.B. Maintain the existing transportation network while providing for future expansion and improvement based on travel demand, and the development of alternative travel modes	Consistent: The proposed Project will not significantly impact the existing transportation network, even considering existing plus ambient growth plus cumulative projects 2024 traffic conditions. The traffic impact analysis (TIA) prepared for the proposed Project (Appendix K.1) determined that existing intersections would continue to operate above minimum acceptable LOS standard with implementation of the Project. Additionally, the Project will be responsible for constructing sidewalk improvements on the Project's frontage on Patterson Avenue and Nevada Avenue. Further, installation of sidewalks and bike racks at the Project site will support development of alternative travel modes.	

Table 5.10-A – Consistency with Perris GP 2030 Goals and Policies

Perris GP 2030 Goal / Policy	Consistency Analysis
Policy III.A Implement a transportation system that accommodates and is integrated with new and existing development and is consistent with financing capabilities.	Consistent: The proposed Project is consistent with the land use designation in the Perris GP 2030 and PVCCSP and traffic associated with development of the site as a warehouse can be accommodated by the City's planned transportation system. Additionally, the Project will also pay applicable development impact fees (DIF), which may be used by the City to support development of transportation options.
Policy V.A Provide for safe movement of goods along the street and highway system.	Consistent: The proposed Project has been designed to ensure that adequate sight distance is provided at each Project access point and that adequate signing and striping is provided. All Project trucks will be restricted to access City/PVCCSP designated truck routes to access I-215.
Policy VII.A Implement the Transportation System in a manner consistent with Federal, State, and local environmental quality standards and regulations.	Consistent: Implementation of the City's Transportation System and consistency of this System with Federal, State, and local environmental quality standards and regulations is the responsibility of the City. The proposed warehouse/distribution facility is consistent with the land use designation of the proposed Project site in the Perris GP 2030 and PVCCSP. The Project includes roadway improvements along the Project site frontage on Patterson Avenue and Nevada Avenue, as well as sidewalk improvements along the Project site frontage on Patterson Avenue and Nevada Avenue. These improvements will be required to be constructed in accordance with City standards. Roadways in the Project vicinity have been planned to accommodate Project-generated traffic and comply with all applicable Federal, State, and local standards.
Conservation Element	
Policy II.A Comply with state and federal regulations to ensure protection and preservation of significant biological resources.	Consistent: The proposed Project is consistent with the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) and will pay applicable fees pursuant to City Ordinance No. 1123 to offset incremental impacts to biological resources from Project construction and operation. Appropriate mitigation measures have been identified in Section 5.3, Biological Resources of this DEIR, to ensure compliance with the Federal Migratory Bird Treaty Act (MBTA) and relevant sections of the California Fish and Game Code.
Policy III.A Review all public and private development and construction projects and any other land use plans or activities within the MSHCP area, in accordance with the conservation criteria procedures and mitigation requirements set forth in the MSHCP.	Consistent: Consistency and compliance with the MSHCP is discussed in detail in the Biological Resources section (Section 5.3) of this DEIR. The Project site is not located in a Criteria Cell and is consistent with the other policies set forth by the MSHCP as outlined in Section 5.3.

Perris GP 2030 Goal / Policy	Consistency Analysis
Policy IV.A Comply with State and Federal regulations and ensure preservation of the significant historical, archaeological, and paleontological resources.	Consistent: In compliance with mitigation measure MM Cultural 1 of the PVCC Specific Plan EIR, a Phase I Cultural Resources Study was prepared for the proposed Project to address potential impacts to historic, archaeological, and paleontological resources. As stated in Section 5.4, Cultural Resources, two historical archeological sites and four built environment resources are within the Project area. However, these resources were determined to not have any historical significance under the criteria established by the California Register of Historical Resources (CRHR). Nonetheless, mitigation measures will be implemented as recommended in Section 5.4 (Cultural Resources) of this DEIR to address unknown historical, archaeological, and paleontological resources that might be encountered during Project development. The Project Applicants' adherence to the mitigation measures and to mandatory regulatory requirements will ensure the proposed Project remains consistent with this policy.
Policy V.A Coordinate land-planning efforts with local water purveyors.	Consistent: As discussed in Section 5.12, Utilities and Service Systems of this DEIR, a Water Supply Assessment (WSA) was prepared by the Eastern Municipal Water District (EMWD), the local water purveyor, to assess if their total projected water supply will meet the projected water demand associated with the proposed Project. The WSA is not a commitment to serve the Project, but rather a review of the water suppliers' future demands and supplies based on current information available. The WSA determined the projected water demand for the Project is less than the water demand projected in the 2020 Urban Water Management Plan that used the Perris GP 2030 land use designations for the same site. Thus, as the Project is currently defined, EMWD would have sufficient water supply to meet the potable water demand for existing and future demands.
Policy VI.A Comply with requirements of the National Pollutant Discharge Elimination System (NPDES).	Consistent: As discussed in Section 5.9, Hydrology and Water Quality of this DEIR, short-term erosional impacts associated with construction of the Project will be minimized through compliance with standard erosion control practices and NPDES permit requirements for construction (a NPDES Statewide General Construction Permit), which include preparation of a Stormwater Pollution Prevention Plan and Waste Discharge Requirements.

Perris GP 2030 Goal / Policy	Consistency Analysis	
Policy VIII.A Adopt and maintain development regulations that encourage water and resource conservation.	Consistent: As identified in Section 3.0 – Project Description, and further discussed in Section 5.7 – Greenhouse Gas Emissions, the PVCCSP EIR includes requirements related to water and resource conservation. The Project shall implement many concepts of energy efficient design and material use that are consistent with LEED certification levels. The building will install light colored roofing materials over office areas and light-colored paving materials. For future office space, energy efficient HVAC systems, appliances and equipment will be installed. The building's Landscape Plan will adhere to the City's landscape requirements per Perris Municipal Code Section 19.70.	
Policy VIII.B Adopt and maintain development regulations that encourage recycling and reduced waste generation by construction projects.	Consistent: As identified in Section 3.0 – Project Description, the proposed Project is required to comply with the 2019 California Green Building Standards (Part 11 of Title 24 California Code of Regulation) which includes requirements for construction waste reduction, disposal, and recycling. This exceeds the 50 percent diversion requirement established in Chapter 7.44, Construction and Demolition Waste Management, of the Perris Municipal Code.	
Environmental Justice Element		
 Goal 3.1 A community that reduces the negative impacts of land use changes, environmental hazards and climate change on disadvantaged communities. Continue to ensure new development is compatible with the surrounding uses by colocating compatible uses and using physical barriers, geographic features, roadways or other infrastructure to separate less compatible uses. When this is not possible, impacts may be mitigated using: noise barriers, building insulation, sound buffers, traffic diversion. 	Consistent: As previously discussed in Section 3.0, Project Description of this DEIR, the proposed Project is consistent with the land use designation of the site and surrounding uses and is therefore a compatible use. However, the Project is surrounded to the east and west with legal non-conforming residences. Section 5.11, Noise Section of this DEIR evaluates the noise impacts from Project implementation to surrounding uses, and concludes that implementation of applicable PVCCSP EIR mitigation measures will ensure that impacts are less than significant.	
 Goal 3.1 A community that reduces the negative impacts of land use changes, environmental hazards and climate change on disadvantaged communities. Support identification, clean-up and remediation of local toxic sites through the development review process. 	Consistent: As discussed in Section 5.8, Hazards and Hazardous Materials of the DEIR, a Phase I Environmental Site Assessment (Phase I ESA) was completed for the Project and is included as Appendix G.1. No Recognized Environmental Conditions were documented or identified in the Phase I ESA related to potentially hazardous materials.	

Perris GP 2030 Goal / Policy	Consistency Analysis
 Goal 3.1 A community that reduces the negative impacts of land use changes, environmental hazards and climate change on disadvantaged communities. As part of the development review process, require conditions that promote Good Neighbor Policies for Industrial Development for industrial buildings larger than 100,000 square feet. The conditions shall be aimed at protecting nearby homes, churches, parks, daycare centers, schools, and nursing homes from air pollution, noise lighting, and traffic associated with large warehouses, making them a "good neighbor." 	Consistent: The City of Perris adopted "Good Neighbor Guidelines" on September 27, 2022. The proposed Project is larger than 100,000 square feet and would be subject to the GNG when it developed and operational. Further, the Project would not result in significant impacts related to the identified issues that are addressed in Sections 5.1, Aesthetics, 5.2, Air Quality, 5.11, Noise, and 5.13, Transportation of this DEIR.
 Goal 3.2 A community that actively works to reduce the impacts of poor air quality. Participate in air quality planning efforts with local, regional, and State agencies that improve local air quality to protect human health, minimize the disproportionate impacts on sensitive population groups, and ensure that City concerns are resolved early in the process. Inform existing industries of the state 5-minute maximum idling limitation and condition new industrial projects to enforce the state's 5-minute maximum idling limitation for stationary diesel trucks. 	Consistent: As mentioned in Section 3.0, Project Description of this DEIR, the Project owner will inform building operators of existing requirements to turn off equipment, including heavy- duty equipment, motor vehicles, and portable equipment, when not in use for more than 5 minutes. Signage will be posted throughout the Project site, requiring that trucks shall not be left idling for more than 5 minutes. Section 5.2, Air Quality, of this DEIR evaluates the Project's impacts to air quality in the region in the Project vicinity. Implementation of applicable PVCCSP EIR mitigation measures will ensure that all air quality impacts of the Project, including those to sensitive receptors, will be less than significant.

Perris GP 2030 Goal / Policy	Consistency Analysis	
 Goal 5.1 Neighborhoods designed to promote safe and accessible connectivity to neighborhood amenities for all residents. Require developers to provide pedestrian and bike friendly infrastructure in alignment with the vision set in the City's Active Transportation plan or active transportation in-lieu fee to fund active mobility projects. 	Consistent: Roadway improvements included as part of the Project would be constructed according to the standards of the City of Perris and would include sidewalks and/or bike lanes. The PVCCSP also includes pedestrian paths and sidewalks into roadway design, and bike trails into its Standards and Design Guidelines to accommodate non-motorized forms of transportation along roadways within the Specific Plan. Bike racks will be installed at the Project site to encourage employees to bike to work. The Project Applicant will also pay applicable DIF, which may be used by the City to support development of active transportation options. Therefore, compliance with these policies will ensure that the Project provides infrastructure that aligns with the City's active transportation plan.	
Healthy Community Element		
HC 1.3 Improve safety and the perception of safety by requiring adequate lighting, street visibility, and defensible space	Consistent: As discussed in Section 3.0, Project Description and Section 5.1, Aesthetics, the proposed Project will include new permanent sources of light. Project lighting will include security lights along the buildings and wall and pole-mounted lights in the parking areas. Streetlights will be installed along Nevada Avenue and Patterson Avenue. All Project-proposed lighting will abide by the lighting requirements outlined in the PVCCSP. Additionally, the proposed Project would include all required emergency access points and would be reviewed by the Perris Fire Department to ensure all regulations of the California Fire Code are met.	

Perris GP 2030 Goal / Policy	Consistency Analysis
 HC 6.3 Promote measures that will be effective in reducing emissions during construction activities Perris will ensure that construction activities follow existing South Coast Air Quality Management District (SCAQMD) rules and regulations All construction equipment for public and private projects will also comply with California Air Resources Board's vehicle standards. For projects that may exceed daily construction emissions established by the SCAQMD, Best Available Control Measures will be incorporated to reduce construction emission standards established by the SCAQMD Project proponents will be required to prepare and implement a Construction Management Plan which will include Best Available Control Measures among others. Appropriate control measures will be determined on a project by project basis, and should be specific to the pollutant for which the daily threshold is exceeded 	Consistent: As discussed in Section 5.2, Air Quality, the proposed Project will implement all applicable PVCCSP EIR mitigation measures for construction-related emissions and comply with the existing SCAQMD rules and regulations aimed at reducing construction-related emissions of pollutants. The Project would not exceed any SCAQMD daily emissions thresholds.
Land Use Element	
Goal II. New development consistent with infrastructure capacity and municipal services capabilities. Policy II.A Require new development to pay its full, fair share of infrastructure costs.	Consistent: The PVCCSP includes an Infrastructure Plan that identifies the utility infrastructure necessary to serve the allowed development in the PVCCSP area. Each individual development, including the proposed Project, is required to implement the infrastructure needed to serve its proposed uses. Water, wastewater, drainage, and dry utility lines that would be installed as part of the proposed Project are described in Section 3.0 – Project Description. The Project Applicant will also pay applicable DIF to pay fair share of infrastructure costs.
Policy II.B Require new development to include school facilities or pay school impact fees, where appropriate.	Consistent: As discussed in Section 4.0, Environmental Effects Found Not Significant of the DEIR, although the proposed Project would not directly increase population affecting school facilities, the proposed Project would still be required to pay appropriate school impact fees.

Perris GP 2030 Goal / Policy	Consistency Analysis
Goal III. Commerce and industry to provide jobs for residents at all economic levels. Policy III.A Accommodate diversity in the local economy	Consistent : The proposed Project is consistent with the PVCCSP land use designations of GI and LI for the site, which was adopted by the City to ensure quality, organized development within the Project site vicinity. As previously discussed in Section 4.0, Environmental Effects Not Found Significant of this DEIR, the proposed Project would generate short-term jobs during its construction, and long-term jobs during its operation. However, it is anticipated that these construction and operational positions would be filled by workers who already reside in the Project's vicinity.
Goal IV. Consistency among all planning documents.	Consistent : As addressed in the respective sections of this DEIR, implementation of the proposed Project would be consistent with applicable local planning documents, including the Perris GP 2030, Perris Municipal Code and the PVCCSP through adherence to the site's Perris GP 2030 and PVCCSP land use designation and zoning and incorporation of applicable Standards and Guidelines from the PVCCSP. Further, the proposed Project is consistent with the South Coast Air Quality Management District's (SCAQMD) Air Quality Management Plan (refer to Section 5.2, Air Quality), the MSHCP (refer to Section 5.3, Biological Resources), and regional plans addressing water quality requirements (refer to Section 5.9, Hydrology and Water Quality) and MARB/IPA uses (refer to Section 5.8, Hazards and Hazardous Materials).
Goal V. Protection from natural or man- made disasters. Policy V.A. Restrict development in areas at risk of damage due to disasters.	Consistent : As discussed in 5.9, Hydrology and Water Quality, of the DEIR, the Project site is located in "Zone X" or, "Areas determined to be outside the 0.2% annual chance floodplain." Thus, the proposed Project is not located within a Flood Zone. As identified in Section 5.6, Geology and Soils, of the DEIR, the Project site is not within an Alquist-Priolo Earthquake Fault Zone. Further, compliance with requirements of the PVCCSP EIR, the Perris GP 2030 measures, and recommendations from the Project-specific geotechnical report would ensure that potential impacts related to geology and soils are less than significant.
Noise Element	
Policy I.A The State of California Noise/Land Use Compatibility Criteria shall be used in determining land use compatibility for new development.	Consistent: The State of California Noise/Land Use Compatibility Criteria was utilized in analyzing potential noise impacts, as discussed in the Section 5.11 – Noise.

Perris GP 2030 Goal / Policy	Consistency Analysis	
Policy II.A Appropriate measures shall be taken in the design phase of future roadway widening projects to minimize impacts on existing noise-sensitive receptors.	Consistent: Based on the Noise Study (Appendix I) discussed in Section 5.11, Noise of this DEIR, five sensitive receptors are located within the Project vicinity. Three of the five sensitive receptors are located along Patterson Avenue which will undergo roadway improvements as part of this Project. Project roadway improvements would consist of a sidewalk, curb and gutter, and road re-pavement of an existing roadway. These improvements ae consistent with existing roadway designations. As indicated in Section 5.11, the Project would have to abide by the PVCCSP EIR mitigation measures MM Noise 1 through MM Noise 4 . Compliance with the mitigation measures mentioned above would minimize impacts to existing noise-sensitive receptors.	
Policy V.A New large scale commercial or industrial facilities located within 160 feet of sensitive land uses shall mitigate noise impacts to attain an acceptable level as required by the State of California Noise/Land Use Compatibility Criteria.	Consistent: The nearest sensitive receptors to the Project site are legal, non-conforming residential sites adjacent to the west and east of the Project site. The distance from the center of the Project to the nearest residential receptor is 650 feet. As further discussed in Section 5.11, Noise of this DEIR, the Noise Study (Appendix I) determined that operational noise levels associated with the Project will satisfy the Perris Municipal Code exterior noise level standards of 80 dBA L_{max} daytime and 60 dBA L_{max} nighttime and the Perris GP 2030 Standard of 60 dBA CNEL.	
Safety Element		
Policy S-2.1 Require road upgrades as part of new developments/major remodels to ensure adequate evacuation and emergency vehicle access. Limit improvements for existing building sites to property frontages.	Consistent: As identified in Section 3.0, Project Description, the proposed Project entails improvements along existing alignments of Patterson Avenue and Nevada Avenue, that are necessary to serve the proposed site. Emergency access will be maintained and provided in accordance with the County's Multi-Hazard Functional Plan (MHFP). All roadway improvements and access would be constructed in accordance with City standards. This would ensure adequate evacuation and emergency vehicle access.	
Policy S-2.2 Require new development or major remodels include backbone infrastructure master plans substantially consistent with the provisions of "Infrastructure Concept Plans" in the Land Use Element.	Consistent: As identified in Section 3.0, Project Description, the proposed Project entails improvements along existing alignments of Patterson Avenue and Nevada Avenue, that are necessary to serve the proposed site. The Project will also construct drainage infrastructure consistent with the PVCCSP and Perris Valley Master Drainage Plan. All roadway and drainage improvements would be constructed in accordance with applicable local standards.	
Policy S-2.5 Require all new developments, redevelopments, and major remodels to provide adequate ingress/egress, including at least two points of access for sites, neighborhoods, and/or subdivisions.	Consistent: As discussed in Section 3.0, Project Description of this DEIR, the Project proposes five driveways: one off Nevada Avenue (for emergency access) and four off Patterson Avenue. Two of the driveways off Patterson Avenue are for passenger car access to automobile parking lots while the other two driveways are designed for trucks. All roadway improvements and access would be constructed in accordance with City standards. This would ensure adequate site access.	

Perris GP 2030 Goal / Policy	Consistency Analysis
Policy S-4.3 Require new development projects and major remodels to control stormwater run-off on site.	Consistent: As discussed in Section 5.12, Utilities and Service Systems of this DEIR, the Project proposes six off-site drainage facilities and two onsite storm drain lines. The two on-site storm drains will collect run off on the northern and southern parts of the Project site and convey it to the underground chambers that will filter runoff before discharging into Master Drainage Plan (MDP) Lateral B-6.1. The proposed six off-site drainage facilities would construct; MDP Lateral B-6 within Patterson Avenue, Lateral B-6-1 in Patterson Avenue with inlet, Lateral B-6-2 in Patterson Avenue, lateral=B6-3 in Patterson Avenue with inlet, Lateral B-6.1 in Nevada, and Lateral-B Stage 4 extension between the Lateral-B Stage 4 stub out and the existing facility in Patterson Avenue which convey flows from the Project site to existing lines leading to the Perris Valley Storm Drain (PVSD).
Policy S-4.4 Require flood mitigation plans for all proposed projects in the 100- year floodplain (Flood Zone A and Flood Zone AE).	Consistent: As discussed in Section 5.9, Hydrology and Water Quality of this DEIR, the Project site is located in an area identified as Zone X which is determined to be outside of the 0.2% annual change floodplain. Therefore, a flood mitigation plan is not required for the proposed Project.
Policy S-4.5 Ensure areas downstream of dams within the City are aware of the hazard potential and educated on the necessary steps to prepare and respond to these risks.	Consistent: As discussed in Section 5.9, Hydrology and Water Quality of this DEIR, the Project site is not within the Perris Dam Inundation Zone.
Policy S-5.3 Promote new development and redevelopment in areas of the City outside the VHFHSZ and allow for the transfer of development rights into lower- risk areas, if feasible.	Consistent: As discussed in Section 4.0, Environmental Effects Found Not Significant of this DEIR, the Project site is not located in or near an area identified as being a "Very High Fire Hazard Severity Zone".
Policy S-5.6 All developments throughout the City Zones are required to provide adequate circulation capacity, including connections to at least two roadways for evacuation.	Consistent: As discussed in Section 3.0, Project Description of this DEIR, the Project proposes five driveways: one off Nevada Avenue (for emergency access) and four off Patterson Avenue. Two of the driveways off Patterson Avenue are for passenger car access to automobile parking lots while the other two driveways are designed for trucks. All roadway improvements and access would be constructed in accordance with City standards. This would ensure adequate site circulation capacity and access.
Policy S-5.10 Ensure that existing and new developments have adequate water supplies and conveyance capacity to meet daily demands and firefighting requirements.	Consistent: As discussed in Section 5.12, Utilities and Service Systems of the DEIR, a review of the Water Supply Assessment (WSA) and Urban Water Management Plan (UWMP) from the Eastern Municipal Water District (EMWD) was done to assess if existing water supplies would be sufficient to meet Project demands. Based on the UWMP projections the Project site would have sufficient water supplies in normal and drought conditions for the foreseeable future.

Perris GP 2030 Goal / Policy	Consistency Analysis
Policy S-6.1 Ensure new development and redevelopments comply with the development requirements of the AICUZ Land Use Compatibility Guidelines and ALUP Airport Influence Area for March Air Reserve Base.	Consistent: As mentioned above in Section 5.10.2, The PVCCSP is located in MARB/IPA Airport Influence Zones I and II; therefore, all development within the plan shall comply with the following measures: • Avigation Easement • Noise Standard • Land Use and Activities • Retention and Water Quality Basins • Notice of Airport in the Vicinity • Disclosure • Lighting Plans • Height Restrictions per Federal Aviation Regulations Part 77 • Clear Zone (Surface B) • Approach/Departure Clearance Surface (Surface C) • Inner Horizontal Surface (Surface E) • Conical Surface • Form 7460 (Notice of Proposed Construction or Alteration
Policy S-6.2 Effectively coordinate with March Air Reserve Base, Perris Valley Airport, and the March Inland Port Airport Authority on development within its influence areas.	Consistent: As discussed in Section 5.8, Hazards and Hazardous Material of the DEIR, the Project site is located approximately 0.1 mile southwest of MARB/IPA. On March 10, 2022 the Project went through Riverside County Airport Land Use Commission (ALUC) review which determined that the proposed Project was consistent with the MARB/IPA ALUCP.
Policy S-6.3 Effectively coordinate with March Air Reserve Base and Perris Valley Airport on development within its influence areas.	Consistent: As mentioned above in Policy S-6.2, the Project is located within the ALUCP and the Project Applicant coordinated with the ALUC and the Project was determined to be consistent with the MARB/IPA ALUCP.
Policy S-7.1 Require all development to provide adequate protection from damage associated with seismic incidents.	Consistent: As discussed in Section 5.6, Geology and Soils of the DEIR, the Project is not located within an Alquist-Priolo Earthquake Fault zone. Additionally, the Geotechnical investigation did not find any evidence of faulting. Further, the Project would be designed to meet or exceed the seismic standards in the current California Building Code (CBC) to reduce seismic impacts.
Policy S-7.2 Require geological and geotechnical investigations by State- licensed professionals in areas with potential for seismic and geologic hazards as part of the environmental and development review and approval process.	Consistent: As discussed in Section 5.6, Geology and Soils, a Geotechnical Investigation was prepared by Southern California Geotechnical (State-licensed professionals) and included as Appendix F.1 of the DEIR. Additionally, the Project would be designed and constructed in accordance with all Geotechnical Investigation recommendations.

Consistency with Southern California Association of Governments' Connect SoCal Plan

As previously mentioned in Section 5.10.2, SCAG is the Metropolitan Planning Organization for Ventura, Los Angeles, Orange, Riverside, San Bernardino, and Imperial counties and is charged by the federal government to research and prepare plans for transportation, growth management, hazardous waste management, and air quality. SCAG is also the designated Regional Transportation Planning Agency under state law and is responsible for preparation of the RTP including its SCS component pursuant to SB 375.

As recommended in SCAG's comment letter in response to the NOP (Appendix A), **Table 5.10-B** – **Proposed Project Consistency with Connect SoCal Goals**, presents a side by side comparison of the 2020 - 2045 RTP/SCS Goals (*Connect SoCal*) and a discussion regarding the Project's consistency, non-consistency, or non-applicability with each goal.

2020-2045 RTP/SCS Goal	Analysis
Goal 1: Encourage regional economic prosperity and global competitiveness.	Consistent: The Project Applicant proposes the construction and operation of approximately 769,668 square feet (sf) of high-cube warehouse/distribution uses on the approximate 36-net-acre Project site. One building is proposed on the Project site to accommodate a high-cube warehouse/distribution center. Approximately 749,668 sf of the building will be used for high cube, non-refrigerated warehouse distribution with the remaining 20,000 sf for supporting office uses. The Project site is within the northern portion of the Perris Valley Commerce Center Specific Plan (PVCCSP), approved by the Perris City Council on January 10, 2012 to provide high quality industrial, commercial, and office uses to serve existing and future residents and businesses of the City of Perris. The PVCCSP planning area encompasses approximately 5.23 square miles in North Perris located east of I-215 and west of the Perris Valley Storm Drain, south of MARB/IPA, and north of Placentia Street. This area provides convenient access to a multi-
	directional freeway system via I-215 traveling north and south and SR-60 traveling east and west as well as access to MARB/IPA for global air transport. The PVCCSP Land Use Plan envisions this area to be a concentrated commerce center with a balanced mix of industrial uses including Business Professional Office (BPO), Light Industrial (LI), and General Industrial (GI).
	Specific Project objectives that support 2020 - 2045 RTP/SCS Goal 1 are:
	 Develop and operate a logistics center that takes advantage of existing City infrastructure and is adjacent to similar industrial logistics and distribution center uses.
	 Develop and operate a logistics center that is in close proximity to MARB/IPA, I-215/SR-60 and I-10, to support the

Table 5.10-B – Proposed Project Consistency with Connect SoCal Goals

2020-2045 RTP/SCS Goal Analysis distribution of goods throughout the region and that also limits traffic truck disruption to residential areas within the City and neighboring jurisdictions. Develop and operate a logistics center that takes advantage of visibility from I-215 that will attract guality tenants and will be competitive with other similar facilities in the region. Maximize efficient goods movement throughout the region by locating a logistics center in close proximity to the Ports of Los Angeles and Long Beach, enabling trucks servicing the site to achieve a minimum of two roundtrips per day. Develop and operate a logistics center that meets industry standards for operational design criteria. Implement the PVCCSP through development of a land use allowed by the Industrial land use designation and consistent with the development standards and criteria relevant to the site and proposed use. Positively contribute to the economy of the City through new capital investment, creation of new employment opportunities, including opportunities for highly trained workers, and expansion of the tax base. Provide local employment for residents of the City to improve jobs-housing balance withing the City. Goal 2: Improve mobility, accessibility, **Consistent:** The Project Applicant proposes a logistics center reliability and travel safety for people and within the PVCCSP area on a site that is currently unimproved and goods. vacant, apart from three parcels, totaling 2.7 acres, in the northwest corner. The Project has a PVCCSP land use designation Goal 4: Increase person and goods of GI and LI and is adjacent to an existing logistics warehouse on movement and travel choices within the the southern property line. The Project site is strategically located transportation system. close to MARB/IPA, I-215/SR- 60 and I-10, to support the distribution of goods throughout the region, and to limit traffic truck disruption to residential areas within the City and neighboring jurisdictions. It also has close proximity to the ports of Los Angeles and Long Beach, enabling trucks servicing the site to achieve a minimum of two roundtrips per day. Goal 3: Enhance the preservation, Not Applicable. Preserving and ensuring a sustainable regional security and resilience of the regional transportation system is beyond the scope of the proposed Project transportation system. and outside the authority of the Project proponents. However, the Project does not include any component that would impede the attainment of this goal (DEIR section 3.6, Project Objectives). Goal 5: Reduce greenhouse gas **Consistent:** The impact on the environment as a result of Project emissions and improve air quality. implementation has been analyzed in this DEIR pursuant to CEQA. Mitigation measures, as appropriate, have been identified to reduce air quality impacts to the maximum extent practicable. To reduce greenhouse gas emissions and improve air quality, the Project Applicant proposes:

2020-2045 RTP/SCS Goal	Analysis	
	 The Project site will include parking locations for clean air/vanpool vehicles 	
	Limit idling time for commercial vehicles to no more than five minutes	
	 Provide at least six percent of total parking spaces to facilitate future installation of electric vehicle supply equipment 	
	 Provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. 	
	• For future office improvement, refrigerants and HVAC equipment will be selected to minimize or eliminate the emission of compounds that contribute to ozone depletion and global climate change	
Goal 6: Support healthy and equitable communities	Consistent : This policy pertains to health and equitable communities, and these issues are addressed through goals and policies outlined in the Healthy Community Element of the Perris GP 2030. Relevant to the Project, the proposed building design would support the health of occupants and users by using non-toxic building materials and finishes, and by using windows and design features to maximize natural light and ventilation. It would also provide employment opportunities close to existing residences, which would allow members of the community to walk or bike to work.	
Goal 7: Adapt to a changing climate and support and integrated regional development pattern and transportation network.	<i>Not Applicable:</i> Supporting and integrating a regional development pattern and transportation network is beyond the scope of the proposed Project and the authority of the Project proponents. However, Connect SoCal indicates that since the adoption of the 2016 RTP/SCS, there have been significant drivers of change in the goods movement industry including emerging and new technologies, more complex supply chain strategies, evolving consumer demands and shifts in trade policies. E-commerce continues to be one of the most influential factors shaping goods movement. As previously identified, the Project involves the development of a high-cube warehouse building that is designed to meet contemporary industry standards and operational characteristics. The Project would accommodate a wide variety of users and would be economically competitive with similar industrial buildings in the local area and region. Further, the Project is located in an area designated for industrial development in the City of Perris, which benefits from its proximity to a key transportation network (e.g., I-215, SR-60).	

2020-2045 RTP/SCS Goal	Analysis
Goal 8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel.	Not Applicable. Leveraging new transportation technologies that result in more efficient travel is beyond the scope of the proposed Project and the authority of the Project proponents. However, Connect SoCal indicates that the advancement of automation is expected to have considerable impacts throughout regional supply chains. Notably, warehouses, such as those proposed with the Project, are increasingly integrating automation to improve operational efficiencies in response to the surge in direct-to- consumer e-commerce. Additionally, continued developments and demonstrations of automated truck technologies will alter the goods movement environment with far-reaching impacts ranging from employment to highway safety. The Project would meet contemporary industry standards and operational characteristics relative to transportation technologies and data-driven solutions.
Goal 9: Encourage development of diverse housing types in areas that are supported by multiple transportation options.	Not Applicable. As previously mentioned, the Project is located within the PVCCSP planning area. The PVCCSP Land Use Plan envisions this area to be a concentrated commerce center with a balanced mix of industrial uses including Business Professional Office (BPO), Light Industrial (LI), and General Industrial (GI). Thus, residential development is not permitted in this area.
Goal 10: Promote conservation of natural and agricultural lands and restoration of habitats.	Not Applicable. According to the Perris GP 2030 and the PVCCSP the Project site is not located within an agricultural land use designation. The Project site has a PVCCSP land use designation of GI and Li and is consistent with the Perris GP 2030. Additionally, as mentioned in Table 5.10-A above the Project is consistent with the Perris GP 2030 Conservation Element.

5.10.6 Recommended Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (State CEQA Guidelines Section 15126.4). Less than significant environmental impacts to land use and planning are anticipated to result from implementation of the Project and thus no mitigation measures are required.

5.10.7 Summary of Environmental Effects After Mitigation Measures Are Implemented

The proposed Project does not result in any significant impact to land use and planning, and no mitigation is required.

5.11 Noise

The focus of the following analysis is related to whether the proposed Project will generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; generate excessive ground-borne vibration or ground-borne noise levels; or for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels.

No written or oral comments regarding noise were received in response to the Notice of Preparation (NOP) or during the February 2, 2022, public scoping meeting.

The following references were used in the preparation of this section of the DEIR:

- Albert A. Webb Associates, Patterson- *Nance Warehouse Project Traffic Impact Analysis for DPR 21-00005, January 2022.* (Included as Appendix K.2 in this DEIR) [Cited as TIA]
- California Department of Transportation Division of Environmental Analysis, *Traffic Noise* Supplement to the Traffic Noise Analysis Protocol, 2013. (Available at https://doi.ca.gov/- /media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf, accessed April 6, 2022)
- City of Perris, *Perris Comprehensive General Plan 2030, Noise Element.* Adopted August 30, 2005, last amended August 30, 2016. (Available at https://www.cityofperris.org/home/showpublisheddocument/461/637203139725000000, accessed April 5, 2022.) [Cited as Perris GP 2030]
- City of Perris, Perris Comprehensive General Plan 2030 Draft Environmental Impact Report, State Clearinghouse #2004031135, October 2004. (Available at <u>https://www.cityofperris.org/home/showpublisheddocument/451/637203139698630000</u>, accessed April 5, 2022.) [Cited as Perris GP 2030 DEIR]
- City of Perris, *Perris Municipal Code, Section 7, Health and Welfare,* 1992. (Available at the City of Perris and at https://library.municode.com/ca/perris/codes/code_of_ordinances?nodeld=COOR_TIT7HEWE_CH7.34NOCO_S7.34.060CONO, accessed April 5, 2022.)
- City of Perris, *Perris Valley Commerce Center Specific Plan Environmental Impact Report*, State Clearing house # 2009081086 November 2011, certified January 10, 2012. (Available at <u>https://www.cityofperris.org/departments/development-services/specific-plans</u> accessed April 5, 2022.) [Cited as PVCCSP EIR]
- City of Perris, *Perris Valley Commerce Center Specific Plan Amendment No. 12*, approved January 10, 2012, and subsequently amended and approved January 11, 2022. (Available at https://www.cityofperris.org/home/showpublisheddocument/2647/637799977032200000, accessed April 5, 2022.) [Cited as PVCCSP]
- ENTECH, Noise and Vibration Study Duke Warehouse at Patterson Avenue & Nance Street, Perris, California, October 2022. (Included as Appendix I in this DEIR) [Cited as ENTECH]

Noise

- Mead & Hunt, March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, November 13, 2014. (Available at <u>https://rcaluc.org/Portals/13/17%20-</u> %20Vol.%201%20March%20Air%20Reserve%20Base%20Final.pdf?ver=2016-08-15-145812-700, accessed April 6, 2022.) [Cited as MARB/IPA ALUCP]
- Riverside County Airport Land Use Commission, *Airport Land Use Commission (ALUC)* Development Review. March 10, 2022. (Included as Appendix G.2 in this DEIR) [Cited as ALUC]

The following discussion is a summary of the *Noise & Vibration Study Duke Warehouse at Patterson Avenue & Nance Street City of Perris* ("Noise & Vibration Study") prepared for the proposed Project by Entech Consulting Group, (ENTECH) October 2022. The Noise & Vibration Study is included in Appendix I to this DEIR.

5.11.1 Setting

This section presents a discussion of noise fundamentals applicable to the Project, together with an assessment of existing ambient noise levels and noise sources in the Project vicinity.

Fundamentals of Sound

Sound is a pressure wave created by a moving or vibrating source that travels through an elastic medium such as air. Noise is defined as unwanted or excessive sound, which can vary in intensity by over one million times within the range of human hearing; therefore, a logarithmic scale, known as the decibel scale (dB), is used to quantify sound intensity. Community noise varies continuously over a period of time with respect to the contributing sound sources of the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable.

To the human ear, sound has two significant characteristics: amplitude and frequency (or pitch). The human ear is not equally sensitive to all frequencies. In particular, the ear deemphasizes low and very high frequencies. (ENTECH, p. 7.) Therefore, the "A-weighted" noise scale, which weights the frequencies to which humans are sensitive, is used for measurements. Noise levels using A-weighted measurements are written dB(A) or dBA. The relationship of various noise levels to common noise events is provided in **Table 5.11-A – Typical Noise Levels of Common Sounds**.

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	rock band (noise to some, music to others)
jet fly-over at 1,000 feet	105	
	100	
gas lawnmower at 3 feet	95	
	90	
diesel truck, 50 mph at 50 feet	85	food blender at 3 feet
	80	garbage disposal at 3 feet
noisy urban area during daytime	75	
gas lawnmower at 100 feet	70	vacuum cleaner at 10 feet
commercial area	65	normal speech at 3 feet
heavy traffic at 300 feet	60	
	55	large business office
quiet urban area during daytime	50	dishwasher in next room
	45	
quiet urban area during nighttime	40	theater, large conference room (background)
quiet suburban area during nighttime	35	
	30	Library
quiet rural area during nighttime	25	bedroom at night, concert hall (background)
	20	
	15	broadcast/recording studio
	10	
	5	
lowest threshold of human hearing	0	lowest threshold of human hearing

Table 5.11-A -	Typical	Noise	Levels of	Common	Sounds
	. Jpicai	110100		001111011	oounuo

Source: ENTECH, Table 2-1.

Two of the primary factors that reduce levels of environmental sounds are increasing the distance between the sound source to the receptor and having intervening obstacles such as walls, buildings, or terrain features between the sound source and the receptor. Factors that act to increase the loudness of environmental sounds include moving the sound source closer to the receptor, sound enhancements caused by reflections, and focusing caused by various meteorological conditions. (ENTECH, p. 9.) The analysis of any project's noise impact defines the noise environment of the project area in terms of sound intensity and its effect on adjacent land uses and receptors.

Effects of Noise on People

The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and in extreme circumstances, hearing impairment. Although exposure to high noise levels has been demonstrated to cause physical and physiological effects, the principal human

Noise

responses to typical environmental noise exposure are related to subjective effects and interference with activities. With regard to increases in A-weighted noise level, except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived, a 3 dBA change is considered a barely perceivable difference outside a laboratory, a change of 5 dBA is readily perceptible, and an increase (or decrease) of 10 dBA is perceived as twice (or half) as loud. (ENTECH, p. 9.)

Noise Descriptors

Because the noise environment is continually changing, average noise over a period of time is generally used to describe the community noise environment. This requires the measurement of noise over a period of time to accurately characterize a community noise environment. This time varying characteristic of environmental noise is described using the noise descriptors defined in **Table 5.11- B – Common Noise Descriptors**.

Descriptor	Definition
L _{eq}	The L_{eq} , or equivalent sound level, is used to describe noise over a specified period of time in terms of a single numerical value; the L_{eq} of a time-varying signal and that of a steady signal are the same if they deliver the same acoustic energy over a given time. The L_{eq} may also be referred to as the average sound level.
Lmax	The maximum instantaneous noise level experienced during a given period of time.
L _{min}	The minimum instantaneous noise level experienced during a given period of time.
Lx	The noise level exceeded a percentage of a specified time period. The "x" represents the percentage of time a noise level is exceeded. For instance, L_{50} and L_{90} represent the noise levels that are exceeded 50 percent and 90 percent of the time, respectively.
L _{dn}	Also termed the day-night average noise level (DNL), the Ldn is the average A- weighted noise level during a 24-hour day, obtained after the addition of 10 dBA to measured noise levels between the hours of 10:00 pm to 7:00 am to account for nighttime noise sensitivity.
CNEL	CNEL, or Community Noise Equivalent Level, is the average A-weighted noise level during a 24-hour day that is obtained after the addition of 5 dBA to measured noise levels between the hours of 7:00 pm to 10:00 pm and after the addition of 10 dBA to noise levels between the hours of 10:00 pm to 7:00 am to account for noise sensitivity in the evening and nighttime, respectively.

Table 5.11-B – Common Noise Descriptors

Source: ENTECH, p. 7.

Fundamentals of Vibration

Vibration is energy transmitted in waves through the ground or man-made structures, and these energy waves generally dissipate with distance from the vibration source. Familiar sources of ground-borne vibration are trains, buses on rough roads, and construction activities such as blasting, piledriving, and operation of heavy earth-moving equipment. According to the Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment*, ground-borne vibration can be serious concern for nearby neighbors of a transit system route or maintenance facility, causing buildings to shake and rumbling sounds to be heard. Ground-borne vibration generated by man-made activities typically attenuates rapidly with distance from the vibration source. Sensitive receptors for vibration include

structures (older masonry structures), people (residents, the elderly, and the sick), and vibration-sensitive equipment. (ENTECH, pp. 10-11.)

Vibration can be quantified by several different methods. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (VdB) is commonly used to measure RMS. (ENTECH, p. 10.)

Existing Site and Surrounding Conditions

The Project site encompasses approximately 35.7 net acres, located at the northeastern corner of Patterson Avenue and Nance Street. The Project site is unimproved and vacant with the exception of 2.7 acres in the northwest corner of the Project site, which is currently being utilized for semi-truck trailer storage. The Project site is bordered by an industrial warehouse to the south, commercial business to the north and west, vacant land and legal, nonconforming residences to the east and west, as shown on **Figure 3-2 – Aerial Map**.

The Project site is located within the Perris Valley Commerce Center Specific Plan (PVCCSP) planning area of the City of Perris. The PVCCSP was adopted by the City on January 10, 2012 and last amended on January 11, 2022. PVCCSP EIR Section 4.9 includes an overview of noise and acoustical fundamentals as well as a comprehensive discussion of existing noise levels, standards and regulations to control noise, and short and long-term noise impacts related to construction, operation, and increased traffic. The PVCCSP EIR concluded that potential noise impacts as a consequence of development consistent with the PVCCSP would be reduced to less than significant levels with mitigation.

The location of existing noise-sensitive land uses adjacent to the Project site are shown in **Figure 5.11-1 – Receptor and Monitoring Locations** and labeled R1, R2, R3, and R4. The Noise & Vibration Study evaluates noise levels at residential and non-residential land uses surrounding the Project site. The location of the property line of these receptors ranges from 0–302 feet from the Project site. Receiver R1 represents two commercial land uses, but the structure on-site appears to be a residence. Receivers R2 through R4 are non-conforming residential land uses. R3 is a residential land use. (ENTECH, p. 28.)



Source: ENTECH 2022, Riverside County 2021 0 250 500 1,000 Feet

1

Figure 5.11-1 – Receptor and Monitoring Locations Duke Warehouse at Patterson Avenue and Nance Street



Existing Noise Levels

The existing ambient noise environment was characterized by collecting field noise measurements at the property boundary of the Project area. Three long-term 24-hour measurements were taken at the Project site from August 10, 2021 through August 12, 2021 at the locations identified as LT-1, LT-2, and LT-3 on **Figure 5.11-1**.

To document existing noise levels in the Project area, a Larson Davis Type 1 precision sound level meter was used. The noise meter was programmed in "slow" mode to record noise levels in the "A" weighted form. The sound level meter and microphone were mounted, five feet above the ground, and equipped with a windscreen during all measurements. The Larson Davis sound level meter was calibrated before the monitoring using a CAL200 calibrator. All noise level measurement equipment meets American National Standards Institute (ANSI) specifications for sound level meters. Measurements taken at the three long-term monitoring sites are shown below in **Table 5.11- C – Existing (Ambient) Long-Term (24-hour) Noise Level Measurements**.

Noise		Hourly Noise Levels (1 hr-L _{eq}) ⁴					24- bour	
Monitoring Location	Description		Daytime			Nighttime		Noise
ID ^{2,3}		Minimum	Maximum	Average	Minimum	Maximum	Average	(CNEL)
Site LT-1	Patterson Avenue & Nance Street	55.6	66.1	58.7	57.8	60.2	53.9	65
Site LT-2	Northern Project boundary south of Harley Knox Blvd	52.2	63.2	55.1	47.7	57.9	49.6	61
Site LT-3	Western Project boundary at Nevada Avenue	47.2	67.4	56.8	49	54.8	48.4	61

Table 5.11-C – Existing (Ambient) Long-Term (24-hour) Noise Level Measurements¹

Source: ENTECH, Table 5-1.

Notes

1 Noise measurement was taken on August 10, 2022, and August 11, 2022, for sites LT-1 and LT-2, and on August 12 for site LT-3. See Appendix I for monitoring data.

2 See **Figure 5.11-1** for the location of the monitoring sites.

3 Taken with Larson Davis Type 1 noise meter

4 Daytime hours-7:01 am to 10:00 pm, Nighttime hours-10:01 pm to 7:00 am

As shown in Table 5.11-C, the existing ambient noise level in the Project area is above 60 CNEL.

Airport Noise

As shown on **Figure 5.11-2 – Airport Noise Contours**, the Project Site is located within Zone B2 of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan (MARB/IPA ALUCP). **Figure 5.11-2** shows a portion of the northeast corner of the Project site consisting of approximately 10 acres is located within the 65-70 CNEL contour, while the remainder of the Project is located in the 60-65 CNEL contour. Nonetheless, the Project is consistent with the type of land use for this compatibility zone. (ENTECH, p. 19.)

Remainder of Page Intentionally Left Blank



Sources: Riverside Co. GIS, 2017; MARB/IP ALUC Plan, 2014; USDA NAIP, 2016.



Figure 5.11-2 – Airport Noise Contours Duke Warehouse at Patterson Avenue and Nance Street



Noise Modeling Procedures

Construction Noise

The magnitude of the noise impact during construction is a function of the type of construction activity, equipment, duration of the construction activity, distance between the construction noise source and receptor, and intervening structures. The Noise & Vibration Study modeled a worst-case construction noise scenario to estimate the loudest activities occurring at the Project site. The type and quantity of off-road construction equipment that may be used during Project construction are shown in **Table 5.11 D – Equipment by Construction Activity**. Additional on-road vehicles would be accessing the Project site for miscellaneous deliveries and for construction worker trips. During concrete pouring activities, the Applicant estimates approximately 10 concrete mixing trucks would be operating on-site at one time. (ENTECH, p. 31.)

Constriction Activity	Off-Road Equipment	Unit Amount
	Excavator	2
	Rubber Tired Dozers	1
Grading	Tactors/Loaders/Backhoes	2
	Grader	1
	Scrapers	8
	Crane	1
	Forklifts	3
Building Construction	Generator Sets	1
	Tactors/Loaders/Backhoes	3
	Welders	1
	Pavers	2
Paving	Paving Equipment	2
	Rollers	2
Architectural Coating	Air compressors	1

Table 5.11-D – Equipment by Construction Activity

Source: ENTECH, Table 10-2.

Using the noise sources identified in **Table 5.11-D**, a noise analysis was performed using the Federal Highway Administration's (FHWA's) Roadway Construction Noise Model (RCNM). The model input and results are detailed in Appendix I to this DEIR. The construction noise assessment is focused on noise levels from the Project site to the nearest residence. Because construction activities tend not to occur at the nearest or farthest part of the Project site in relation to the nearest sensitive receptor, the Project's construction noise was modeled from the center of the Project site. Construction noise levels were evaluated at the nearest residential receivers to the west and east of the Project site, receivers R1 and R3 respectively. This represents the idealized point from which the energy sum of all construction noise, both near and far, would be centered. It was assumed the distance from the center of the Project to the nearest residential receivors, R3, is 650 feet as shown in **Figure 5.11-1 – Receptor and Monitoring Locations** above. Receptor R3 is east of the Project site. (ENTECH, p. 32.)

Construction noise is usually short-term and creates a temporary impact on ambient noise for a period of a time. **Table 5.11-E – Construction Schedule** provides an estimated construction period based on

engineering and Applicant estimates. As shown below, the construction period is approximately eleven months.

Construction Activity	Start Date	End Date	Total Working Days
Grading	09/01/2022	10/31/2022	43
Building Construction	11/01/2022	07/31/2023	195
Paving	06/01/2023	07/31/2023	43
Painting	07/01/2023	07/31/2023	21

Table 5.11-E - Construction Schedule

Source: ENTECH, Table 10-1.

Operational Noise

The Noise & Vibration Study (Appendix I) used the following basic parameters in the modeling assumptions. The Project Applicant proposes one building with approximately 769,668 square (sf) feet of floor area to accommodate a non-refrigerated warehouse and supporting office use. The building includes 64 dock doors on the east side, and 49 dock doors on the west side. The proposed office space will be equipped with heating, ventilation, and air-conditioning (HVAC) equipment. The Noise & Vibration Study identified the following primary non-transportation noise sources associated with the Project; HVAC equipment, on-site parking lot circulation, and loading docks activity. **Table 5.11-F – Reference Noise Levels**, below used similar operations activities from the SoundPlan Library to calculate noise levels at sensitive receptors based on anticipated operational noise levels. (ENTECH, p. 25.)

Noise Source ¹	Source Type	Number of Units	Reference Noise Level L _{eq} (dBA) ²	Reference Noise Level L _{max} (dBA) ²	Distance (ft)
Idling Semi Truck	Point	113	73.8	74.9	10
Back Up Alarm	Point	113	77.9	92.7	3
HVAC	Point	112	67.7	68.6	3
Trailer Parking	Area (SP Parking Tool)	141	-	-	1 trailer per Hr per stall
Parking	Area (SP Parking Tool)	515	-	-	1 car Per Hr

Table 5.11-F – Reference Noise Levels

Source: ENTECH, Table 6-2.

Notes:

1 Reference noise levels were obtained from the SoundPlan library.

2 Based on the throughput of 3 cars per hour

Roadway Noise

As described in Section 6.2.1 of the Noise Study, roadway noise level increases from vehicular traffic were calculated using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model – FHWA-RD-77-108. The FHWA noise prediction model was used to analyze Project-generated traffic noise for the following scenarios: existing with and without the Project. The modeling calculations take into account the roadway classification, the active roadway width, the

Noise

Duke Warehouse at Patterson Avenue and Nance Street DEIR

posted vehicle speed, total average daily traffic (ADT), the estimated vehicle mix, the roadway grade, the angle of view, the site conditions, and the percentage of ADT which flows each hour throughout a 24-hour period. (ENTECH, p. 24.)

5.11.2 Related Regulations

To limit the population's exposure to physically and/or psychologically damaging noise levels, the federal government, the State, various County governments, and most municipalities in California have established standards and ordinances to control noise.

Federal Regulations

Federal Noise Control Act of 1972

The U.S. Environmental Protection Agency (USEPA) Office of Noise Abatement and Control issued the Federal Noise Control Act of 1972, establishing programs and guidelines to identify and address the effects of noise on public health, welfare, and the environment. The USEPA also published *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (Levels of Environmental Noise). Levels of Environmental Noise recommends that the L_{dn} should not exceed 55 dBA outdoors or 45 dBA indoors in order to prevent significant activity interference and annoyance in noise-sensitive areas.*

In addition, *Levels of Environmental Noise* identified 5 dBA as an "adequate margin of safety" for a noise level increase relative to a baseline noise exposure level of 55 dBA L_{dn} . In other words, there would not be a noticeable increase in adverse community reaction with an increase of five dBA or less from this baseline level. The USEPA did not promote these findings as universal standards or regulatory goals with mandatory applicability to all communities, but rather as advisory exposure levels below which there would be no risk to a community from any health or welfare effect of noise.

In 1981, USEPA administrators determined that subjective issues such as noise would be better addressed at lower levels of government. Consequently, in 1982 responsibilities for regulating noise control policies were transferred to State and local governments. However, noise control guidelines and regulations contained in USEPA rulings in prior years remain in place by designated Federal agencies, allowing more individualized control for specific issues by designated Federal, State, and local government agencies.

Federal Transit Administration and Federal Railroad Administration Standards

Although the Federal Transit Administration (FTA) standards are intended for federally-funded mass transit projects, the impact assessment procedures and criteria included in the FTA *Transit Noise and Vibration Impact Assessment Manual* (May 2006) are routinely used for projects proposed by local jurisdictions. The FTA and Federal Railroad Administration (FRA) have published guidelines for assessing the impacts of ground-borne vibration associated with rail projects, which have been applied by other jurisdictions to non-rail projects. The FTA measure of the threshold of architectural damage for conventional sensitive structures is 0.2 inch per second perturbation projection vector (PPV).

Occupational Health and Safety Administration

The federal government regulates occupational noise exposure common in the workplace through the USEPA Occupational Health and Safety Administration (OSHA). Noise regulations apply to the operation of construction equipment and may apply to 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 will not be addressed further in this analysis.

State Regulations

California Noise Control Act of 1973

California Health and Safety Code Sections 46000 through 46080, known as the California Noise Control Act of 1973, declares that excessive noise is a serious hazard to the public health and welfare and that exposure to certain levels of noise can result in physiological, psychological, and economic damage. It also identifies a continuous and increasing bombardment of noise in the urban, suburban, and rural areas. The California Noise Control Act declares that the State of California has a responsibility to protect the health and welfare of its citizens by the control, prevention, and abatement of noise. It is the policy of the State to provide an environment for all Californians free from noise that jeopardizes their health or welfare.

California Noise Insulation Standards (California Code of Regulations (CCR) Title 24)

In 1974, the California Commission on Housing and Community Development adopted noise insulation standards for hotels, motels, dormitories, and multi-family residential buildings (CCR Title 24, Part 2). Title 24 establishes standards for interior room noise (attributable to outside noise sources). This State standard indicates that interior noise levels attributable to exterior noise sources shall not exceed 45 dB (CNEL or L_{dn}) in any habitable room. The City of Perris applies the interior noise criterion of 45 dBA CNEL for single family residences, in addition to multi-family residential structures.

State of California General Plan Guidelines

Though not adopted by law, the State of California *General Plan Guidelines* published by the California Governor's Office of Planning and Research (OPR) provide guidance for the compatibility of projects within areas of specific noise exposure. The *General Plan Guidelines* identify the suitability of various types of construction relative to a range of outdoor noise levels and provide each local community some flexibility in setting local noise standards that allow for the variability in community preferences. Findings presented in *Levels of Environmental Noise* (USEPA 1974) influenced the recommendation of the *General Plan Guidelines*, most importantly in the choice of noise exposure metrics (i.e. L_{dn} or CNEL) and in the upper limits for the Normally Acceptable outdoor exposure of noise-sensitive uses. The *General Plan Guidelines* include a Noise and Land Use Compatibility Matrix that identifies acceptable and unacceptable community noise exposure limits for various land use categories.

The City of Perris has utilized the State's noise/land use compatibility matrix as a model to create their own. The matrix for community noise prepared by the State of California, Department of Health, as adopted by the City of Perris is shown in the Perris GP 2030 Safety Element Exhibit N-1 (reproduced herein as **Table 5.11-G – City of Perris Land Use Compatibility Guidelines**). The compatibility guidelines identify "normally acceptable," "conditionally acceptable" and "clearly unacceptable" noise levels for siting various new land uses. A conditionally acceptable designation implies new development should be undertaken only after a detailed analysis of the noise reduction requirements for each land use is made and the 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.

Noise

Table 5.11-G – City of Perris Land Use Compatibility Guidelines

Land Use Category	C Equiv or Day	ommunity Noise valent Level (CNEL) Night Level (Ldn), dB 65 70 75 80 85	Nature of the noise environment where the CNEL or Ldn level is:
Residential- Low-Density Family, Duplex, Mobile H	Single-		Below 55 dB Relatively quiet suburban or urban areas, no arterial
Residential- Multi-Family			streets within 1 block, no freeways within 1/4 mile.
Commercial- Motels, Hot Transient Lodging	els,		55-65 dB
Schools, Libraries, Churc Hospitals, Nursing Home	shes,		urban areas, near but not directly adjacent to high
Amphitheaters, Concert I Auditorium, Meeting Hall	Hall, 7////		volumes of traffic.
Sports Arenas, Outdoor Spectator Sports	1111		65-75 dB Very noisy urban areas near arterials, freeways or
Playgrounds, Neighborhood Parks			airports.
Golf Courses, Riding Stal Water Rec., Cemeteries	bles,	111	75+ dB Extremely noisy urban
Office Buildings, Busines Commercial, Professiona Mixed-Use Development	s, al, and s	VIII MALLAND	areas adjacent to freeways or under airport traffic patterns. Hearing damage
Industrial, Manufacturing Utilities, Agriculture		1118000	with constant exposure outdoors.
Normally Acceptable Specific land use is atisfactory, based on he assumption that any uilding is of normal onventional construc- on, without any special oise insulation require- nents	Conditionall Acceptable New construction or development should undertaken only afte detailed analysis of noise reduction requ ments is made and needed noise insulat features included in design. Conventiona construction, but with closed windows and fresh air supply syste or air conditioning, w normally suffice.	New construction or development should generally be discour- aged. If new construc- tion or development does proceed, a de- tailed analysis of noise reduction requirements must be made and needed noise insulation features included in design.	Clearly Unacceptable New construction or development should generally not be undertaken.
he Community Noise Equ oise environment. They nergy received over the c ight, the CNEL weighting 0-decibel penalty on nois 0-decibel weighting for la	vivalent Level (CNEL) represent the constant lay were averaged. In includes a 5-decibel e between 10:00 p.m. te-night noise events.	and Day-Night Noise Level (t A-weighted noise level that order to account for the great benalty on noise between 7:00 and 7:00 a.m. of the next da For practical purposes, the t	Ldn) are measures of the 24-hour would be measured if all the soun iter sensitivity of people to noise a 0 p.m. and 10:00 p.m. and a y. The Ldn includes only the wo measures are equivalent for

Business and Professions Code

Business and Professions Code Section 11010 and Civil Code Sections 1102.6, 1103.4, and 1353 address buyer notification requirements for lands around airports. Any person who intends to offer subdivided lands, common interest developments and residential properties for sale or lease within an airport influence area is required to disclose that fact to the person buying the property.

Regional Regulations

Airport Land Use Commission

On April 26, 1984, the Riverside County Airport Land Use Commission (ALUC) adopted the Riverside County Airport Land Use Plan (1984 ALUP). This plan established land use restrictions within the Airport-Influenced Areas that were adopted by the ALUC around airports in Riverside County. In 1986, airport-influenced areas were established around March Air Force Base (which was realigned and converted to March Air Reserve Base (MARB) on April 1, 1996). The airport influence area around MARB was divided into three land use planning areas: Area I, Area II, and Area III. The Project site is located in Influence Area II encompasses larger land areas. Agricultural, industrial, and commercial uses are permitted. The boundaries follow general flight paths and coincide with areas where aircraft would be turning and applying or reducing power. (Perris GP DEIR, p. IV-35.)

The 2005 MARB Air Installation Compatible Use Zone (AICUZ) Study provides noise contours produced by aircraft operations at MARB, based upon the day-night average a-weighted sound level (L_{dn}) metric used by the United States Air Force and CNEL used by the State of California. The AICUZ also provides the information necessary to maximize beneficial use of the land surrounding MARB, including March Joint Powers Authority, while minimizing the potential for degradation of the health and safety of the affected public. The basic objective of the AICUZ program is to achieve compatible uses of public and private lands in the vicinity of military airfields by controlling incompatible development through local actions. The MARB AICUZ provides compatible use guidelines for land use areas around the base which is provided to assist local communities in future planning and zoning activities.

On November 13, 2014, ALUC adopted the MARB/IPA ALUCP. The compatibility zones and associated criteria set forth in the MARB/IPA ALUCP provide noise and safety compatibility protection. The proposed Project site is located within Compatibility Zone B2. Zone B2 is defined as a "High Noise Zone" with a "high" noise impact from airport noise and overflight factors. Zone B2 is not within an Accident Potential Zone, but is within or near the 65 CNEL contour, as shown in

Figure 5.11- 2 – Airport Noise Contours. Therefore, the Project is subject to "single-event noise" sufficient to disrupt many land use activities. (MARB/IPA ALUCP, p. 3.) On March 10, 2022, Riverside County ALUC found the Project consistent with the MARB/IPA ALUCP. The ALUC review findings are included in Appendix G.2 of this DEIR.

Local Regulations

Perris Municipal Code

According to Perris Municipal Code, Chapter 7.34, excessive noise levels are detrimental to the health and safety of individuals. Noise is considered a public nuisance, and the City discourages unnecessary, excessive or annoying noises from all sources. The Perris Municipal Code addresses noise impacts in terms of the CNEL and does not set short-term noise limitations.

Noise

Section 7.34.040 – Sound amplification:

No person shall amplify sound using sound amplifying equipment contrary to any of the following:

- A. The only amplified sound permitted shall be either music or the human voice, or both.
- B. The volume of amplified sound shall not exceed the noise levels set forth in this subsection when measured outdoors at or beyond the property line of the property from which the sound emanates.

Fable 5.11-H – Cit	y of Perris	Outdoor Noise	e Regulations
--------------------	-------------	---------------	---------------

Time Period	Maximum Noise Level
10:01 PM – 7:00 AM	60 dBA
7:01 AM – 10:00 PM	80 dBA

Source: Perris Municipal Code Section 7.34.040.

Section 7.34.050 – General prohibition:

- A. It is unlawful for any person to willfully make, cause or suffer, or permit to be made or caused, any loud excessive or offensive noises or sounds which unreasonably disturb the peace and quiet of any residential neighborhood or which are physically annoying to persons of ordinary sensitivity or which are so harsh, prolonged or unnatural or unusual in their use, time or place as to occasion physical discomfort to the inhabitants of the city, or any section thereof. The standards for dBA noise level in Section 7.34.040 shall apply to this section. To the extent that the noise created causes the noise level at the property line to exceed the ambient noise level by more than 1.0 decibels, it shall be presumed that the noise being created also is in violation of this section.
- B. The characteristics and conditions which should be considered in determining whether a violation of the provisions of this section exists should include, but not be limited to, the following:
 - 1. The level of the noise;
 - 2. Whether the nature of the noise is usual or unusual;
 - 3. Whether the origin of the noise is natural or unnatural;
 - 4. The level of the ambient noise;
 - 5. The proximity of the noise to sleeping facilities;
 - 6. The nature and zoning of the area from which the noise emanates and the area where it is received;
 - 7. The time of day or night the noise occurs;
 - 8. The duration of the noise; and
 - 9. Whether the noise is recurrent, intermittent or constant.

Section 7.34.060 – Construction noise:

It is unlawful for any person between the hours of seven p.m. of any day and seven a.m. of the following day, or on a legal holiday, with the exception of Columbus Day and Washington's birthday, or on Sundays to erect, construct, demolish, excavate, alter or repair any building or structure in such a manner as to create disturbing, excessive or offensive noise. Construction activity shall not exceed 80 dBA L_{max} in residential zones in the city. (Ord. 1082 Section 2(part), 2000).

Chapter 16.22 – Construction Located Near Arterials, Railroads and Airports, clarifies terminology relative to noise.

Section 16.22.020 - Definitions:

J. "Noise-sensitive land uses" include, but are not limited to: residences, schools, libraries, hospitals, churches, offices, hotels, motels, and outdoor recreational areas. Noise-sensitivity factors include interference with speech communication, subjective judgment of noise acceptability and relative noisiness, priced for freedom from noise intrusion, and sleep interference criteria.

Perris Comprehensive General Plan 2030

The following are applicable goals, policies and measures from the Perris Comprehensive General Plan (Perris GP 2030) Noise Element (adopted 2005, amended 2016) related to impacts from noise:

Noise Element

Goal I	Future land uses compatible with projected noise environments.	
Policy I.A	The State of California Noise/Land Use Compatibility Criteria shall be used in determining land use compatibility for new development.	
Measure I.A.1	All new development proposals will be evaluated with respect to the State Noise/Land Use Compatibility Criteria. Placement of noise sensitive uses will be discouraged within any area exposed to exterior noise levels that fall into the "Normally Unacceptable" range and prohibited within areas exposed to "Clearly Unacceptable" noise ranges.	
Measure I.A.3	Acoustical studies shall be prepared for all new development proposals involving noise sensitive land uses, as defined in Section 16.22.020J of the Perris Municipal Code, where such projects are adjacent to roadways and within existing or projected roadway CNEL levels of 60 dBA or greater.	
Measure I.A.4	As part of any approvals of noise sensitive projects where reduction of exterior noise to 65 dBA is not reasonably feasible, the City will require the developer to issue disclosure statements to be identified on all real estate transfers associated with the affected property that identifies regular exposure to roadway noise.	
Goal IV	Future land uses compatible with noise from air traffic.	
Policy IV.A	Reduce or avoid the existing and potential future impacts from air traffic on new sensitive noise land uses in areas where air traffic noise is 60 dBA CNEL or higher.	

Section 5.11	City of Perris
Noise	Duke Warehouse at Patterson Avenue and Nance Street DEIR
Measure IV.A.1	As part of any approvals for new sensitive land uses within the 60 dBA CNEL or higher noise contours associated with March Inland Port, and for such new uses within the flight paths associated with the Perris Valley Skydiving Center, the City will require the developer to issue disclosure statements identifying exposure to regular aircraft noise. This disclosure shall be issued at the time of initial and all subsequent sales of the affected properties.
Measure IV.A.2	All new development proposals in the noise contour areas of 60 dBA and above will be evaluated with respect to the State Noise/Land Use Compatibility Criteria.
Policy V.A	New large scale commercial or industrial facilities located within 160 feet of sensitive land uses shall mitigate noise impacts to attain an acceptable level as required by the State of California Noise/Land Use Compatibility Criteria.
Measure V.A.1	An acoustical impact analysis shall be prepared for new industrial and large scale commercial facilities to be constructed within 160 feet of the property line of any existing noise sensitive land use. This analysis shall document the nature of the commercial or industrial facility as well as all interior or exterior facility operations that would generate exterior noise. The analysis shall document the placement of any existing or proposed noise-sensitive land uses situated within the 160-foot distance. The analysis shall determine the potential noise levels that could be received at these sensitive land uses and specify specific measures to be employed by the large scale commercial or industrial facility to ensure that these levels do not exceed 60 dBA CNEL at the property line of the adjoining sensitive land use. No development permits or approval of land use applications shall be issued until the acoustic analysis is received and approved by the City Staff.
PVCCSP Standard	ds and Guidelines and Mitigation Measures

The PVCCSP contains Development Standards and Guidelines pertaining to the analysis of noise impacts. As suggested by the PVCCSP, specific standards and guidelines best suited to each individual project should be identified and incorporated into the project design. The Development Standards and

Guidelines relevant to the proposed Project are identified below:

Hours of Operation

Depending on the type of use and activities proposed by the industrial, commercial or professional/office development, the Development Services Department may impose restrictions on hours of operation for construction, as well as business operation.

Screening

Proposed industrial, commercial or professional/office developments will need to screen operations for residential views through landscape and/or wall screening.

Supplemental to the Development Standards and Guidelines applicable to the proposed Project, the PVCCSP EIR incorporates mitigation measures designed to avoid or reduce the potential for significant adverse noise impacts on or by projects located within the PVCCSP planning area.

MM Noise 1:	During all project site excavation and grading on-site, construction contractors shall
	equip all construction equipment, fixed or mobile, with properly operating and
	maintained mufflers consistent with manufacturer's standards. The construction
	contractor shall place all stationary construction equipment so that emitted noise is
	directed away from the noise sensitive receptors nearest the project site.

- **MM Noise 2:** During construction, stationary construction equipment, stockpiling and vehicle staging areas will be placed a minimum of 446 feet away from the closet sensitive receptor.
- **MM Noise 3:** No combustion-powered equipment, such as pumps or generators, shall be allowed to operate within 446 feet of any occupied residence unless the equipment is surrounded by a noise protection barrier.
- **MM Noise 4:** Construction contractors of implementing development projects shall limit haul truck deliveries to the same hours specified for construction equipment. To the extent feasible, haul routes shall not pass sensitive land uses or residential dwellings.

As specified in the PVCCSP EIR, the Perris Municipal Code Chapter 7.34 Noise Control codifies the Perris Noise Ordinance, which incorporates California Noise Insulation Standards pursuant to the CCR, Title 25, Chapter 1, Subchapter 1.

Summary

The Perris GP 2030 Noise Element lists the noise standard for fixed noise sources at 60 dBA CNEL at the nearest noise-sensitive land use. The Noise Ordinance lists the noise standard for fixed noise sources at 60 dBA L_{max} during nighttime hours (10:01 p.m. to 7:00 a.m.) and 80 L_{max} during daytime hours (7:01 a.m. to 10:00 p.m.). For a summary of City of Perris noise standards, see **Table 5.11-I – City of Perris Noise Standards Summary**, below.

Noise Standard Summary			
Off-Site Roadway Noise	65 dBA CNEL for roadway segments with fronting residential and school uses		
	75 dBA CNEL for roadway segments with fronting industrial, office, or commercial uses		
On-site Truck Noise	60 dBA L _{max}		
On-site Noise/Other Sources	60 dBA L _{max}		
Construction Noise	80 dBA L _{max} with time restrictions		
Interior Noise	45 dBA CNEL for residences		

Table 5.11-I – City of Perris Noise Standards Summary

Because the proposed Project is industrial, it is not a noise-sensitive land use as defined by Perris Municipal Code Section 16.22.020. However, the Project site is located adjacent to legal, non-conforming residential uses to the west and east of the Project site.

Traffic

The City specifies outdoor and indoor noise limits for industrial and residential uses, places of worship, educational facilities, hospitals, hotels/motels, commercial and other land uses. The City's exterior standard for industrial land uses are normally acceptable in areas up to 70 dBA CNEL and conditionally acceptable up to 80 dBA CNEL. Residential land uses are conditionally acceptable at 65 dBA CNEL.

Noise

Construction

Construction noise is considered a short-term impact and would be considered significant if construction activities are undertaken outside the allowable times as defined in the Perris Municipal Code Section 7.34.060 and exceed 80 dBA in residential zones.

5.11.3 Design Considerations

Design considerations refer to ways in which the proposed Project will reduce noise impacts. The Project site is located within the PVCCSP planning area. The PVCCSP includes development Standards and Guidelines to address the potential for noise impacts resulting from industrial, commercial, and professional office land uses adjacent to residential development, identified as sensitive receptors. The Project site is adjacent to legal, non-conforming residential development located to the east and west of the Project site. The Project will protect in place the existing wall along the southern boundary. A 14-foot-tall pilaster wall is proposed on the east and west sides of the Project site, to screen the view of the truck parking areas and loading bays from Patterson Avenue and Nevada Avenue. As required by Riverside County ALUC, "Notice of Airport in Vicinity" shall be provided to all prospective purchasers and tenants, and recorded as a deed notice. ALUC conditions also require the office portions of the proposed logistics center building shall incorporate noise measures as necessary to reduce interior noise levels from aircraft operation at or below 45 CNEL. (ALUC, p. 2-3.)

5.11.4 Thresholds of Significance

The City of Perris has not established local CEQA significance thresholds and instead, defers to the thresholds of significance identified in the State CEQA Guidelines Appendix G. Impacts related to this Project may be considered potentially significant if the proposed Project would result in:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in local general plan or noise ordinance, or applicable standards of other agencies;
- Generation of excessive ground-borne vibration or ground-borne noise levels; or,
- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

There is no official "industry standard" of determining significance for noise impacts. However, typically, a jurisdiction will identify either a 3 dBA or 5 dBA increase as being the threshold because these levels represent varying levels of perceived noise increases. The PVCCSP EIR states that a change in 5 dBA is "readily discernable to most people in an exterior environment." Accordingly, for purposes of the analysis included herein, an increase of 5 dBA is considered discernable to most people in an exterior environment when the existing noise levels are below 60 dBA. Further, it identifies a 3-dBA increase threshold when the existing ambient noise levels already exceed 60 dBA.

Vibration can cause damage to buildings and become a human annoyance. The FTA measure of the threshold of architectural damage for conventional sensitive structures is 0.2 in/sec PPV.

Table 5.11- J – Construction Vibration Damage Criteria below, outlines the City's adopted FTA's vibration standards that evaluate potential building damage impacts related to construction activities. (ENTECH, p. 11.)
Building Category	PPV (in/sec)
I. Reinforced concrete, steel, or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

Table 5.11-J – Construction Vibration Damage Criteria

Source: ENTECH, Table 3-1

Annoyance from vibration often occurs when the vibration levels exceed the threshold of perception, 65 VdB, by only a small margin. A vibration velocity level of 75 VdB is considered to be the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. In general, a residential area has a background vibration velocity level of 50 VdB, approximately 0.0013 in/sec PPV. (ENTECH, p. 11.) The FTA has also adopted the following standards for ground-borne vibration impacts related to human annoyance: Vibration Category 1 – High Sensitivity, Vibration Category 2 – Residential, and Vibration Category 3 – Institutional. Thresholds and category definitions can be found in **Table 5.11- K – Ground-borne Vibration Impact Criteria for General Assessment**, (ENTECH, p. 12.) In the PVCCSP EIR the City of Perris adopted the FTA vibration threshold of 80 VdB as the maximum acceptable vibration standard.

Table 5.11-K – Ground-borne Vibration Impact Criteria for General Assessment

Land Use Category	Frequent Events	Occasional Events	Infrequent Events
Category 1: Buildings where vibration would interfere with major operations	65 VdB⁴	65 VdB₫	65 VdB₫
Category 2: Residences and buildings where people would normally sleep	72 VdB	75 VdB	80 VdB
Category 3: Institutional and uses with primarily daytime use	75 VdB	78 VdB	83 VdB

Source: ENTECH, Table 3-2.

Notes

a) "Frequent Events" is defined as more than 70 vibration events of the same source per day.

b) "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day.

c) "Infrequent Events" is defined as fewer than 30 vibration events of the same kind per day.

d) This criterion is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes.

5.11.5 Environmental Impacts Before Mitigation

Threshold A: Would the Project result in generation of substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in local general plan or noise ordinance, or applicable standards of other agencies?

The City has identified noise levels of up to 60 dBA CNEL as "normally acceptable" and of up to 65 dBA CNEL as "conditionally acceptable" for residential land uses per the Perris GP 2030. Noise levels of up to 70 dBA CNEL are considered "normally acceptable" and of up to 80 dBA CNEL are considered "conditionally acceptable" for industrial uses (see **Table 5.11-G – City of Perris Land Use**

Compatibility Guidelines). In this regard, the phrase "normally acceptable" is defined by the City as "[s]pecific land use is satisfactory based on the assumption that any building is of normal conventional construction, without any special noise insulation requirements." Likewise, the phrase "conditionally acceptable" is defined as "[n]ew construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in the

Noise

Duke Warehouse at Patterson Avenue and Nance Street DEIR

design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice."

Noise impacts generally fall into two broad categories with respect to all types of projects and noise standards: noise impacts <u>from</u> a project and noise impacts <u>to</u> a project. The first category is the noise created by the uses or traffic associated with a project. The second category of noise impacts is noise created off-site that may cause unacceptable levels of noise within buildings or outdoor areas to a project site.

Construction Noise Impacts

Construction noise associated with the Project was analyzed using the RCNM model. It was assumed that the construction for the Project parcels would take place over eleven months. It was assumed that the Project development would occur in one phase and would consist of mass grading, building construction, paving, and painting activities. All construction activities would create temporary periods of noise when heavy construction equipment is in operation and would cause a short-term increase in ambient noise levels. It was assumed that each construction activity would occur at the center of the Project. Construction noise levels were evaluated at the nearest residential receivers to the west and east of the Project site, receivers R1 and R3. **Table 5.11-L, Construction Noise Levels by Construction Phase**, presents the noise levels in L_{max} for each construction phase for R1 and R3. Concrete pouring may occur during the daytime and nighttime hours during hot weather. All other construction activities will occur during the daytime hours only. (ENTECH, p. 32.)

Location	Phase	Construction dBA	Exceeds Standard,	
		Daytime	Nightime ²	80 dBA L _{max}
	Grade	68	None	
R1 (West)	Build	62	57	
	Pave	63	None	
	Arch Coat	54	None	Nia
	Grade	72	None	INO
R3 (West)	Build	66	64	
	Pave	67	None	
	Arch Coat	58	None	

Table 5.11-L – Construction Noise Levels by Construction Phase

Source: ENTECH, Table 10-3.

Notes

1 Construction noise projected from center of Project site to nearest adjacent use (structure)

2 Concrete pours with cement pump trucks and mixers occur during the building construction phase at nighttime only.

Construction noise is considered a short-term, temporary impact and would be considered significant if construction activities are undertaken outside the allowable times and if construction noise exceeds the allowable decibels described in the Perris Municipal Code Section7.34.060 – Construction noise. The Project will comply with the allowable construction hours identified in Section 7.34.060. However, Section 7.34.060 identified that construction noise shall not exceed 80 dBA L_{max} for residential properties within the City. Construction equipment is expected to operate on the Project site during the allowed

days and time period. Should construction activities need to occur outside of the hours permitted by the Perris Municipal Code, the Project Applicant would be required to obtain authorization from the City. In the event on-site concrete pouring activities need to occur at night to allow the concrete to set properly, pours would typically start at 1:00 a.m.

While the Project is not located within a residential zone, several legal, non-conforming residential land uses, and commercial land uses, are located around the Project site. (ENTECH, p. 28.) According to **Table 5.11-L**, the highest noise level experienced at receptor R3 is 72 dBA L_{max} , during grading activities. Thus, construction noise from construction activities would not exceed the established 80 dBA L_{max} standard identified by the Perris Municipal Code Section 7.34.060. (ENTECH, p. 33.) While the loudest construction activity is below the City's standards and considered to be **less than significant**, the Project is subject to all applicable mitigation measures from the PVCCSP EIR. Implementation of applicable PVCCSP EIR mitigation measures **MM Noise 1** through **MM Noise 4** would further reduce the less than significant impacts related to construction noise.

Project-Generated Traffic Noise Impacts

As discussed above, it is widely accepted that the average healthy ear can barely perceive changes of 3 dBA; that a change of 5 dBA is readily perceptible; and that an increase (decrease) of 10 dBA sounds twice (half) as loud. (ENTECH, p. 9.) A doubling of the energy of a noise source, such as a doubled traffic volume, would increase the noise level by 3 dBA. Therefore, Project-generated trips would need to result in a doubling of the traffic volumes on a road segment in order to result in an audible increase in ambient noise levels.

To determine the Project's contribution to traffic noise on area roadways, CNEL noise levels were evaluated from the center of the roadway identified in the TIA (Appendix K.2) as those which could be affected by implementation of the Project, for the following scenarios:

- Existing without Project (2021): This scenario refers to the existing present-day noise conditions, without the proposed Project
- Existing with Project: This scenario refers to the existing present-day noise conditions, with the proposed Project.
- Opening Year with Project (2024): This scenario refers to the existing present-day noise conditions, plus ambient growth with the proposed Project.
- Opening Year with Project Plus Cumulative Projects (2024): This scenario refers to the existing present-day noise conditions, plus ambient growth plus cumulative projects in the area with the proposed Project.

Noise contours were used to assess the Project's incremental traffic-related noise impacts at land uses adjacent to roadways conveying Project traffic based on the PVCCSP EIR significance criteria. The noise contours represent the distance to noise levels of a constant value and are measured from the center of the roadway for the 70, 65, 60, and 55 CNEL dBA noise levels. The noise contours do not consider the effect of any existing noise barriers or topography that may attenuate ambient noise levels. Additionally, the noise contours reflect modeling of vehicular noise on area roadways and thus do not reflect noise contributions from the surrounding stationary noise sources.

The modeled noise levels are measured at 50-feet from the centerline of Patterson Avenue. Noise levels at distances greater than 50 feet from the centerline would be lower due to attenuation provided by increased distance from the noise source. Generally, noise from heavily traveled roadways would experience a decrease of approximately 3 dBA for every doubling of distance from the roadway.

The TIA (Appendix K.2) estimated the proposed Project would generate 1,077 daily vehicle trips and a total of 62 AM peak hour vehicle trips and 78 PM peak hour vehicle trips. Using these predictions exterior noise levels were calculated based on the expected increase in vehicle trips as a result of the Project implementation. Existing with Project was calculated at 62.1 dBA CNEL. (ENTECH, p. 26.)

As shown in **Table 5.11-M – Change in Existing Noise Levels at Road Segments as a Result of Project**, below, the Existing without Project exterior noise level is 61.2 dBA CNEL, without accounting for noise attenuation features such as noise barriers or topography. This would result in a 0.9 dBA increase between existing without Project and existing exterior noise levels. Opening Year with Project condition is calculated at 61.5 dBA CNEL and Opening Year with Project and Cumulative Projects condition of 62.4 dBA CNEL. This results in a 0.9 dBA CNEL increase at 50 feet, during Opening Year with Project and Opening Year with Project.

Table 5 11-M -	Change in	Evictina N	laisa Lavals	at Road S	oamonte a	as a Rocult	of Project
	Change in	EXISTING IN	IOISE LEVEIS	at nuau S	eginents a	as a nesuit	of Project

		CNEL at 50 Feet dBA ²						
	Scena		arios Change		Scenarios		Change	Potential
Roadway ¹	Segment	Existing Without Project	Existing With Project	in Noise Level	Opening Year with Project	Opening Year with Project Plus Cumulative Projects	in Noise Level	Significant
Patterson Ave	Harley Knox Blvd to California Ave	61.2	62.1	0.9	61.5	62.4	0.9	No

Source: ENTECH, Table 7-5.

Notes:

1 Exterior noise level calculated at 5 feet above ground level.

2 Noise levels were calculated at 50 feet from the centerline of the subject roadway.

In general, except in carefully controlled laboratory experiments, a change in sound levels of 1 dBA cannot be perceived, a change of 3 dBA is generally considered barely perceptible, and a change of 5 dBA is readily perceptible. (ENTECH, p. 9.) Although the City of Perris has not determined an "industry standard" for noise levels the PVCCSP EIR indicates that a 5 dBA noise level increase is considered discernable to most people in an exterior environment when the existing noise levels are below 60 dBA. (ENTECH, p. 18.) As shown in **Table 5.11-M**, Project -generated traffic is expected to increase noise levels by less than 1 dBA. Specifically, Project-generated traffic is expected to increase noise levels in the Project area from 61.2 dBA CNEL to 62.1 dBA CNEL, a 0.9 dBA CNEL increase in the Existing with Project scenario and from 61.5 to 62.4 dBA CNEL in the Opening Year with Project Plus Cumulative Projects Exterior Noise Levels. Therefore, CNEL noise levels will remain below the significance threshold of 3 dBA CNEL when the without Project noise levels are above 60 dBA CNEL. Thus, noise resulting from Project-generated traffic would have a **less than significant impact and no mitigation is required**.

Noise

Operational Noise

Development of the proposed Project will result in changes to existing noise levels on the Project site by introducing new stationary sources of noise, including HVAC equipment, vehicle parking lot, and truck loading dock activities into the Project area. These new noise sources may affect noise-sensitive land uses near the Project site. Noise levels from the SoundPLAN model were used to describe the anticipated operational noise levels generated from on-site parking lot circulation, trailer spaces and the loading docks (including backup beeps and air brake releases for both trailers and truck loading and unloading activities.) (ENTECH, p. 28.) **Table 5.11-F – Reference Noise Levels** identified the reference noise levels used in the model calculations.

The combined Project operational noise levels at receptors R1 through R4 range from 44 to 51 dBA L_{max} , as shown in **Table 5.11-N - Project Only Operational Noise Level (dBA L_{max})**. **Table 5.11-O - Project Only Operational Noise Levels (dBA L_{eq}) & CNEL** shows the combined operational CNEL values range from 43 dBA to 48 dBA. As a result, operational noise levels associated with the Project would not exceed the Perris Municipal Code exterior noise level standards of 80 dBA L_{max} daytime and 60 dBA L_{max} nighttime and the Perris GP 2030 Standard of 60 CNEL. (ENTECH, p. 29.)

Receptor Location ¹	Distance from the Project site to receiving property line (ft)	Combined Project only Operational Noise Level (dBA L _{max})	Daytime Standard 80 dBA L _{max} Exceeded	Nighttime Standard 60 dBA L _{max} Exceeded	
R1 ²	52	51			
R2	52	50	No	No	
R3	30	51		INO	
R4	302	44			

Table 5.11-N – Project Only Operational Noise Levels (dBA L_{max})

Source: ENTECH, Table 8-1.

Notes:

1 Figure 5.11-1 shows the receptor locations.

2 Identified as a potential residential land use.

Table 5.11-O – Project Only Operational Noise Levels (dBA Leq) & CNEL

Receptor Location ¹	Distance from the Project site to receiving property line (ft)	Combined Project only Operational Noise Level (dBA Leq) ³	CNEL	60 CNEL Standard Exceeded
R1 ²	52	46	47	No
R2	52	46	47	No
R3	30	48	48	No
R4	302	43	43	No

Source: ENTECH, Table 8-2. Notes:

1 Figure 5.11-1 shows the receptor locations.

2 Identified as a potential residential land use.

Using the Project only operational noise level data provided in **Table 5.11-O**, the combined Project only operational noise levels were added to the average measured ambient noise level to determine the total

Noise

combined operational noise level and the increase over existing ambient noise levels. As shown in Table 5.11-P - Daytime Operational Noise Levels (dBA Leg), daytime noise levels at sensitive receptors R1 through R4 would increase between 0.2 dBA Leq and 0.5 dBA Leq, respectively.

Receptor Location ¹	Combined Operational Noise Level (dBA Leq) ²	Measurement Location ³	Average Measured Ambient Noise Level (dBA L _{eq}) ³	Combined Noise Level (dBA L _{eq}) ⁴	Project Increase (dBA L _{eq})
R1	46	Site 1	58.7	58.9	0.2
R2	46	Site 1	58.7	58.9	0.2
R3	48	Site 3	56.8	57.3	0.5
R4	43	Site 3	56.8	57.0	0.2

Table 5.11-P – Daytime Operational Noise Levels (dBA Leg)

Source: ENTECH, Table 8-3. Notes:

1

Figure 5.11-1 shows the receptor locations.

2 Combined Noise Level from Table 8-2, Appendix I 3

Site 1 average measured daytime noise was used for long-term measurement.

Table 5.11-Q - Nighttime Operational Noise Levels (dBA Lea) represents the combined Project only operational nighttime noise levels added to the average measured ambient noise level. As shown below, sensitive receptors R1 through R4 would experience a noise level increase of 0.6 dBA Leq to 2.8 dBA Leq.

Table 5.11-Q – Nig	ghttime Operational	Noise Levels (dBA L _{eq})
--------------------	---------------------	-------------------------------------

Receptor Location ¹	Combined Operational Noise Level (dBA L _{eq}) ²	Measurement Location ³	Average Measured Ambient Noise Level (dBA L _{eq}) ³	Combined Noise Level (dBA L _{eq}) ⁴	Project Increase (Dba L _{eq})
R1	46	Site 1	53.9	54.5	0.6
R2	46	Site 1	53.9	54.5	0.6
R3	48	Site 3	48.4	51.2	2.8
R4	43	Site 3	48.4	49.5	1.1

Source: ENTECH, Table 8-4.

Notes:

1 Figure 5.11-1 shows the receptor locations.

2 Combined Noise Level from Table 8-2, Appendix I

3 Average measured nighttime noise was used for long-term measurement.

Based on the results from Table 5.11-P through Table 5.11-Q, operational noise levels associated with the Project will satisfy the Perris Municipal Code exterior noise level standards of 80 dBA Lmax daytime and 60 dBA L_{max} nighttime and the Perris GP 2030 Standard of 60 CNEL. Since implementation of the Project would not exceed applicable thresholds, impacts to operational noise levels would be less than significant.

Conclusion: As discussed above, Project-generated operational noise and Project-generated traffic noise on Patterson Avenue would not exceed City noise standards. Additionally, it was determined that during construction, the Project would not exceed the noise standard identified in Perris Municipal Code Section 7.34.060 and noise impacts would be less than significant. However, the Project is subject to

all applicable mitigation measures from the PVCCSP EIR. Implementation of PVCCSP EIR mitigation measures **MM Noise 1** through **MM Noise 4** would further reduce the less than significant construction noise impacts.

Threshold B: Would the Project result in generation of excessive ground-borne vibration or ground-borne noise levels?

As indicated above, the City of Perris does not define the numeric level at which a development project's vibration levels are considered "excessive." The City of Perris uses the FTA's vibration damage criteria outlined in **Table 5.11-J** to evaluate potential building damage. (ENTECH, p. 12.) The PVCCSP EIR used the FTA vibration threshold of 80 VdB as the maximum acceptable vibration standard for a human response. (PVCCSP EIR, pp. 4.9-27–4.9-28.)

Construction Vibration

Vibration levels associated with construction of the Project were estimated based on the equipment requirements and construction schedule information provided by the Project Applicant, the length of time the Project would take to complete, and the types of construction activities that would occur. As indicated earlier, construction activities would create temporary periods of noise when heavy construction equipment is in operation and would cause a short-term increase in ambient noise levels. Based on **Table 5.11-E – Construction Schedule**, construction is set to occur over an eleven-month period. Based on the FTA's reference vibration level, off-road equipment causes the greatest source of vibration. An off-road large bulldozer was used to represent the largest peak vibration source with a reference level of 87 VdB at a distance of 25 feet. At 650 feet, measured from the center of the Project site to the nearest receiver, it is assumed that two (2) large bulldozers operating at the same time would produce the worst-case construction vibration levels from the Project site. Under worst-case conditions, vibration levels would approach 56 VdB as shown in **Table 5.11-R – Construction Equipment Vibration Levels**. (ENTECH, p. 32.)

Noise Receptor ¹	Distance from Construction Activity to Property Line	Large Bulldozer Reference Vibration Level PPV _{ref} (VdB) at 25 ft ¹	Peak Vibration PPV (VdB)	Exceed Threshold? (Below 80 VdB)
R3	650 feet	87 VdB	56 VdB	No

Table 5.11-R – Construction	Equipment V	ibration Levels
-----------------------------	-------------	-----------------

Source: ENTECH, Table 10-4.

Notes:

1 Figure 5.11-1 shows the receptor location

2 Reference noise level obtained from the FTA Noise and Vibration Manual, Table 7-4.

Based on **Table 5.11-K– Ground-borne Vibration Impact Criteria for General Assessment,** the FTA's vibration assessment annoyance criteria for infrequent events, the Project would not exceed the Vibration Category 2, Infrequent event threshold of 80 VdB adopted by the FTA. Additionally, the expected construction vibration level of 56 VdB would not exceed the 80 VdB maximum acceptable vibration standard that was adopted by the City of Perris in the PVCCSP EIR. Therefore, anticipated construction vibration would not result in a perceptible human response (annoyance). As noted in **Table 5.11-K**, Project construction activities will progress and change over time, thus impacts at the closest sensitive receptor, R3, are unlikely to be sustained during the entire construction period. Moreover,

construction use of off-road equipment at the Project site will be restricted to daytime hours, thereby eliminating potential vibration impacts during sensitive nighttime hours. Further, the predicted construction noise level is below the PVCCSP EIR vibration threshold of 80 VdB. The Project construction will not generate excessive ground-borne vibration. Therefore, Project construction would have a **less than significant impact**.

Operational Vibration

Vibration associated with operation of the Project would be generated by vehicular traffic and mechanical equipment operation. Per Caltrans Transportation Noise and Vibration Manual, vehicular traffic on roadways rarely generates vibration amplitudes high enough to cause structural or cosmetic damage. (ENTECH, p. 30.) Caltrans collected vibration data for truck pass-bys, as a result it was concluded that vibration from trucks were considerably higher than that of an automobile. However, vibration from these trucks drops off dramatically with distance. Vibration wavefronts emanating from several trucks closely together may either cancel or partially cancel (destructive interference) or reinforce or partially reinforce (constructive interference) each other, depending on their phases and frequencies. Since traffic vibrations can be considered random, total destructive or constructive interference probabilities are minimal. (ENTECH, p. 30.)

Caltrans found that at 5 meters (m) from the centerline of the nearest lane vibrations never exceeded 2.0 mm/s (0.08 in/sec), even with worst combinations of heavy trucks. This amplitude coincides with the maximum recommended "safe amplitude" for historic buildings. Caltrans determined that for most people at 45 m from the center line vibration, amplitudes would dip below most human perception thresholds. According to Caltrans, sensitive receptors adjacent to local roadways within 15 m of the nearest travel lane's center line will have the maximum worse-case vibration levels of 0.08 mm/s or (0.0032 in/sec or 70 VdB). (ENTECH, p. 30.)

As previously mentioned, the City of Perris uses the FTA's damage criteria of 0.3 PPV (in/sec), and the human annoyance level of 80 VdB. This worst-case vibration level from truck traffic would not exceed the City's adopted level nor the Caltrans threshold of 0.2 PPV (in/sec). Furthermore, it is expected that actual vibration levels within the Project area from truck traffic would be lower than this worst-case level, when soil type and pavement conditions are considered. (ENTECH, p. 30.) Therefore, the potential for the Project to result in the exposure of persons to, or generation of, excessive ground-borne vibrations is determined to be below the 80 VdB FTA vibration threshold. (ENTECH, p. 30.) Hence, impacts from operational vibration are **less than significant**.

Conclusion: As outlined above, construction and operation activities related to the proposed Project would be considered significant if the construction or operational vibration levels exceeded 0.3 in/sec PPV and/or 80 VdB. Because construction and operation activities related to the proposed Project would not exceed 0.3 in/sec PPV or 80 VdB, impacts are **less than significant and no mitigation is required**.

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

The Project site is located approximately 0.1 miles southwest of the MARB/IPA. The entire Project site is located within Zone B2 of the MARB/IPA ALUCP (see **Figure 5.11-2 – Airport Noise Contours**). Noise impacts within Zone B2 are considered high because this zone is mostly within the 65 CNEL contour. **Figure 5.11-2** shows approximately 10 acres of the northeastern portion of the Project site is located

within the 65-75 CNEL contour, while the remaining acres of the Project site are located within the 60- 65 CNEL contour. Nonetheless, the Project does not include noise sensitive uses. Thus, the Project is consistent with the type of land use for this compatibility zone. (ENTECH, p. 19.) Standard building construction for the Project is presumed to provide adequate sound attenuation where the difference between the exterior noise exposure and the interior standard is 20 dB or less. (ENTECH, p. 19.) Through Project design and compliance with the conditions of the ALUC's findings, impacts with regard to the exposure of people to excessive airport noise would be reduced to **less than significant and no mitigation is required**.

5.11.6 Recommended Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse Impacts. (State CEQA Guidelines Section 15126.4). Mitigation measures were evaluated for their ability to eliminate or reduce the potential significant adverse noise impacts. The proposed Project will implement PVCCSP EIR mitigation measures **MM Noise 1** through **MM Noise 4** for construction noise. No Project-specific mitigation measures are required.

5.11.7 Summary of Environmental Effects After Mitigation Measures Are Implemented

The proposed Project does not result in any significant noise impacts and no mitigation is required. Implementation of PVCCSP EIR mitigation measures **MM Noise 1** through **MM Noise 4** would further reduce the less than significant impacts resulting from temporary construction activities.

The focus of the following analysis is whether the proposed Project will: require or result in the relocation or construction of new or expanded water, wastewater treatment, drainage, electric power, natural gas, or telecommunications facilities the construction of which could cause significant environmental effects; have sufficient water supplies to serve the Project and reasonably future development during normal, dry, and multiple dry years; result in a determination by the wastewater treatment provider that it has adequate capacity to serve the Project's projected demand in addition to the provider's existing commitments; generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; and comply with federal, state, and local management and reduction statues and regulations related to solid waste.

Two comment letters related to drainage and drinking water were received: the Riverside County Flood Control & Water Conservation District (RCFC&WCD) and the Eastern Municipal Water District (EMWD), in response to the Notice of Preparation (NOP). Copies of said comment letters are included in Appendix A.2 of this DEIR.

The RCFC&WCD in its written comments requested the DEIR address: impacts to MDP facilities within the proposed project area; stated that an encroachment permit is required for connection to the RCFC&WCD facilities or prior to any work in the RCFC&WCD rights-of-way; and that the EIR identify RCFC&WCD as a Responsible Agency if an encroachment permit will be required. These written comments further indicated the RCFC&WCD would consider accepting ownership of any storm drains 36 inches or larger in diameter; though, they must be built to the RCFC&WCD standards, with plan check and inspection required for acceptance.

The EMWD in its written comments reminded the Applicant to consult with the EMWD's Development Services Department early in the design process to set up a one-hour complimentary Due Diligence meeting prior to the Design Conditions (DC) Report preparation. The EMWD comment letter also set forth the contents of the DC Report and process to be followed by the project Applicant. Refer to the EMWD's comment letter for specific details.

No oral or written comments were received at the February 2, 2022, scoping meeting regarding utilities and service systems.

The following references were used in the preparation of this section of the DEIR:

- Albert A. Webb Associates, *Duke Patterson and Nance, P21-00005, Preliminary Drainage Study*, April 2021, revised March 2022. (Included as Appendix H.1 to this DEIR.) [Cited as WEBB(a)]
- Albert A. Webb Associates, Project Specific Water Quality Management Plan, Duke Patterson & Nance, P21-00005, April 2021, revised March 2022. (Included as Appendix H.2 to this DEIR.) [Cited as WEBB(b)]
- Albert A. Webb Associates, *Design Conditions Report for Patterson & Nance, WS: 2020-1153, WO: 16238*. June 2022. (Included as Appendix J.1 to this DEIR.) [Cited as WEBB(c)]
- California Department of Resources, Recycling, and Recovery website. *History of California Solid Waste Law, 1985-1989.* Last updated July 27, 2018. (Available at <u>https://www.calrecycle.ca.gov/laws/legislation/calhist/1985to1989,</u> accessed January 10, 2022.) [Cited as CalRecycle 2018a]

- California Department of Resources, Recycling, and Recovery website. *History of California Solid Waste Law, 1990-1994.* Last updated July 27, 2018. (Available at https://www.calrecycle.ca.gov/Laws/Legislation/calhist/1990to1994, accessed January 10, 2022.) [Cited as CalRecycle 2018b]
- California Department of Resources, Recycling, and Recovery website. *History of California Solid Waste Law, 2010-2014.* Last updated September 5, 2018. (Available at <u>https://www.calrecycle.ca.gov/Laws/Legislation/CalHist/2010to2014/#2011,</u> January 10, 2022.)
 [Cited as CalRecycle 2018c]
- California Department of Resources Recycling and Recovery, California's 75 Percent Initiative Defining the Future, Last Updated January 21, 2020. (Available at <u>https://sj-admin.s3-us-west-</u> <u>2.amazonaws.com/2019 0000 CalRecycle 75PercentInitiative.pdf</u>, accessed May 11, 2022.) [Cited as CalRecycle 2020c]
- California Department of Resources, Recycling, and Recovery website. SWIS Facility Detail, Badlands Sanitary Landfill (33-AA-0006). (Available at <u>https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2245?siteID=2367.</u> Accessed December 7, 2021.) [Cited as CalRecycle 2020a]
- California Department of Resources, Recycling, and Recovery website. SWIS Facility Detail, El Sobrante Landfill (33-AA-0217). (Available at <u>https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2280?siteID=2402, a</u>ccessed December 7, 2021.) [Cited as CalRecycle 2020b]
- California Legislative Information, Senate Bill No. 1016 Diversion: compliance: per capita disposal rate. Version September 26, 2008. (Available at <u>http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200720080SB1016, accessed</u> <u>January 10, 2022.)</u> [Cited as CLI 2008]
- City of Perris. *Perris Comprehensive General Plan 2030, Land Use Element* (adopted April 26, 2005, amended August 30, 2016) and *Conservation Element* (adopted July 12, 2005, amended February 18, 2008). (Available at https://www.cityofperris.org/departments/development-services/general-plan, accessed March 18, 2022.) [Cited as Perris GP 2030]
- City of Perris. *Perris Valley Commerce Center Specific Plan, Amendment No. 12.* Approved January 10, 2012. Ordinance No. 1284 and subsequently amended and approved January 11, 2022. (Available at <u>https://www.cityofperris.org/Home/ShowDocument?id=2647</u>, accessed March 18, 2022.) [Cited as PVCCSP]
- City of Perris, *Draft Environmental Impact Report for Perris Valley Commerce Center, SCH No.* 2009081086. July 2011. (Available at the City of Perris Planning Department.) [Cited as PVCCSP EIR]
- Department of Water Resources. Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001. October 2003. (Available at http://sntbberry.cityofsanteeca.gov/sites/FanitaRanch/Public/Remainder%20of%20the%20Rec ord/(2)%20Reference%20Documents%20from%20EIR%20&%20Technical%20Reports/Tab%2 0185%20-%202003-10%20CDWR%20Guidebook%20for%20Impl%20SB%20610.pdf, accessed March 18, 2022) [Cited as DWR 2003]

- Eastern Municipal Water District. 2020 Urban Water Management Plan. July 1, 2021. (Available at https://www.emwd.org/sites/main/files/file-attachments/urbanwatermanagementplan_0.pdf?1625160721, accessed November 30, 2021.) [Cited as EMWD(a)]
- Eastern Municipal Water District. *Perris Valley Regional Water Reclamation Facility*. January 2021. (Available at <u>https://www.emwd.org/sites/main/files/file-attachments/pvrwrffactsheet.pdf</u>, accessed November 30, 2021.) [Cited as EMWD(b)]
- Eastern Municipal Water District. *Water Supply Assessment*, approved February 16, 2022. (Included as Appendix H.3 to this DEIR.) [Cited as EMWDI]
- Riverside County Flood Control and Water Conservation District. *Master Drainage Plan for the Perris Valley Area.* July 1987, revised June 1991. (Available at <u>http://rcflood.org/downloads/Master%20Drainage%20Plans/MDP_Reports/Zone%204/Perris%</u> <u>20Valley%20MDP.pdf</u>, accessed March 18, 2022.) [Cited as MDP 1991]
- Riverside County Flood Control and Water Conservation District. *Perris Valley Area Drainage Plan and Exhibit.* July 1987, revised June 1991. (Available at <u>http://www.floodcontrol.co.riverside.ca.us/Downloads/Area%20Drainage%20Plans/Updated/Re</u> <u>ports/Perris%20Valley%20ADP.pdf</u>, accessed March 18, 2022.) [Cited as ADP 1991]
- Riverside County Flood Control and Water Conservation District. *Rules and Regulations for Administration of Area Drainage Plans*, Adopted June 10, 1980 by Resolution No. 80-244. (Available at <u>https://rcflood.org/Portals/0/Downloads/ADP Rules and Regulations 9-17-</u> <u>2019.pdf?ver=2020-03-06-115822-727</u>, accessed March 18, 2022.) [Cited as ADP Rules]
- Riverside County Flood Control and Water Conservation District. Water Quality Management Plan: A Guidance Document for the Santa Ana Region of Riverside County. Approved October 22, 2012. (Available at <u>http://rcflood.org/NPDES/SantaAnaWS.aspx</u>, accessed March 18, 2022.) [Cited as WQMP Guidance]
- Riverside County Planning Department. County of Riverside Volume 2: Draft Program Environmental Impact Report No. 521. February 2015. (Available at https://planning.rctlma.org/Portals/14/genplan/general_plan_2015/DEIR%20521/DEIR%20No.% 20521.pdf, accessed May 22, 2022.) [Cited as RCGP EIR]
- State of California, Regional Water Quality Control Board, Santa Ana Region. Order No. R8-2010-0033, NPDES No. CAS 618033, National Pollutant Discharge Elimination System Permit and Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the Count of Riverside, and the Incorporated Cities of Riverside County within the Santa Ana Region, Area-Wide Urban Runoff Management Program. Adopted January 29, 2010. (Available at

https://www.waterboards.ca.gov/santaana/board_decisions/adopted_orders/2010/10_03 3 RC_MS4_Permit_01_29_10.pdf, accessed March 18, 2022.) [Cited as MS4]

5.12.1 Setting

The Project site is located in the planning area of the Perris Valley Commerce Center Specific Plan (PVCCSP), which was originally approved in 2012 by City Ordinance No. 1284 and Amendment 12 to the PVCCSP was approved by the City on January 11, 2022 by Ordinance No. 1414. The Project site and

Duke Warehouse at Patterson Avenue and Nance Street DEIR

surrounding area is generally flat and slopes approximately 1.0% in a southwest to northeast direction. Existing elevations on the Project site range from approximately 1,499 feet above mean sea level (amsl) in the southwest corner to 1,486 feet amsl in the northeast corner. (WEBB(a) p. 1-1.) As shown on **Figure 3-2 – Aerial Map**, except for approximately 2.7 acres in the northwest corner of the Project site, the remainder of the Project site is undeveloped. There are no utilities currently serving the Project site.

Potable water, recycled water, wastewater collection and treatment, drainage facilities, electrical service, natural gas service, telecommunication service, and solid waste collection and disposal services are provided to the Project area by the following purveyors identified in the table below.

Purveyor	Type of Services
EMWD	water, sewer, recycled water
Verizon	telephone
Southern California Edison	electricity
Southern California Gas Company	natural gas
CR&R Waste Services	solid waste disposal
Frontier Communications	cable television and internet

Potable Water and Recycled Water

Potable water service to the Project area is provided by the EMWD. The EMWD serves an estimated population of more than 859,000 people within an area that covers approximately 555-square miles. (EMWD, p. 3). As of calendar year 2020, the EMWD supplied 84,673 acre-feet¹ of potable water to 155,561 municipal connections. (EMWD(a), p. 2-2.) The EMWD owns and operates two microfiltration plants and two desalination plants to produce potable water from local and imported sources, in addition to potable water delivered directly from two of The Metropolitan Water District of Southern California's (MWD's) treatment plants. (EMWD(a), p. 3-3.) According to the Project's DC Report, the Project site will be served by the 1705 pressure zone with the Decker water storage reservoir being the primary source of water supply. (WEBB(c), p. 2-1.) There is an existing 12-inch diameter potable water line located in Patterson Avenue adjacent to the Project site that would serve the Project.

In addition to the potable water system, the EMWD maintains a regional recycled water system that provides tertiary-treated recycled water to customers for agricultural, landscape irrigation, environmental, and industrial use. The EMWD's recycled water system consists of four regional water reclamation facilities (RWRFs) that treat wastewater for recycling: the San Jacinto Valley RWRF, the Moreno Valley RWRF, the Temecula Valley RWRF, and the Perris Valley RWRF, are spread throughout the EMWD's service area. A network of pipelines connects the four RWRFs, as well as several distribution storage ponds to manage the delivery of recycled water. (EMWD(a), p. 3-3)

There is an existing 8-inch diameter recycled waterline just north of Markham Street on Patterson Avenue. (WEBB(c), p. 4-1.)

Wastewater

Wastewater generated by the Project would be collected by the EMWD and treated at the EMWD's Perris Valley RWRF, which is the largest of the four RWRF's. The plant produces tertiary-treated water

¹ One acre-foot of water is equivalent to 325,851.43 gallons.

and can store more than 2 billion gallons of recycled water for use by surrounding agricultural customers. With the completion of its most recent expansion in 2014, the Perris Valley RWRF has the current capacity to treat 22 million gallons per day (mgd) of wastewater, with an ultimate capacity of 100 mgd. Typical daily flows are 15.5 mgd. (EMWD(b), pp. 1-2). There are no existing sewer lines adjacent to the Project site; the nearest potential points of connection to EMWD sanitary sewer lines are at the intersections of Harley Knox Boulevard and Patterson Avenue, and North Webster Avenue and Nance Street.

According to the Project's DC Report, "there is an existing 15-inch diameter gravity sewer line in Harley Knox Boulevard that is assumed to have capacity for [the Project]. (WEBB(c), p. 3-1.)

Storm Water Drainage

The Project site is located within the Master Drainage Plan (MDP) for the Perris Valley Area. (MDP 1991.) Developed and updated by the RCFC&WCD, the MDP outlines a master drainage plan for ultimate development, or "buildout" of the area. Since the area has not reached buildout conditions, the stormwater drainage systems in the valley are in differing stages of interim and ultimate designs.

Currently, stormwater flows onto the west side of the Project site from an offsite area of approximately 2 acres ("offsite run-on"). Onsite runoff sheet flows towards the northwest. With the Project, the runoff from the Project site will drain to the Perris Valley Storm Drain (PVSD), a regional man-made channel designed to collect and convey the stormwater runoff from a 100-year return frequency storm event. The PVSD conveys flow in a southerly direction to Reach 3 of the San Jacinto River. The San Jacinto River flows to Canyon Lake, which sometimes overflows into Reach 1 of the San Jacinto River and then Lake Elsinore. Lake Elsinore outlets northerly to Temescal Creek, which flows to the Santa Ana River and ultimately to the Pacific Ocean.

The Project site is located within an area determined to be exempt from a requirement to match proposed flow rates to not more than existing flow rates; this is referred to as a hydromodification requirement or hydrologic condition of concern (HCOC). (WEBB(b), p. 7).

The Perris Valley MDP identifies Lateral B-6 to be built along Patterson Avenue and former Oleander Avenue (now Harley Knox Boulevard), as well as Lateral B-6.1 to be built within Nevada Avenue. Some of the Perris Valley MDP facilities required an updated design to meet the development goals of the PVCCSP. (PVCCSP, p. 3.0-27.) However, neither Lateral B-6 nor Lateral B-6.1 were identified in the PVCCSP for design changes.

The RCFC&WCD has no drainage facilities at the Project site.

Electric Power

Southern California Edison (SCE) would provide electrical service to the Project site. SCE electrical lines are located within Patterson Avenue.

Natural Gas

Southern California Gas Company (SoCal Gas) would provide natural gas service to the Project site. SoCal Gas distribution lines are located within Patterson Avenue, Nevada Avenue, and Harley Knox Boulevard.

Telecommunication

Frontier Communications would provide telecommunication service to the Project site. Frontier lines are located within Patterson Avenue and Harley Knox Boulevard.

Solid Waste

Solid waste, recycling, and green waste collection and disposal service in the City of Perris is provided by CR&R Waste Services. The County of Riverside also sponsors several hazardous waste collection events that are open to residents of the county throughout the year. Waste collected by CR&R is transported to the CR&R Perris Transfer Station and Materials Recovery Facility located at 1706 Goetz Road, approximately 6.5 miles south of the Project area. After the transfer station, the solid waste produced from the Project would be transported to either the Badlands Landfill or El Sobrante Landfill.

The Project area is located approximately 10 miles southwest of the Badlands Landfill located at 31125 Ironwood Avenue in the City of Moreno Valley. The Badlands Landfill is a regional municipal solid waste landfill that is owned and operated by Riverside County. The Badlands Landfill has a total capacity of 34,400,000 cubic yards (cy), is permitted to accept a maximum of 4,800 tons per day, and, as of January 2015, has a remaining capacity of 15,748,799 cy. According to CalRecycle, the landfill has a "ceased operation date" of January 1, 2026 and continues to operate as of this writing. (CalRecycle, 2020a) The Project area is located approximately 15 miles northeast of the El Sobrante Landfill located at 10910 Dawson Canyon Road in the City of Corona. The landfill is a regional municipal solid waste landfill that is owned and operated by USA Waste Services of California, Inc. The El Sobrante Landfill has a total capacity of 209,910,000 cy, is permitted to accept 16,054 tons per day, and, as of April 2018, has a remaining capacity of 143,977,170 cy. (CalRecycle, 2020b)

The Riverside County Department of Waste Resources is charged with the responsibility of, among other things, meeting the solid waste disposal needs of all Riverside County residents. Each year, the County prepares a 15-year projection of disposal capacity as part of the annual reporting requirements to the state. The Riverside Countywide Siting Element serves as a policy manual of how the County will meet the disposal needs of all Riverside County residents and provide a minimum of 15 years of disposal capacity at its landfills at all times. (RCGP EIR, p. 4.17-42.)

5.12.2 Related Regulations

Federal Regulations

Clean Water Act

The United States Environmental Protection Agency (USEPA) has delegated responsibility for compliance with the federal Clean Water Act to the State of California, which is discussed under State Regulations.

There are no other federal regulations applicable to Utilities and Service Systems.

State Regulations

Clean Water Act

The Clean Water Act prohibits the discharge of pollutants to waters of the United States unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. Applicable NPDES permits include those managed on a statewide basis by the State Water Resources

Utilities and Service Systems

Control Board (i.e., General Permits), such as the General Industrial Activities Storm Water Permit and the General Construction Activity Storm Water Permit. Both of these permits require a Storm Water Pollution Prevention Plan (SWPPP); the industrial permit requires an industrial SWPPP used in perpetuity based on the SIC code, and the construction permit requires a SWPPP for construction phase only. In addition, the State Board issues statewide municipal permits for Municipal Separate Storm Sewer Systems (MS4) owned by municipalities.

The MS4 permit program regulates all stormwater discharges from municipal storm drains. The Santa Ana Regional Water Quality Control Board (RWQCB) regulates the Riverside County MS4 permit (Order RB8-2010-0033), which requires the principal permittee (RCFC&WCD) and co-permittees (County of Riverside and cities, including the City of Perris) to develop several items designed to reduce pollutants in urban runoff to the Maximum Extent Practicable (MEP).² Specifically for qualifying new developments and redevelopments, this includes a Water Quality Management Plan (WQMP).

Water Code Sections 13550-13556

California Water Code Sections 13550-13556 state that local, regional, or state agencies shall not use water from any source of quality suitable for potable domestic use if suitable recycled water is available as provided in Water Code Section 13550.

Water Conservation in Landscaping Act

The Water Conservation in Landscaping Act was established to ensure adequate water supplies are available for future uses. To promote the conservation and efficient use of water, the Act requires local agencies to adopt a water efficient landscape ordinance. The City of Perris implements the model ordinance adopted by the State through regulations contained in Perris Municipal Code Section 19.70, Landscaping.

Urban Water Management Planning Act

The Urban Water Management Planning Act (UWMP Act) (California Water Code Sections 10610 et. seq.) was enacted in 1983 and applies to municipal water suppliers, such as the EMWD, that serve more than 3,000 customers or provide more than 3,000 acre-feet per year (AFY) of water. The UWMP Act requires these suppliers to prepare and update their Urban Water Management Plan (UWMP) every five years to demonstrate an appropriate level of reliability in supplying anticipated short-term and long-term water demands during normal, single-dry, and multiple-dry years.

Senate Bill 610 (SB 610) - Water Supply Assessments

SB 610 requires an assessment of whether available water supplies are sufficient to serve the demand generated by a proposed project, as well as the reasonably foreseeable cumulative demand in the region over the next 20 years under average normal year, single dry year, and multiple dry year

² The term, Maximum Extent Practicable (or MEP) comes from the federal Clean Water Act, Section 402(p)(3)(B). The MEP standard involves applying BMPs that are effective in reducing the discharge of pollutants in storm water runoff. In discussing the MEP standard, the State Board has said the following: "There must be a serious attempt to comply, and practical solutions may not be lightly rejected. If, from the list of BMPs, a permittee chooses only a few of the least expensive methods, it is likely that MEP has not been met. On the other hand, if a permittee employs all applicable BMPs except those where it can show that they are not technically feasible in the locality, or whose cost would exceed any benefit to be derived, it would have met the standard. MEP requires permittees to choose effective BMPs, and to reject applicable BMPs only where other effective BMPs will serve the same purpose, the BMPs would not be technically feasible, or the cost would be prohibitive." (Order WQ 00-11, p.20).

Duke Warehouse at Patterson Avenue and Nance Street DEIR

conditions. Under SB 610, a Water Supply Assessment (WSA) must be prepared in conjunction with the land use approval process associated with a project and is required for any "project" that is subject to CEQA and meets certain criteria relative to size. Relevant to the Project, this includes a proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.

Pursuant to SB 610, a WSA was prepared by the EMWD for the Project (a copy of which is located in Appendix H.3). The EMWD Board of Directors approved the Project's WSA on February 16, 2022. The WSA was requested by the City for the EMWD to prepare because the Project proposes more than 650,000 square feet of floor area for an industrial land use, and therefore meets the definition of a "project" according to SB 610. The purpose of the WSA is to determine whether the projected water supply for the next 20 years, based on normal, single dry, and multiple dry years, will meet the demand projected for the Project plus existing and planned future uses, including agricultural and manufacturing uses. The City as lead agency shall determine, based on the entire record including the WSA whether water supply will be sufficient for the Project. The WSA does not assure a commitment by the EMWD to serve the Project. The specific facilities needed to serve the Project will be defined in the design conditions phase of EMWD's New Development Process. (EMWD, p. 1)

California Integrated Waste Management Act (AB 939)

The California Integrated Waste Management Act of 1989 (AB 939), created the Board now known as California Department of Resources Recycling and Recovery (CalRecycle) and accomplished the following: (1) it required each jurisdiction in the state to submit detailed solid waste planning documents for CalRecycle approval; (2) it set diversion requirements of 25 percent in 1995 and 50 percent in 2000; (3) it established a comprehensive statewide system of permitting, inspections, enforcement, and maintenance for solid waste facilities; and (4) it authorized local jurisdictions to impose fees based on the types or amounts of solid waste generated. Jurisdictions select and implement the combination of waste prevention, reuse, recycling, and composting programs that best meet the needs of their community while achieving the diversion requirements. (CalRecycle, 2018a.)

Solid Waste Disposal Measurement Act of 2008

The purpose of the Solid Waste Disposal Measurement Act of 2008 (SB 1016) is to make the process of goal measurement (as established by AB 939) simpler, more timely, and more accurate. SB 1016 builds on AB 939 compliance requirements by implementing a simplified measure of jurisdictions' performance. SB 1016 accomplishes this by changing to a disposal-based indicator—the per capita disposal rate—which uses only two factors: (1) a jurisdiction's population (or in some cases employment) and (2) its disposal, as reported by disposal facilities. Each year CalRecycle calculates each jurisdiction's per capita (per resident or per employee) disposal rates that are compared to that jurisdiction's 50 percent per capita disposal target. (CLI, 2008.)

Waste Reuse and Recycling Act (AB 1327)

The Waste Reuse and Recycling Act (WRRA) required the California Integrated Waste Management Board (CIWMB) to approve a model ordinance for adoption by any local government for the transfer, receipt, storage, and loading of recyclable materials in development projects by March 1, 1993. The WRRA also required local agencies to adopt a local ordinance by September 1, 1993 or allow the model ordinance to take effect. The WRRA requires all development projects that are commercial, industrial, institutional, or marina in nature and where solid waste is collected and loaded, to provide an adequate area for collecting and loading recyclable materials over the lifetime of the project. (CalRecycle, 2018b.)

Assembly Bill 341

Assembly Bill 341 (AB 341) (Chapter 476, Statutes of 2011) directed CalRecycle to develop and adopt regulations for mandatory commercial recycling. The final regulation was approved by the Office of Administrative Law on May 7, 2012. AB 341 was designed to help meet California's recycling goal of 75 percent by the year 2020. AB 341 requires all commercial businesses and public entities that generate four cubic yards or more of waste per week to have a recycling program in place. In addition, multi-family apartments with five or more units are also required to form a recycling program. (CalRecycle, 2018c.) The state did not meet its 75 percent by 2020 recycling goal set out in AB 341. However, CalRecycle identified five strategies and three additional focus areas that can be pursued by the state to reach the 75 percent goal (CalRecycle, 2020c).

Regional Regulations

Perris Valley Master Drainage Plan and Perris Valley Area Drainage Plan

The RCFC&WCD adopted the Perris Valley MDP and the Perris Valley Area Drainage Plan (July 1987, revised June 1991), the boundaries of which include the Project site. According to the RCFC&WCD, the primary responsibility for the design and construction of all Area Drainage Plan (ADP) facilities lies with the RCFC&WCD so that the maximum control and accountability for costs accruing to the ADP funds can be maintained. The following criteria will be applied by the RCFC&WCD Chief Engineer to assist in the evaluation of the engineering and administration responsibility for construction contracts related to the proposed Project storm drain connections: (1) design responsibility for major facilities, including channels, retention basins, and storm drains with diameters of more than 60 inches will be designed by the RCFC&WCD (or through private engineering contracts administered by the RCFC&WCD), unless otherwise authorized in writing by the Chief Engineer; (2) local facilities and lateral storm drains with diameters of 60 inches or less will normally be designed by the developer's engineer using District standards, providing that the Chief Engineer has authorized the developer (in writing) to proceed in this manner.

Since the Project site is located within the Perris Valley ADP, the Project will be subject to applicable ADP fees. The Perris Valley ADP fees are currently set at \$8,875 per acre. (ADP 1991.) The ADP fees are paid at the time of tentative map recordation, unless deferred by the developer to the grading permit or building permit stage. The actual ADP fee paid by a project developer may be less than \$8,875 per acre, due to credits for drainage infrastructure previously constructed or drainage facilities constructed, as part of development proposals. The proposed Project Applicant/Developer is not expected to construct facilities for which credit can be given, and instead will be paying the Project's fair share drainage fees.

The RCFC&WCD, City of Moreno Valley and City of Perris have also agreed upon an Area Drainage Plan (ADP, 1991) that accompanies the MDP and provides the funding mechanism used to offset taxpayer costs for proposed drainage facilities.

Local Regulations

Perris Comprehensive General Plan 2030

The following are applicable goals, policies, and implementation measures from the Perris Comprehensive General Plan 2030 (Perris GP 2030) related to utilities and service systems.

Utilities	and	Service	Systems	
Ounties	anu	0011100	Oystems	

Conservation Element

Goal V	An adequate water supply to support existing and future land uses, anticipated in the Land Use Element.		
Policy V.A	Coordinate land-planning efforts with the local water purveyors.		
Measure V.A.2	Require the use of new technologies and water conserving plant materials for landscaping.		
Goal VIII	Create a vision for energy and resource conservation and the use of green building design of the City, to protect the environment, improve quality of life, and promote sustainability.		
Policy VIII.A	Adopt and maintain development regulations that encourage water and resource conservation.		
Measure VIII.A.1	Use indigenous and/or drought resistant planting materials and efficient irrigation systems in residential projects as a means of reducing water demand, including smart irrigation systems.		
Measure VIII.A.2	Use indigenous and/or drought resistant planting and efficient irrigation systems with smart controls in all new and refurbished commercial and industrial development projects. Also, restrict use of turf to 25% or less of the landscaped areas.		
Measure VIII.A.7	Use indigenous and/or drought-resistant planting and efficient irrigation systems with smart controls in all new and refurbished commercial and industrial development projects. Also, restrict use of turf to 25% or less of the landscaped areas.		
Policy VIII.B	Adopt and maintain development regulations that encourage recycling and reduced waste generation by construction projects.		
Land Use Element			
Goal II N	lew development consistent with infrastructure capacity and municipal services		

- capabilities.
- Policy II.A Require new development to pay its full, fair-share of infrastructure costs.

PVCCSP Standards and Guidelines and Mitigation Measures

The PVCCSP includes Standards and Guidelines relevant to utilities and service systems. The Standards and Guidelines summarized below from the PVCCSP are incorporated as part of the proposed Project and are assumed in the analysis presented in this section. The chapters/section numbers provided correspond to the PVCCSP chapters/sections. There were no mitigation measures for utilities and service systems included in the PVCCSP EIR. (PVCCSP EIR, p. 4.11-46.)

On-Site Design Standards and Guidelines (Chapter 4.0 of the PVCCSP)

4.2 On-Site Standards and Guidelines

4.2.1 General On-Site Project Development Standards and Guidelines

Water Quality Management Plan

Most developments are required to implement a Water Quality Management Plan (WQMP) in accordance with the most recently adopted Riverside County MS4 NPDES Permit (Board Order R8-2010-0033). Approval of a WQMP plan by the City requires submittal of a document with supporting data which includes at a minimum, a site "Post-Construction BMP Plan," and treatment control facility sizing calculations. Site design, based on Low Impact Design (LID) elements and Source Control BMP's, must be incorporated into the site design. If these two types of BMP's do not sufficiently manage hydromodification and treat expected pollutants, then treatment control facilities must be implemented in order to assure proper flow management and pollutant treatment. Treatment control BMPs are in accordance with Riverside County Storm Water Best Management Practice Handbook. The RWQCB continuously updates impairments as studies are completed, the most current version of impairment data should be reviewed prior to preparation of Preliminary or Final WQMP document.

Trash and Recyclable Materials

Development of all PVCCSP sites shall contain enclosures (or compactors) for collection of trash and recyclable materials subject to water quality and best management practices. All trash enclosures shall comply with City of Perris Standards and with applicable City of Perris recycling requirements.

Waste Hauling

Construction and other waste disposal shall be hauled to a city approved facility.

Construction of Infrastructure May Be Financed

Construction of required infrastructure (such as sewer and water lines, storm drains, and roads) may be financed through the establishment of a financing district (e.g., Assessment District, Community Facilities District, or Road and Bridge Benefit District). Refer to Section 13 of the PVCCSP.

4.2.2.7 Water Quality Site Design

General Standards - Refer to NPDES Permit Board Order R8-2010-0033 for complete and current information on water quality management standards. Current requirements can be obtained by visiting the Riverside County Flood Control website at http://rcflood.org/NPDES/SantaAnaWS.aspx specifically to review the current WQMP Manual and the Low Impact Development Manual.

Water Quality Management Plan – Prepare a WQMP in accordance with the Riverside County MS4 NPDES Permit. Receive approval from the City of Perris on the WQMP. The MS4 Permit requires that applicable new development and redevelopment project: (i) design the site to minimize imperviousness, detain runoff, and infiltrate, reuse or evapotranspirate runoff where feasible; (ii) cover or control sources of stormwater pollutants; (iii) use LID to infiltrate, evapotranspirate, harvest and use, or treat runoff from impervious surfaces; (iv) ensure runoff does not create a hydrologic condition of concern; and (v) maintain Stormwater BMPs.

Duke Warehouse at Patterson Avenue and Nance Street DEIR

Low Impact Design - As stated in the Riverside County LID Manual, when LID is implemented correctly on a site, it provides two primary benefits: 1) hydromodification flows are managed across the site and 2) expected pollutants are reduced in the remaining runoff. The NPDES Permit requires that the design capture volume be first infiltrated, evapotranspirated, or harvested and reused. When such retention methods are infeasible, the remainder of the volume can be biotreated.

Source Control - Source Control features are also required to be implemented for each project as part of the Final WQMP. Source Control Features are those measures which can be taken to eliminate the presence of pollutants through prevention.

BMP Features in "Visibility Zone" - Sites that necessitate the placement of Water Quality BMPs adjacent to public rights-of-way shall follow the landscaping requirements of the Specific Plan. Treatment control BMP's adjacent to the public right-of-way must drain properly to adequate storm drain facilities. If no storm drain is available, alternative drainage shall be proposed for approval by City Engineer. Treatment control BMPs are not to be placed within public right-of-way.

The following elements shall be considered and/or required in site design pursuant to the PVCCSP (Section 4.0-23):

- Open Jointed Surfaces for Sidewalks
- Open Jointed Surfaces in Low Traffic Areas
- Filter Strips
- Filter Strip Adjoining Impervious Surfaces
- Roof Runoff Discharge into Landscape Area
- Second Treatment of Roof Water
- Covered Trash Enclosures

4.2.7 Utilities

Utility Connections and Meters

All utility connections and meters shall be coordinated with the development of the site and should not be exposed, except where deemed appropriate or necessary by the building official. To the greatest extent possible, these utility connections should be integrated into the building or the architectural design.

Electrical, Telephone, CATV and Similar Service Wires and Cables

All electrical, telephone, CATV and similar service wires and cables which provide direct service to the property being developed, within the exterior boundary lines of such property, shall be installed underground.

Electrical Transmission Lines

Electrical transmission lines 66kv and less shall be installed underground.

Off-Site Design Standards and Guidelines (Chapter 5.0 of the PVCCSP)

5.4.1 Water Standards and Guidelines

Design Standards

All waterlines shall be designed and located per EMWD standards. All waterline facilities shall require the approval of both EMWD and the City of Perris.

Water Supply Assessment

- Individual projects will be required to comply with Senate Bill 610 and 221 for the preparation of a WSA as follows:
- Retail shopping centers or business establishments employing more than 1,000 persons or having more than 500,000 square feet of floor space.
- Commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.
- Hotel/Motel having more than 500 rooms.
- Industrial, manufacturing or processing plants and industrial parks housing more than 1,000 persons, occupying more than 40 acres of land or having more than 650,000 square feet of floor area.

Plan of Service

Developers are advised to coordinate with EMWD to determine water service requirements through EMWD's Plan of Service process.

Fire Protection

All water facilities shall be sized to provide adequate fire protection per the requirements of the City of Perris Building and Safety Department.

Irrigation Water Demand

Developers shall provide information that estimates a project's irrigation water demand and submit conceptual landscape/irrigation conceptual plans to EMWD for review during the Plan of Service process.

Conservation Measures

Conservation measures will be incorporated into the project including water saving devices and systems.

Existing Facility Relocation

Relocation of existing water facilities will require coordination with and approval by EMWD. All relocation costs shall be incurred by the development.

Inspection

All waterlines shall be placed underground and inspected by EMWD and the City of Perris.

5.4.2 Sewer Standards and Guidelines

Design Standards

All sewer lines shall be designed and located per EMWD standards. All sewer facilities shall be approved by both EMWD and the City of Perris.

Plan of Service

Developers are advised to coordinate with EMWD to determine sewer service requirements through EMWD's Plan of Service process.

Existing Sewer Lines May be Relocated to Facilitate Development

Relocation of existing sewer facilities will require coordination with and approval by EMWD. All relocation costs shall be incurred by the development.

On-Site Sewage Disposal Systems

On-site sewage disposal systems are prohibited for all non-residential land uses, unless otherwise approved by the City Engineer

5.4.3 Recycled Water Standards and Guidelines

Recycled Water Candidates

Projects located within one mile of existing EMWD recycled water facilities and require more than 3,000 s.f. of landscape are potential recycled water candidates. EMWD should be contacted early in the development process to determine if a recycled water connection will be required or if recycled water facilities need to be constructed.

On-Site Recycled Waterline

All projects within the PVCCSP area will be required to install on-site recycled waterlines (purple pipe) and an irrigation meter for connection to existing or future recycled facilities.

5.4.4 Storm Drain Standards and Guidelines

Riverside County Flood Control and Water Conservation District Standard

Drainage and flood control facilities shall be provided in accordance with the City of Perris standards which are based on RCFC&WCD standards.

Collect and Discharge Storm Water

Storm drain facilities shall be designed to collect and discharge storm water runoff without damage to streets or adjacent properties.

San Jacinto River

The intent of the San Jacinto River Plan is to achieve a balance between resource protection and reasonable economic development by creating higher development standards for projects posing potential impacts to the San Jacinto River. Once the Perris Valley MDP has been updated, projects will be required to meet these guidelines. In the meantime, all projects shall adhere to the adopted interim development criteria for the San Jacinto River.

On-site Retention

Installation of a nuisance storm drain line within landscaped median is required where possible or where storm drain is available.

There are no standards and guidelines in the PVCCSP for natural gas or telecommunication facilities.

Perris Municipal Code

The Perris Municipal Code contains provisions relevant to utilities and services systems.

Title 7 – Health and Welfare includes *Chapter 7.16 – Rubbish Collection and Disposal* and *Chapter 7.44 – Construction and Demolition Waste Management.* These chapters address solid waste regulations.

Title 13 – Utilities includes *Chapter 13.04 – Underground Utility Installations, Chapter 13.12 – Television Systems, and Chapter 13.16 – Violation; Penalty.* This title addresses electric, communication or similar or associated services.

Title 14 – Water and Sewage. This title includes several chapters on potable water and wastewater definitions and regulations. It also includes *Chapter 14.22 - Stormwater/Urban Runoff Management and Discharge Control*, which regulates stormwater runoff and water quality.

Title 15 – Floodplain Regulations includes provisions for all areas with special flood hazards.

Title 18 – Subdivisions includes Chapter 18.32 – Reservations and Fees addressing drainage fees.

5.12.3 Design Considerations

Design considerations refer to ways in which the proposed Project will reduce potential impacts to utilities and service systems. In addition to the design considerations required by the PVCCSP, the proposed Project includes the following elements related to utilities and service systems:

Potable Water Design Features

No off-site water line improvements are proposed. Project site improvements consist of a looped 10inch diameter water line around the proposed building which would include two connections to the existing 12-inch diameter water line in Patterson Avenue (see **Figure 5.12-1 – Proposed On-Site Utilities**). There will also be a fire flow pump for fire flow demands.

Remainder of Page Intentionally Left Blank





Figure 5.12-1 – Proposed On-Site Utilities

Duke Warehouse at Patterson Avenue and Nance Street



Recycled Water Design Features

An 8-inch diameter recycled water line is proposed in Patterson Avenue between the existing line just north of Markham Street north to Nance Street. At Nance Street, a tee will be placed with stubs going north and west to extend just beyond the intersection. This recycled water line will serve the proposed Project site, but the environmental documentation and subsequent construction will be the responsibility of another developer under City Case No. DPR 22-00003 (see **Figure 5.12-2 – Proposed Off-Site Improvements**).

Wastewater Design Features

An 8-inch diameter gravity sewer line is proposed in Nevada Avenue between the Project site and the existing 15-inch diameter line in Harley Knox Boulevard (see **Figure 5.12-2**).

Storm Water Drainage Design Features

The Project includes construction of off-site and on-site drainage facilities. Six offsite drainage facilities will be constructed as part of the Project: (1) 790 linear feet of MDP Lateral B-6 within Patterson Avenue (48-inch diameter), 2) 40 linear feet of Lateral B-6-1 in Patterson Avenue (24-inch diameter) with inlet, 3) 35 linear feet of Lateral B-6-2 in Patterson Avenue (18-inch diameter), 4) 40 linear feet of Lateral B-6-3 in Patterson Avenue (30-inch diameter) with inlet; 5) 800 linear feet of MDP Lateral B-6.1 in Nevada Avenue (48-inch diameter) (WEBB(a), pp. 3-4, 3-5.); and 6) approximately 900 linear feet of MDP Lateral-B Stage 4 extension between the Lateral-B Stage 4 stub out and the existing facility in Patterson Avenue (Refer to **Figure 5.12-2**).

As shown in **Figure 5.12-1**, within the Project site two storm drain lines will be constructed: Line 1 and Line 2. Line 1 will be 1,700 linear feet of 24 to 36-inch diameter to collect all runoff from the northern half of the Project site. Line 2 will be 1,940 linear feet of 27- to 36-inch diameter storm drain to collect all runoff from the southern half of the Project site. Both Line 1 and Line 2 are sized to convey the 100-year flow rate and both will convey flows to an underground detention chamber system located onsite. The underground detention system (underground "chambers") will fully store the water quality volume from the Project via proposed Lines 1 and 2. The chambers will have an emergency outlet capable of bypassing the peak 100-year flow rate (WEBB(a), p. 3-4). A pump will be used to convey the water quality volume held in the chambers into a Contech® Filterra Bioscape™ modular wetland for treatment and discharge into proposed offsite MDP Lateral B-6.1 in Nevada Avenue via 350 linear feet of maximum 42-inch diameter storm drain line. The modular wetland provides the equivalent of "bioretention" treatment and can treat the water quality volume. Flows in excess of the water quality volume will bypass the modular wetland treatment and exit the site directly into Lateral B-6.1 within Nevada Avenue. (WEBB(b), p. 7).

In addition to Line 1 and Line 2, the Project will construct an onsite West Collector Channel to convey offsite run-on coming onto the Project site from three corrugated metal pipe culverts currently located under Patterson Avenue (**Figure 5.12-1**). The West Collector Channel will be 280 linear feet, 2 feet deep at 2:1 side slope with a 4-foot bottom width totaling 6,330 square feet and will convey flow directly to MDP Lateral B-6 via Lateral B-6-2. (WEBB(a), p. 3-4) The proposed drainage facilities and water quality treatment system are consistent with the design standards of the PVCCSP.



Source: DPR 21-00005, 3-16-2022



Figure 5.12-2 – Proposed Off-site Utilities

Duke Warehouse at Patterson Avenue and Nance Street



0 125 250 500 Feet

Energy Efficiency Design Features

- Design building shells and components, such as windows, roof systems and electrical systems to meet California Title 24 Standards for nonresidential buildings.
- Design buildings to achieve U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) features for potential certification. This includes design considerations related to the building envelope, heating, ventilation, and air conditioning (HVAC), lighting, and power systems. Additionally, the architectural expression such as roofs and windows in the buildings will relate to conserving energy.
- Install energy efficient light-emitting diodes (LED) lighting on the site. Provide skylights for natural day light to reduce the lighting load, therefore saving energy. Lighting will incorporate motion sensors that turn them off when not in use.
- Meet City minimum landscape requirements and provide adequate landscape shade for the site to reduce energy use.
- Install light-colored roofing materials over office area spaces and light-colored paving materials.
- For future office space, install energy efficient HVAC systems (seasonal energy efficiency ratio (SEER) 13), appliances and equipment, and control systems that are Energy Star rated.
- For future office improvement, refrigerants and HVAC equipment will be selected to minimize or eliminate the emission of compounds that contribute to ozone depletion and global climate change. Ventilation and HVAC systems will be designed to meet or exceed the minimum outdoor air ventilation rates described in the American Society of Heating, Refrigeration, and Air Conditioning Engineers (ASHRAE) standards and/or per California Title 24 requirements.
- For future office improvement, implement design features to increase the efficiency of the building envelope (i.e., the barrier between conditioned and unconditioned spaces). This includes providing R-19 roof insulation for conditioned space and R-22 between conditioned and unconditioned space to minimize heat transfer and minimize energy consumption.
- Provide greatly enhanced window glazing insulation for exterior walls at conditioned spaces (0.28 or less U-factor).
- Incorporate Energy Star rated space heating and cooling equipment, light fixtures, appliances, or other applicable electrical equipment.

Water Conservation and Efficiency Design Features

- Recycled water shall be used for landscape irrigation.
- Surface parking lots will be landscaped in accordance with City standards to reduce heat island effect.
- Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls and sensors for landscaping according to the California Department of Water Resources Model Efficient Landscape Ordinance and Chapter 19.70 (Landscaping) of the Perris Municipal Code.
- Design buildings to be water-efficient. Install water-efficient fixtures in accordance with Section 5.303 of the California Green Building Standards Code Part 11.

- Duke Warehouse at Patterson Avenue and Nance Street DEIR
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff in accordance with City Standards.
- Provide education about water conservation and available programs and incentives to the building operators to distribute to employees.

Electric, Natural Gas, and Telecommunication Design Features

Existing power poles along Patterson Avenue, Nance Street and Nevada Avenue within the Project site or off-site improvement areas will be relocated or moved underground to avoid any interference with the proposed building or improvements; power poles that do not interfere with the proposed improvements will be protected in place.

If natural gas service is needed, then the Project will connect to the existing gas line in Patterson Avenue adjacent to the Project site. The Project will connect to existing telephone/telecommunication lines in Patterson Avenue as well.

Solid Waste Design Features

- Recycle and/or salvage for reuse a minimum of 65 percent of the nonhazardous construction and demolition waste in accordance with California Green Building Standards Code Section 5.408.1.
- Provide storage areas for recyclables and green waste and adequate recycling containers located in readily accessible areas in accordance with California Green Building Standards Code Section 5.410.1.
- The property operator will provide readily available information provided by the City for employee education about reducing waste and available recycling services.

5.12.4 Thresholds of Significance

The City of Perris has not established local CEQA significance thresholds and instead, defers to the thresholds of significance identified in State CEQA Guidelines Appendix G. Impacts related to this Project may be considered potentially significant if the proposed Project would:

- Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Utilities and Service Systems

5.12.5 Environmental Impacts Before Mitigation

Threshold A: Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

The Project Applicant will construct the utilities described in Section 3.0 – Project Description and Section 5.12.3 –Design Considerations, and as shown on **Figure 5.12-1 – Proposed On-Site Utilities** and **Figure 5.12-2 – Proposed Off-Site Improvements.** MDP Lateral B-6 in Patterson Avenue is designed to convey the ultimate condition flow rates and is a necessary component of the Project to flood-protect the Project site from the offsite, upstream tributary area between Patterson Avenue and Interstate 215. Laterals B-6-1, B-6-2, and B-6-3 stem off of Lateral B-6 and they will be designed for the interim condition with the expectation that the offsite tributary areas that will drain to them will connect in the future to Lateral B-6 via future additional connections when those properties are fully developed. Construction of MDP Lateral B-6.1 in Nevada Avenue is necessary to drain the runoff generated on the Project site. MDP Lateral B-6 in Patterson Avenue and Lateral B-6.1 in Nevada Avenue will both convey flows to the existing Caltrans reinforced concrete box (RCB) storm drain (8-feet wide and 7-feet high to 8-feet wide and 6-feet high) located parallel to Harley Knox Boulevard. The Caltrans RCB outlets to the PVSD approximately 2 miles to the east. (WEBB(a), pp. 1-2, 3-4, 3-5.)

Proposed MDP Lateral B-6.1 in Nevada Avenue will be sized for the ultimate build-out condition of the project area. The tributary drainage capacities of Lateral B-6 and Lateral B-6.1 are highly dependent on the capacity of the Caltrans RCB running parallel to Harley Knox Boulevard. Currently, there is roughly 50 cfs of capacity in the Caltrans RCB (assuming 5-inch of freeboard) and Laterals B-6 and B-6.1 will add approximately 180 cfs during the ultimate condition. (WEBB(a), p. 1-2) Therefore, connections of Lateral B-6 and B-6.1 to the existing Caltrans RCB is not feasible since capacity does not exist to handle the flows from these Laterals.

In order to address the limited capacity of the Caltrans RCB, completion of MDP Lateral-B Stage 4 (currently under design by the RCFC&WCD and shown in **Figure 5.12-2**) will cut off roughly 300 cfs of tributary runoff from the existing Caltrans RCB, after accounting for the effects of confluences. The effect of a confluence, or a coming together of stream paths, will result in a flow rate that is less than the sum of the individual streams. The connection of MDP Lateral-B Stage 4 must be made for the Caltrans RCB to have capacity for unrestricted runoff from MDP Lateral B-6 and Lateral B-6.1 under ultimate conditions. The Project Applicant will be responsible for the construction of this off-site lateral extension between the Lateral B Stage 4 stub out and the existing Caltrans RCB. In the interim condition when the Project is completed, the runoff coming from the Project is such that the time to drain down is significantly less than the time of concentration for upstream areas to reach the same connection point to the Caltrans RCB at Lateral B-6 and Lateral B-6.1. This means the Project's ability to exceed the capacity of the Caltrans RCB is unlikely even in the interim condition before Lateral-B Stage 4 is completed.

Wet and dry utilities installed as part of the Project would be installed on-site and off-site consistent with the requirements of the respective utility providers, and consistent with final plans approved by the utility providers. All construction activities associated with the proposed on-site and off-site utilities would be within the Project's construction impact area, as shown on **Figure 5.12–1** and **Figure 5.12-2** and described in Section 3 – Project Description of this DEIR.

The installation of the proposed utility improvements would potentially result in environmental effects; however, the effects of constructing and relocating utilities are described, analyzed, and mitigated in this DEIR (e.g., air quality impacts, impacts to biological and cultural resources, water quality impacts, noise impacts, etc.). Any applicable PVCCSP EIR mitigation measures and Project-specific mitigation measures for construction identified for each topical issue would address potential significant impacts associated with construction and installation of utilities. Therefore, through consistent implementation of a variety of measures related to construction impacts, no additional impacts related to construction and operation of utility systems would occur and are **less than significant and no mitigation is required**.

Threshold B: Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

The Project's WSA states the total water demand for the proposed Project is estimated to be 20.78 acre-feet per year (AFY). (WSA, p. 19.) Potable water would be provided to the Project site by the EMWD from the 1705 pressure zone with the Decker water storage reservoir being the primary source of water supply. The nearest point of potable water connection is in Patterson Avenue adjacent to the Project site. The Project's DC Report, "determined through the hydraulic analysis that the existing and proposed system can meet the District's [EMWD's] pressure and velocity constraints with [the Project] demands added to the system." (WEBB(c), p. 2-4)

Regarding available water supply, a WSA was prepared for the proposed Project by the EMWD pursuant to SB 610 and approved February 16, 2022 by the EMWD Board of Directors. (The WSA is included as Appendix H.3.) The WSA is not a commitment to serve the Project, but rather a review of the EMWD's future demands and supplies based on information available at the time the WSA was prepared. The WSA determined the projected water demand for the Project is less than the water demand projected in the EMWD 2020 UWMP that used the Perris GP 2030 land use designations for the Project site. As stated in the Project's WSA, "In the Eastern Municipal Water District's (EMWD) 2020 UWMP, the demand projections for the parcels covering the project site were estimated based on Heavy Industrial and Business Park/Light Industrial land uses, with a total demand of 118.87 acre-feet per year (AFY). The total water demand for this project is estimated to be 20.78 AFY, which falls within the limits of estimated demand considered in the 2020 UWMP. The specific facilities needed to serve the Project's water demands will be defined in the design conditions phase of EMWD's New Development Process." (WSA, p. 1.) Furthermore, "EMWD plans to supply new water demands in its service area, including the Project, through a combination of additional imported water purchases from MWD and the ongoing development of EMWD's local water supply portfolio." (WSA, p. 8.) Local water supplies include potable groundwater, desalinated brackish groundwater, and recycled water. (WSA, p. 8.)

The EMWD 2020 UWMP describes EMWD's projected water demands and supplies during normal, single-dry, and multiple-dry years for the next 20 years. As stated in the WSA, "EMWD expects its local supplies to remain highly reliable and resilient, even under severe hydrologic conditions" (WSA, p. 21). Because EMWD relies on wholesale water supplied by MWD, the UWMP assumes the determination of MWD's 2020 UWMP, which is "MWD demonstrated in the 2020 MWD UWMP that with the addition of all water supplies, existing and planned, MWD has the ability to meet all of its member agencies' projected supplemental demand through 2045, even under a repeat of historic multiple-year drought scenarios" (WSA, p. 23). However, "the WSA [for the Project] is conditioned on MWD's ability to continue to supply imported water to meet EMWD's requirements, including the requirements for the evaluated Project area. This project is subject to any special or additional requirements imposed by MWD or EMWD on such deliveries, including increased pricing or a different pricing structure" (WSA, pp. 23-24).

Utilities and Service Systems

According to the WSA, "The Project may be conditioned to construct off-site and on-site [potable] water facilities needed to distribute [potable] water throughout the project area. Prior to construction, the developer should contact EMWD staff to establish development design conditions and determine if any revisions are required to the master plan." (WSA, p. 22.) It is the policy of EMWD that all new development shall install water efficient devices and landscaping, non-functional turf is prohibited, and recycled water should be used if possible for all non-potable water demands, such as irrigation and decorative water features. (WSA, p. 24.) The Project "may also be conditioned to construct an [on-site and/or off-site] recycled water system separately from the potable water system...EMWD will make a final determination on requirements for recycled water use and facilities during the development design conditions phase of the Project." (WSA, p. 24.) The Applicant is constructing all on-site and off-site potable water facilities as part of the Project. The Applicant has begun EMWD's DC Report process.

Because the UWMP has determined that future water supplies will be sufficient to meet projected water demands in normal, single-dry, and multiple-dry year conditions based on the Perris GP 2030 land use designation of the Project site, and the projected water demand of the Project site is significantly less than the water demand assumed in the most recent UWMP, the Project as currently defined would have sufficient water supplies in normal and drought conditions for the foreseeable future. Therefore, impacts are **less than significant and no mitigation is required**.

Threshold C: Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Wastewater generated by the Project would be collected by the EMWD and treated at the Perris Valley RWRF, which has the current capacity to treat 22 million gallons per day (mgd) of wastewater, with an ultimate capacity of 100 mgd. Typical daily flows are 15.5 mgd. (EMWD(b), pp. 1-2.)

Wastewater generated by the Project can be estimated using the EMWD wastewater generation factor for Light Industrial uses as identified in EMWD's *2015 Wastewater Collection System Master Plan,* which is 1,200 gpd/acre (EMWD, p. 4-6), which, multiplied by the Project site of 35.7 acres is approximately 42,840 gpd (0.04 mgd; average daily flow). This represents approximately 0.2 percent of the current daily treatment capacity of the Perris Valley RWRF.

EMWD tracks development projects from planning to construction in its Database of Proposed Projects (DOPP) with details to calculate future wastewater flows. A wastewater capacity analysis using the DOPP and land use-based future growth information was performed as part of the EMWD *2015 Wastewater Collection System Master Plan* in order to identify system deficiencies and infrastructure projects needed now and into the future (EMWD, p. 8-2). In this document, the Project site is shown as a mix of commercial DOPP and non-residential land use (EMWD, Figure 4-9). Because the PVCCSP was first approved in 2012, it can be reasonably assumed that the EMWD's subsequent planning projections for wastewater generation and treatment capacity used the PVCCSP land uses, including those assigned to the Project site, which are similar land use designations as that proposed by the Project. Therefore, because the development of the PVCCSP has been accounted for in the planning efforts of the wastewater treatment provider EMWD, the Project DC Report determined "the proposed sewer system will meet the District's design capacity planning standard with the estimated peak flows from the [Project] and future buildout flows (WEBB(c), p. 3-4). Therefore, impacts are **less than significant and no mitigation is required**.

Threshold D: Would the Project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Construction Solid Waste

Construction of the Project would result in the generation of construction-related solid waste. Based on the USEPA's construction waste generation rate of 3.89 pounds per square foot (lbs/sf) for Light Industrial uses, as identified in the PVCCSP EIR, construction of 769,668 SF building to accommodate 749,668 SF for high-cube, non-refrigerated warehouse distribution uses with the remaining 20,000 SF for supporting office uses. approximately 1,497 tons of construction-related solid waste would be generated.³ The Project's building construction is anticipated to occur over a period of approximately 11 months, which corresponds to an average of approximately 6.2 tons of construction waste generated per day from building construction activity.

The PVCCSP EIR estimated that construction of future development under the PVCCSP would generate approximately 104,671.09 tons of solid waste over the 20-year construction period, which was determined to be approximately 0.10 percent of the combined annual capacity (i.e., yearly intake) of the Badlands and El Sobrante landfills (see PVCCSP EIR Table 4.11-J, *Estimated Construction-Related Solid Waste Generation and Contribution*). The PVCCSP EIR concluded that, with the development of the PVCCSP, construction-related solid waste would not substantially contribute to exceeding the permitted capacity of these landfills. (PVCCSP EIR, p. 4.11-43.) The PVCCSP EIR estimates that operation of future development within the PVCCSP would generate approximately 544,048.96 tons per year of solid waste, which was calculated to be approximately 10.65 percent of the combined annual capacity of the Badlands and El Sobrante landfills (see PVCCSP EIR Table 4.11-K, *Anticipated Solid Waste Generation and Contribution*). The PVCCSP EIR Table 4.11-K, *Anticipated Solid Waste Generation and Contribution*). The PVCCSP EIR Table 4.11-K, *Anticipated Solid Waste Generation and Contribution*). The PVCCSP EIR concluded that, with the development of the PVCCSP, operational solid waste would not substantially contribute to exceeding the permitted capacity of the local infrastructure and impacts are less than significant (PVCCSP EIR p. 4.11-45).

The estimated 1,497 tons of solid waste generated by construction of the Project is approximately 2.1 percent of the total solid waste planned for Light Industrial uses in the PVCCSP EIR (i.e., 70,009.81 tons), which was determined to be a less than significant impact to the landfills serving the City (PVCCSP EIR p. 4.11-44). Because the Badlands Landfill is currently permitted to accept 4,800 tons per day and the EI Sobrante Landfill is permitted to accept 16,054 tons per day, the Project's daily rate of 6 tons/day of solid waste represents approximately 0.13 percent of the Badlands Landfill maximum daily capacity and 0.04 percent of the EI Sobrante Landfill maximum daily capacity.

Furthermore, it is anticipated that the solid waste generated during construction of the Project that would be sent to landfills would be less than that amount estimated in the PVCCSP EIR as a result of increasingly stringent waste diversion regulations (65 percent per the CalGreen Code as discussed under Threshold E, below). Therefore, through the implementation of existing regulations the disposal of construction-related solid waste associated with the Project would not exceed the permitted capacity of the Badlands or El Sobrante Landfills, and the impact would be **less than significant**. No mitigation is required.

Operational Solid Waste

Operation of the Project will generate solid waste. According to the operational solid waste disposal factor of 0.0108 tons/SF/year for Light Industrial uses as identified in the PVCCSP EIR, operation of the

³ The Light Industrial construction waste generation rate was used since the office uses are ancillary.

Utilities and Service Systems

Project's 769,668 SF would generate approximately 8,312 tons per year (23 tons per day) of solid waste requiring disposal. This represents approximately 2.1 percent of the estimated annual solid waste stream for the PVCCSP (i.e., 388,743.42 tons/year), which the PVCCSP EIR determined was a less than significant impact to the receiving landfills. (PVCCSP EIR, p. 4.11-45). The estimated daily generation rate of 23 tons/day represents approximately 5 percent of the maximum daily capacity of the Badlands Landfill and 0.14 percent of the maximum daily capacity of the El Sobrante Landfill.

Furthermore, it is anticipated that the solid waste generated by the Project that would be sent to landfills would be less than that amount estimated in the PVCCSP EIR as a result of increasingly stringent waste diversion regulations, (65 percent per the CalGreen Code as discussed under Threshold E, below). Therefore, through the implementation of existing regulations the disposal of operational solid waste associated with the Project would not exceed the permitted capacity of the Badlands or El Sobrante Landfills, and the impact would be **less than significant**. No mitigation is required.

Threshold E: Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

The Project includes the solid waste design features listed in Section 5.12.3. The PVCCSP EIR Initial Study concluded that the PVCCSP will comply with all regulatory requirements regarding solid waste and impacts were less than significant. Federal, State, and local statutes and regulations regarding solid waste generation, transport, and disposal are intended to decrease solid waste generation through mandatory reductions in solid waste quantities (e.g., through recycling and composting of green waste) and the safe and efficient transport of solid waste. The proposed Project will comply with all regulatory requirements regarding solid waste, and it will coordinate with CR&R Waste Services to develop a collection program for recyclables, such as paper, plastics, glass, and aluminum, in accordance with local and State programs, including AB 341, Mandatory Commercial Recycling, and the California Solid Waste Reuse and Recycling Act of 1991.

Additionally, the Project would be required to comply with activities enacted by the City pursuant to AB 939 (e.g., composting, facility recovery, household hazardous waste, policy incentives, public education, recycling, source reduction, and special waste materials). AB 939 required that local jurisdictions divert at least 50 percent of all solid waste generated by January 1, 2000. The diversion goal was increased to 75 percent by SB 341. Further, the Solid Waste Disposal Measurement Act of 2008 (SB 1016) was established to make the process of goal measurement (as established by AB 939) simpler, more timely, and more accurate. SB 1016 builds on AB 939 compliance requirements by implementing a simplified measure of jurisdictions' performance. SB 1016 accomplishes this by changing to a disposal-based indicator—the per capita disposal rate—which uses only two factors: (1) a jurisdiction's population (or in some cases employment); and (2) its disposal, as reported by disposal facilities. Building operators would participate in the City's recycling programs and comply with hazardous waste disposal regulations. Through implementation of existing regulations, the Project would not conflict with any federal, state, or local regulations related to solid waste and impacts are **less than significant**. No mitigation is required.

5.12.6 Recommended Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (State CEQA Guidelines Section15126.4.) No potentially significant impacts related to utilities and services systems (i.e., potable water, wastewater, drainage, electrical power, natural gas, telecommunications, and solid waste) are anticipated from the implementation of the proposed Project.

Project design features have been included to provide the necessary utilities such that the Project's impacts to said utilities and service systems will not result in significant environmental effects. Therefore, no mitigation measures are required.

5.12.7 Summary of Environmental Effects After Mitigation Measures Are Implemented

There are no anticipated adverse environmental impacts related to utilities and service systems that would result from implementation of the Project; therefore, no mitigation measures are required and potential impacts from utilities and service systems remain **less than significant**.

5.13 Transportation

The focus of the following discussion is related to the potential impacts associated with conflicts with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, conflict with or inconsistency with State CEQA Guidelines Section 15064.3 regarding Vehicle Miles Traveled (VMT), substantially increasing hazards due to geometric design, and inadequate emergency access.

One comment letter was received related to transportation and multiple verbal comments were received in response to the Notice of Preparation (NOP) and at the February 2, 2022 EIR public scoping meeting. Californians Allied for a Responsible Economy (CARE CA) submitted a letter asking for a VMT analysis that includes heavy trucks to be prepared as part of the Project. Verbal comments were received concerning truck traffic mingling with personal vehicle traffic, truck route enforcement, pedestrian friendly roadways, freeway traffic, and evaluating VMT highest use. These comments are addressed in this Section, as well as in Section 3.0, Project Description, for Project circulation.

The analysis in this section is based on the *Patterson Nance Warehouse – VMT Analysis, Case Number DPR 21-00005,* prepared by Translutions, dated January 2022 (VMT Analysis) and on the *Patterson and Nance Warehouse Project Traffic Impact Analysis (DPR 21-00005)* (TIA), dated January 2022, which are included as Appendix K.1 and K.2 respectively. to this DEIR. The VMT Analysis was performed in accordance with the City of Perris *Transportation Impact Analysis Guidelines for CEQA (May 2020).* In addition to the VMT Analysis and TIA, which are listed below, the following references were used in the preparation of this section of the DEIR:

- Albert A. Webb Associates, *Patterson-Nance Warehouse Project, Traffic Impact Analysis (DPR 21-00005, January 5, 2022.* (Included as Appendix K.2 to this DEIR) [Cited as TIA]
- City of Perris, *Perris Comprehensive General Plan 2030*, July 12, 2005. (Available at <u>https://www.cityofperris.org/departments/development-services/general-plan</u>, accessed April 20, 2012.) [Cited as Perris GP 2030]
- City of Perris, *Perris Comprehensive General Plan 2030 Circulation Element*, adopted June 14, 2005, amended January 11, 2022. (Available at https://www.cityofperris.org/home/showpublisheddocument/447/637806276230830000, accessed April 20, 2022) [Cited as Perris GP 2030]
- City of Perris, *Perris Valley Commerce Center Specific Plan Amendment No. 12*, approved January 10, 2012, and subsequently amended and approved January 11, 2022. (Available at https://www.cityofperris.org/home/showpublisheddocument/2647/637799977032200000, accessed April 18, 2022.) [Cited as PVCCSP]
- City of Perris, *Perris Valley Commerce Center Specific Plan Final Environmental Impact Report*, State Clearing house # 2009081086 November 2011. (Available at the City of Perris and <u>https://www.cityofperris.org/departments/development-services/specific-plans</u>, accessed April 18, 2022.) [Cited as PVCCSP EIR]
- City of Perris, *Transportation Impact Analysis Guidelines for CEQA*, May 2020. (Available at https://www.cityofperris.org/Home/ShowDocument?id=13227, accessed May 3, 2022.) [Cited as TIA Guidelines]
- Riverside County Transportation Commission, *Riverside County Long Range Transportation Study*. December 2019. (Available at https://www.rctc.org/wp-content/uploads/2019/12/RCTC-Draft-LRTS-120119-GV22.pdf, accessed April 28, 2022.) [Cited as LRTS]
- Translutions, Patterson-Nance Warehouse VMT Analysis Case number DPR 21-00005 Memorandum, January 10, 2022. (Included as Appendix K.1 to this DEIR) [Cited as VMT Analysis]
- Western Riverside Council of Governments, *Transportation Uniform Mitigation Fee Nexus Study*, 2016 Update, adopted July 10, 2017. (Available at http://www.wrcog.cog.ca.us/DocumentCenter/View/1020, accessed May 2, 2022.) [Cited as TUMF Nexus 2016]

5.13.1 Setting

The Project site encompasses approximately 35.7-net acres south of Harley Knox Boulevard between Patterson Avenue and Nevada Avenue (**Figure 3-2 – Aerial Map**), in the City of Perris (City). The area surrounding the Project site is dominated by industrial and commercial uses with some vacant land. Specifically, the Project site is bordered by an industrial warehouse to the south, commercial businesses to the north, vacant land and legal, non-conforming residential uses to the east, and commercial businesses and legal, non-conforming residential uses to the west.

As discussed in Section 3 – Project Description, the Project Applicant proposes to amend the PVCCSP to amend the Circulation Plan to delete two planned streets: California Avenue and Nance Street between Patterson Avenue to the west and Nevada Avenue to the east (see **Figure 3-7 – Proposed Specific Plan Amendment Circulation Plan**). The proposed Project also involves the construction and operation of an approximately 769,668 square feet (sf) high-cube warehouse building.

Regional and Local Roadway Circulation System

The existing street system in the Project area consists of roadways designated in the Perris Comprehensive General Plan 2030 (Perris GP 2030), Circulation Element, Exhibit CE-4: City of Perris Existing Roadway Network, as Freeway, Expressway, Primary Arterial, Secondary Arterial, Major Collector and, Collector (**Figure 5.13-1 – City of Perris General Plan Circulation Element**).

Truck Routes

The PVCCSP Circulation Plan designates truck routes, as well as provides a Circulation Plan that governs street standards within the PVCCSP planning area (**Figure 5.13-2 – PVCCSP Circulation Plan and Truck Route**). The PVCCSP-designated truck route map is shown on **Figure 5.13-2**. As shown, Harley Knox Boulevard, Indian Avenue, Redlands Avenue, Morgan Street, and portions of Rider Street, Wester Way, and Placentia Avenue are identified as designated truck routes. It should also be noted that the City's policy is for trucks to utilize the Harley Knox Boulevard interchange at I-215.

Transit Service

Transit service in the Project area is provided by the Riverside Transit Authority (RTA), a public transit agency serving the Riverside County region. RTA operates two bus routes that travel through the PVCCSP area, Routes 19 and 41 as shown in **Figure 5.13-3 – PVCCSP Mass Transit Circulation**. RTA Route 41 travels along Rider Street and traverses through the PVCCSP area along portions of the Ramona Expressway, Perris Boulevard, and Rider Street and connects the Mead Valley Community

City of Perris

Duke Warehouse at Patterson Avenue and Nance Street DEIR

Center to the Riverside County Regional Medical Center in Moreno Valley by traveling through the City of Perris. RTA Route 19 travels through the PVCCSP area along Perris Boulevard connecting the Moreno Valley Mall to the City of Perris Civic Center and Downtown. This route includes alternate routing that traverses west on the Ramona Expressway and makes a loop, following Indian Avenue, Morgan Street, Webster Avenue and then back to the Ramona Expressway; this loop provides service to several large employers and a high school.

Transit service is reviewed and updated by RTA periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate. Consistent with PVCCSP EIR mitigation measure **MM Trans 4**, the Project Applicant has coordinated with RTA with respect to the bus routes and bus stops.

The PVCCSP identified the Perris Valley Rail Line, now called the 91/Perris Valley Line(91/PVL), which was planned as part of Riverside County Transportation Commission's (RCTC) Metrolink system. This passenger train service is now in operation and runs from the Los Angeles Union Station to the South Perris Station on Case Road near the City of Perris/City of Menifee border. The 91/PVL uses the tracks parallel and west of I-215, west of the Project area. Stops along the PVL include the Perris-Downtown Station and Moreno Valley/March Field Station.

Bicycle and Pedestrian Facilities

In an effort to promote alternative modes of transportation, the Perris GP 2030 - Circulation Element and PVCCSP identify trails and bicycle facilities. **Figure 5.13-4 – City of Perris General Plan Bikeway Systems** depicts the existing and proposed bicycle and walking trails within the City. There are two existing northbound and southbound Class II bicycle lanes along Patterson Avenue adjacent to the Project site and two eastbound and westbound lanes along Harley Knox Boulevard north of the Project site. These bicycle lanes provide dedicated lanes for bicycle travel adjacent to traffic. A painted white line separates the bicycle lane from motor vehicle traffic. There are no existing or planned trails in the Project vicinity.











0 100 200 300

Figure 5.13-4 – City Of Perris General Plan Bikeway Systems

Duke Warehouse at Patterson Avenue and Nance Street



Primary Arterial streets serve major traffic movements or major traffic corridors and Secondary Arterial streets are intended to carry local traffic between the local street system and the primary arterial system. A Collector Street is a low or moderate-capacity road that tends to lead traffic from local roads or sections of neighborhoods to activity areas within communities, arterial roads or occasionally, directly to expressways or freeways. The Project area street system generally provides two- to six-lanes of travel, and on-street parking is not allowed in the area. The I-215 traverses the City north to south, and is the only interstate or state highway located nearby. I -215 currently has four lanes in each direction and is owned and maintained by Caltrans.

The existing roadways within the Project area are described below (TIA, p. 13):

- Harley Knox Boulevard is an east-west six-lane roadway classified as an Arterial in the PVCCSP Circulation Plan. Within the Project vicinity, it has either a raised, landscaped median or a two-way left-turn median lane. The proposed Project does not include any improvements to Harley Knox Boulevard.
- Patterson Avenue is a north-south two-lane roadway with a two-way left-turn median lane from California Avenue to Markham Street. A Class II bike lane is included in each direction. It is classified as a Collector in the PVCCSP Circulation Plan, terminating north of Harley Knox Boulevard at Nandina Avenue and south of Markham Street. The proposed Project includes improvements to Patterson Avenue as described in Section 3.3.5, On- and Off-Site Infrastructure.
- **Nevada Avenue** is a north-south two-lane undivided roadway classified as a Local Road per the PVCCSP Circulation Plan. It terminates to the north at Harley Knox Boulevard and to the south at Nance Street. The proposed Project includes improvements to Nevada Avenue as described in Section 3.3.5, On- and Off-Site Infrastructure.
- Nance Street is an east-west two-lane undivided roadway classified as a Local Road per the PVCCSP Circulation Plan. It terminates to the west at Wade Avenue and to the east at Indian Avenue. It is currently an undeveloped dirt road between Patterson Avenue and Webster Avenue. The proposed Project includes a Specific Plan Amendment which would delete Nance Street from the PVCCSP Circulation Plan and a Tentative Parcel Map which would vacate the Nance Street right-of-way.

5.13.2 Related Regulations

Federal Regulations

No federal regulations are applicable to the Project with respect to transportation/traffic.

State Regulations

Senate Bill 743 and VMT Based Analyses

Senate Bill 743 (SB 743), which was codified in Public Resources Code Section 21099, requires changes to the State CEQA Guidelines regarding the analysis of transportation impacts. Pursuant to Section 21099, the criteria for determining the significance of transportation impacts must "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." To that end, in developing the criteria, Office of Planning and Research (OPR) proposed, and the California Natural Resources Agency (CNRA) certified and adopted changes to the CEQA Guidelines in December 2018, which entailed changes to the thresholds of significance for the evaluation of impacts to transportation.

The updated CEQA Guidelines include the addition of State CEQA Guidelines Section 15064.3, of which Subdivision (b) establishes criteria for evaluating a project's transportation impacts based on project type and using automobile VMT as the metric. Section 15064.3, subdivision (a), states, "For the purposes of this section, 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project." Here, the term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks (i.e., no heavy-duty trucks). As identified in Section 15064.3(b)(4), a lead agency has the discretion to choose the most appropriate methodology to evaluate a project's VMT. The City of Perris adopted its guidelines for conducting automobile VMT analysis in June 2020. Beginning July 1, 2020, the provisions of State CEQA Guidelines Section 15064.3 applied statewide. Pursuant to SB 743 and Public Resources Code Section 21099, the requirement for analyzing congestion impacts for CEQA purposes was eliminated in December 2018. Therefore, an analysis of congestion impacts, including analysis of impacts related to the LOS of the circulation system is not provided in this DEIR.

Regional Regulations

SCAG Regional Transportation Plan/Sustainable Communities Strategy

As further discussed in Section 5.10, Land Use and Planning, of this DEIR, the Southern California Association of Governments (SCAG) is a regional agency established pursuant to California Government Code Section 6500, also referred to as the Joint Powers Authority law. SCAG is designated as a Council of Governments (COG), a Regional Transportation Planning Agency (RTPA), and a Metropolitan Planning Organization (MPO). The Project area is within SCAG's regional authority.

In April 2018 SCAG published *Industrial Warehousing in the SCAG Region*. According to the document, the SCAG region is a vibrant hub for international and domestic trade because of its large transportation base and extensive multimodal transportation system. The SCAG region's freight transportation system includes warehouses and distribution centers; the Ports of Los Angeles, Long Beach, and Hueneme; airports; rail intermodal terminals; rail lines, and local streets, state highways and interstates. Together the system enables the movement of goods from source to market, facilitating uninterrupted global commerce. The region is home to approximately 34,000 warehouses with 1.17 billion square feet of warehouse building space, and undeveloped land that could accommodate an additional 338 million square feet of new warehouse building space. These regions attract robust logistics activities and are a major reason why the region is a critical mode in the global

Transportation

supply chain. (SCAG, 2018)

On September 3, 2020, SCAG's Regional Council adopted *Connect SoCal* (the 2020 - 2045 RTP/SCS). *Connect SoCal* is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. It charts a path toward a more mobile, sustainable and prosperous region by making connections between transportation networks, between planning strategies and between the people whose collaboration can improve the quality of life for Southern Californians. *Connect SoCal* also recognizes the opportunities and challenges that come with goods movement and includes a focus on its rapidly changing nature. As with the 2016-2040 RTP/SCS, *Connect SoCal* includes a Transportation System Goods Movement Technical Report. (SCAG, 2020)

County of Riverside Congestion Management Program

Riverside County Transportation Commission (RCTC) is designated as the Congestion Management Agency (CMA) to oversee the Congestion Management Program (CMP). RCTC approved a modification of the CMP Land Use Coordination Element that included the elimination of the Traffic Impact Assessment report process and replaced it with an Enhanced Traffic Monitoring System. Prior to this modification of the CMP, a Traffic Impact Assessment had to be prepared consistent with the CMP/Local Agency Guidelines whenever a proposed development generated greater than 200 peak hour trips. However, as of July 1, 1997, assessing these impacts consistent with the CMP guidelines is no longer required by RCTC. Therefore, although the Perris Environmental Checklist includes a reference to CMA LOS, for the purposes of this analysis, the Perris GP 2030 will be used as the guiding document for acceptable LOS against which impacts are measured.

Western Riverside County Transportation Uniform Mitigation Fee

In 2002, the jurisdictions of western Riverside County, including the City agreed to participate in the Western Riverside County Transportation Uniform Mitigation Fee (TUMF) program. TUMF is a multijurisdictional impact fee program administered by the Western Riverside Council of Governments (WRCOG) that funds transportation improvements on a regional and sub-regional basis associated with new growth. All new development in each of the participating jurisdictions is subject to TUMF, based on the proposed intensity and type of development. State law requires the preparation of a "Nexus Study" to establish the relationship between new growth and transportation improvements needed to mitigate traffic impacts. The most recent Nexus Study, the *TUMF Nexus Study – 2016 Update* (TUMF Nexus 2016) was completed in 2016 and adopted by the WRCOG Executive Committee on July 10, 2017 (TUMF Nexus 2016, p.3).

The WRCOG is responsible for establishing and updating the TUMF rates. WRCOG receives all fees generated from the TUMF as collected by the local jurisdictions. WRCOG invests, accounts for, and expends the fee in accordance with the TUMF ordinance, the administrative plan and applicable state laws. The TUMF is structured to allocate its funds as follows (TUMF Admin 2017, p. 5):

- Allocation to Regional Transit Improvements Of the TUMF funds received by WRCOG, 1.64 percent shall be allocated to the RTA for making regional transit improvements.
- Allocation to Regionally Significant Transportation Improvements Of the TUMF funds received by WRCOG, 46.39 percent shall be allocated to the RCTC for programming improvements to the arterials of regional significance on the Regional System of Highways and Arterials.

Duke Warehouse at Patterson Avenue and Nance Street DEIR

- Allocation to Zones Of the TUMF funds received by WRCOG, 46.39% shall be allocated to the five Zones for programming improvements to the Regional System of Highways and Arterials as determined by the respective Zone Committees. The amount of TUMF funds allocated to each Zone shall be proportionate to the amount of TUMF revenue generated from the zone.
- Allocation to Mitigate TUMF Construction Projects Of the TUMF funds received by WRCOG, 1.59 percent shall be allocated to the RCA to purchase habitat for the MSHCP, to mitigate the impacts of TUMF construction projects.

The Regional System of Highways and Arterials (RSHA) is the system of roadways that serve intercommunity trips within western Riverside County and therefore are eligible for improvement funding with TUMF funds. The RSHA for western Riverside County was identified based on several transportation network and performance guidelines, including but not limited to (TUMF Nexus 2016, p.25):

- Facilities that serve multiple jurisdictions and/or provide connectivity between communities both within and adjoining Western Riverside County;
- Facilities with forecast traffic volumes in excess of 20,000 vehicles per day in the future horizon year;
- Facilities that accommodate regional fixed route transit services;
- Facilities that provide direct access to major commercial, industrial, institutional, recreational, or tourist activity centers, and multi-modal transportation facilities (such as airports, railway terminals, and transit centers).

Specific transportation improvement projects are identified by WRCOG's Public Works Committee, which is responsible for developing objective criteria for project selection and prioritization including, but not limited to, the following factors: traffic safety issues potentially created by growth, regional significance, availability of matching funds, mitigation of congestion created by new development, system continuity, geographic balance, project readiness, and completed projects with reimbursement agreements). Recommendations of the Public Works Committee are then submitted to WRCOG's Technical Advisory Committee, which are then submitted to WRCOG's Executive Committee. The Executive Committee is responsible for reviewing and acting on recommendations for project selection and prioritization of the Regionally Significant Arterials, 10-year Strategic Plan, and the Transportation Improvement Program.

Fees owed to TUMF by the Project proponent will be based on the current fees when the certificate of occupancy is issued.

Local Regulations

City of Perris Development Impact Fee Program

In addition to TUMF fees as described above, the City of Perris Development Impact Fee (DIF) is a "fair share" mitigation fee which applies to projects within the City. Applicable projects are required to pay into DIF which will off-set the project's contribution to area-wide traffic impacts. The City of Perris performed a comprehensive review of their DIF program and adopted an update in February 2006. Fee amounts have been determined that will finance transportation infrastructure at levels identified through the year 2030. DIF fees owed by the Project proponent will be based on the current fees when the certificate of occupancy is issued.

North Perris Road and Bridge Benefit District (NPRBBD)

The North Perris Road and Bridge Benefit District (NPRBBD) encompasses approximately 3,500 acres (five square-miles) of land in north Perris. The NPRBBD boundary is the same as that of the PVCCSP.

The purpose of the NPRBBD is to streamline the financing of specific regional road and bridge improvements determined to provide benefit to the developing properties within the boundaries of the NPRBBD. The road and bridge improvement fee for the NPRBBD is a one-time fee paid to the City prior to recordation of a final tract or parcel map or prior to the issuance of a building permit. The payment of the NPRBBD fee is not intended to relieve the Subdivider, Developer, or an Applicant for a building permit from the requirements imposed under other provisions or ordinances of the City to dedicate and improve roads as a condition of approval of a tentative map or building permit.

The selected facilities are needed to provide acceptable levels of service in conjunction with the planned development of the area. Eligible facilities are those which will provide a regional benefit and are shown on the Circulation Element of the Perris GP 2030. The NPRBBD includes Expressway, Arterial, and Secondary Arterial classifications of roadway.

Fair Share Contribution

Project mitigation may include a combination of fee payments to established programs (e.g., TUMF, NPRBBD, and/or DIF), construction of specific improvements, payment of a fair share contribution toward future improvements, or a combination of these approaches. Improvements constructed by development may be eligible for a fee credit or reimbursement through the program, where appropriate (to be determined at the City's discretion). When off-site improvements are identified with a minor share of responsibility assigned to proposed development, for improvements not funded through payment of the NPRBBD, the approving jurisdiction may elect to collect a fair share contribution or to require the development to construct improvements. Improvements included in a defined program, i.e., NPRBBD, and constructed by development may be eligible for a fee credit or reimbursement through the program where appropriate.

Perris Comprehensive General Plan 2030

The following excerpted goals, policies and measures from the Perris Comprehensive General Plan 2030 (Perris GP 2030) - Circulation Element, Land Use Element, Safety Element, Environmental Justice Element, and Conservation Element pertain to transportation and are applicable to the proposed Project.

Circulation Element

Goal I	A comprehensive transportation system that will serve projected future travel demand, minimize congestion, achieve the shortest feasible travel times and distances, and address future growth and development in the City.
Policy I.A	Design and develop the transportation system to respond to concentrations of population and employment activities, as designated by the Land Use Element and in accordance with the designated Transportation System, Exhibit 4.2 Future Roadway Network.
Measure I.A.6	Require a parking facility design that minimizes visual and physical impacts while maintaining pedestrian and motorist safety and supporting adjacent activities.

City of Perris		Section 5.13
Duke Warehouse at Pat	terson Avenue and Nance Street DEIR	Transportation
Policy I.B	Support development of a variety of transportation options for major employment and activity centers including direct access to commuter facilities, primary arterial highways, bikeways, park-and-ride facilities, pedestrian facilities.	and
Measure I.B.1	Require on-site improvements that accommodate public transit vehic (i.e., bus pullouts and transit stops and cueing lanes, bus turnarounds other improvements) at major trip attractions (i.e., community centers tourist, and employment centers).	les s and ,
Policy I.C:	Cooperate with local, regional, State and federal agencies to establish efficient multi-modal circulation system.	n an
Policy I.D	Encourage and support the development of projects that facilitate and enhance the use of alternative modes of transportation.	b
Goal II	A well planned, designed, constructed, and maintained street and highway system that facilitates the movement of vehicles and provide safe and convenient access to surrounding developments.	S
Measure II.A.I	Utilize existing infrastructure (lanes, median islands, turn lanes, availal right-of-way) and rights-of-way to the maximum extent practicable.	ble
Policy II.B	Maintain the existing transportation network while providing for future expansion and improvement based on travel demand, and the development of alternative travel modes.	
Measure II.B.I	Develop a Standard Specification for the City of Perris that includes the following:	ne
	Cross sections and classifications identified in Exhibit CE-11;	
	 Facilities that accommodate bus operations, including bus turn or and other design features; 	uts,
	• Design guidelines that define the minimum design and technical criteria for the analysis and design of roadway facilities. Such des guidelines shall identify intersection improvements consistent with lane geometrics referenced in Table CE-7.	ign n the
	• Limit access points and intersections of streets and highways bas upon the road's General Plan classification and function to reduce motorist conflict and enhance continual traffic flow. Access points must be located at a sufficient distance from the major intersection and from the access points on the adjoining parcels to allow for s efficient operation.	sed e s ons afe,
	• Roadway pavement cross-section to accommodate large trucks where extensive truck travel involving regional movement of bulk goods is anticipated	
Measure II.B.2	Allow roundabouts or other innovative design solutions when a thorou traffic impact assessment has been conducted demonstrating that su an intersection design alternative would manage traffic flow and impro- safety.	ugh ch ove

Section 5.13	City of Perris
Transportation	Duke Warehouse at Patterson Avenue and Nance Street DEIR
Measure II.B.3	Restrict on-street parking to reduce traffic congestion and improve safety in appropriate locations such as expressways and arterials, and require all new development to provide adequate off-street parking based on expected parking needs.
Goal III	To financially support a transportation system that is adequately maintained.
Policy III.A	Implement a transportation system that accommodates and is integrated with new and existing development and is consistent with financing capabilities.
Measure III.A.I	Distribute the costs of transportation system improvements for new development equitably among beneficiaries through the City's Traffic Impact Fee Program.
Measure III.A.2	Use redevelopment agreements, revenue sharing agreements, tax allocation agreements, and the CEQA process as tools to ensure that new development pays a fair share of the costs to provide local and regional improvements and to mitigate cumulative traffic impacts.
Measure III.A.4	Require developers to be primarily responsible for the improvements of the streets and highways of the commercial, industrial, and residential areas that are being developed. These may include road construction or widening, installation of turning lanes and traffic signals, and the improvement of any drainage facility or other auxiliary facility necessary for the safe and efficient movement of traffic or the protection of road facilities.
Policy IV.A:	Provide non-motorized alternatives for commuter travel as well as recreational opportunities that maximize safety and minimize potential conflicts with pedestrians and motor vehicles.
Goal V	Efficient goods movement.
Policy V.A	Provide for safe movement of goods along the street and highway system.
Measure V.A.3	Monitor commercial truck movements and operations in the City and establish new truck routes away from noise-sensitive areas, where feasible.
Measure V.A.4	Limit truck traffic in residential and commercial areas to designated truck routes; limit construction, delivery, and truck through-traffic to designated routes; and distribute maps of approved truck routes to City traffic officers.
Measure V.A.7:	Require streets abutting properties in Light Industrial and General Industrial zones to conform to standard specifications for industrial collector streets to accommodate the movement of heavy trucks.
Measure V.A.8	Provide adequate off-street loading areas for all commercial and manufacturing land uses.

City of Perris		Section 5.13
Duke Warehouse at Pat	tterson Avenue and Nance Street DEIR	Transportation
Goal VII	A transportation system that maintains a high level of environmental quality.	
Policy VII.A	Implement the Transportation System in a manner consistent with Fe State, and local environmental quality standards and regulations.	deral,
Measure VII.A.2	Require noise mitigation measures (e.g., wall treatments, landscape berms, and/or building and window enhancements) along freeways, expressways, and four-lane highways in order to protect adjacent no sensitive land uses from traffic-generated noise impacts consistent w the requirements of Title 24 of the California Codes and Regulations.	ise- <i>v</i> ith
Goal VIII	Enhanced traffic flow, reduced travel delay, reduced reliance on single occupant vehicles, and improved safety along the City and State road system.	e- dway
Measure VIII.D.I	Implement the City's Transportation Control Measure (TCM) Ordinand comply with Federal, State, regional, and local requirements.	ce to
Measure VIII.D.3	Construct traffic signals at intersections where signal warrants have a met.	been
Measure VIII.D.4	Optimize traffic operation by maintaining the spacing and operation of traffic signals, as a coordinated system.	of the
Fasing and a locati		
Goal 5.1	Neighborhoods designed to promote safe and accessible connectivit neighborhood amenities for all residents.	y to
Policy	Require developers to provide pedestrian and bike friendly infrastruct alignment with the vision set in the City's Active Transportation plane transportation in-lieu fee to fund active mobility projects.	ture in or active
Measure IX.A.1	Encourage installation of shared vehicle parking and support facilities and refurbished commercial and industrial developments, i.e., dual fu and charging systems on site, car pool parking, and bus stop shelter	s within new Iel vehicles s.
Healthy Community	Element	
Goal HC-3	Multimodal Transportation – Support efforts to create transportation beyond an auto-centric focus.	options
Policy HC 3.1	Promote job growth within Perris to reduce the substantial out-of-Percommutes that exist today.	rris job
Goal HC-6	Support efforts of local businesses and regional agencies to improve our region's environment.	the health of
Policy HC 6.1	Support regional efforts to improve air quality through energy efficien use of alternative fuels, and land use and transportation planning.	t technology,
Land Use Element		
Policy II.A	Require new development to pay its full, fair-share of the infrastructu costs.	re

Safety Element	
Policy II.A	The City shall require roadway improvements to expedite quick and safe travel by emergency responders.
Conservation Elem	lent
Goal IX	Encourage project designs that support the use of alternative transportation facilities.
Policy IX.A	Encourage land uses and new development that support alternatives to the single occupant vehicle.
Measure IX.A.1	Encourage installation of shared vehicle parking and support facilities within new and refurbished commercial and industrial developments, i.e., dual fuel vehicles and charging systems on site, car pool parking, and bus stop shelters.
Measure IX.A.2	Install bicycle paths and create secure and accessible bicycle storage for visitors and occupants within new and refurbished commercial and industrial developments.
Measure IX.A.4	Encourage building and site designs that facilitate pedestrian activity, such as locating buildings close to the street and providing direct connections to public walkways and neighboring land uses.
Measure IX.A.5	The City shall require all new public and private development to include bike and walking paths wherever feasible.

PVCCSP Standards and Guidelines and Mitigation Measures

The following excerpted guidelines from the PVCCSP Design Standards and Guidelines pertain to transportation and circulation and are applicable to the proposed Project:

- <u>3.2.2 Truck Circulation</u>: The City has adopted specific truck routes throughout the PVCCSP area to separate passenger and truck traffic and move truck traffic efficiently through the area while avoiding residential communities as much as possible. (See **Figure 5.15-2.**)
- <u>4.2.2.2 Vehicular Access and On-Site Circulation:</u>
 - Establish Truck Routes. Truck routes are required for trucks having a maximum gross weight of 5 tons. These routes (Figure 3.0-3 in the PVCC Specific Plan) should avoid conflicts with established communities and be separated from passenger vehicles where possible.
 - Minimize Vehicular Conflict. Site access should promote safety, efficiency, convenience, and minimize conflict between employee/customer vehicles and large trucks by creating separate access points when possible.
 - Access Points Easily Identifiable. Entry drives should be easily identifiable through the use of enhanced landscaping and special pavements (accent colors, textures, and patterns). Landscaped medians should be provided on major project entrances. Signage should also be used to identify customer and service entrances. Driveways used exclusively for deliveries or loading activities are excluded.
 - Shared Access. The City encourages shared driveway access whenever possible. Reciprocal ingress/egress access easements shall be provided for circulation and

Duke Warehouse at Patterson Avenue and Nance Street DEIR

parking to facilitate ease of vehicular movement between properties and to limit the number of vehicular access points to adjoining streets.

- Emergency Vehicle Access. Design of primary drive aisles must allow for emergency vehicle access. Typically, this requirement is a minimum of 20 feet. However, applicants are encouraged to check with the City's Fire Marshall.
- Visual Link to Building and Entry. A well-designed entry should offer a visual link to the building and entry through the use of business signs, paving, and landscaping.
- Primary Entry Drive/Location of Building. The primary entry drive should be oriented toward the main entrance of the building.
- Entry Median. A landscaped center median shall be provided at the primary entrance for sites requiring 100 or more parking spaces.
- Landscape Parkways/Sides of Entry. Landscaped parkways shall border both sides of all entry drives to create a sense of arrival.
- Dual Axle Entrances. Entrances used primarily or solely by dual axle vehicles shall provide a minimum 50-foot radius curb returns.
- Entry Median. A landscaped center median shall be provided at the primary entrance for sites requiring 100 or more parking spaces.
- Dual Axle Entrances. Entrances used primarily or solely by dual axle vehicles shall provide a minimum 50' radius curb returns.
- Avoid Back-up onto Public Streets. To avoid back-up onto public streets, entry drive approaches shall avoid conflict points such as parking stalls, internal drive aisles, or pedestrian crossings. Final determination of the driveway approach length shall be determined by the Planning Manager and the City Engineer after consideration of the project site design.
- Minimize Interactions. Minimize interactions between trucks, cars and pedestrians by having separate circulation. The placement of loading areas and dock facilities should minimize the interaction between trucks and visitor/customer automobiles. Access to loading and delivery areas should be separated from parking areas to the greatest extent feasible.
- Consideration of Large Truck Maneuverability. The design and location of loading facilities should take into consideration the specific dimensions required for the maneuvering of large trucks and trailers into and out of loading positions at docks or in stalls and driveways.
- 4.2.2.3 Pedestrian Access and On-Site Circulation:
 - Avoid Conflicts Between Pedestrian and Vehicular Circulation. Provide a system of pedestrian walkways that avoids conflicts with vehicle circulation through the utilization of separated pathways for direct pedestrian access from public rights-of-way and parking areas to building entries and throughout the site with internal pedestrian linkages.

City of Perris

- Primary Walkway. Primary walkways should be 5 feet wide at a minimum and conform to [Americans with Disabilities Act (ADA)]/Title 24 standards for surfacing, slope, and other requirements.
- Pedestrian Linkages to Public Realm. A minimum five-foot wide sidewalk or pathway, at or near the primary drive aisle, should be provided as a connecting pedestrian link from the public street to the building(s), as well as to systems of mass transit, and other onsite building(s).
- 4.2.2.4 Parking and Loading
 - Bicycle Racks Facilities. with 200 or more required parking spaces shall provide a bicycle parking area to accommodate no less than 5 locking bicycles. Facilities with 500 or more required parking spaces shall provide bicycle parking to accommodate no less than 15 locking bicycles. Bicycle parking shall be located near main entrances of buildings, adjacent to landscape areas.
 - Motorcycle Parking. Facilities with 200 or more required parking spaces may provide a motorcycle parking area with an overall dimension of 7 feet in length and area not less than 56 square feet. Facilities with 500 or more required parking spaces shall provide a motorcycle parking area with an overall dimension of 7 feet in length and area not less than 70 square feet. For every two motorcycle spaces, credit for one parking space shall be given.
 - ADA Compliant Parking. All parking lots and parking areas shall be ADA compliant.
- <u>4.2.2.5 Screening</u>
 - Screen Loading Docks. When possible, loading areas should be located on the side or rear of a site and shall be screened from public view.
 - Screening of Outdoor Storage Areas, Work Areas, Etc. The screening of outdoor storage areas, outdoor work areas (where permitted), and mechanical equipment with walls that utilize the same building materials and architectural design of the buildings is required. Soften screen walls with earth berms and dense landscaping. The intent is to keep walls as low and unobtrusive as possible while performing their screening and security functions.
- 5.2.2 Truck Route Standards and Guidelines
 - Large Turning Radius. A 35-foot turning radius shall be provided at intersections along truck route. A minimum 40-foot turning radius shall be required for driveways with 50feet being the preferred driveway turning radius.
 - Concrete Intersections and Approaches. All major intersections and approaches shall be paved with concrete for a minimum distance of 150 feet on either side of the centerline.
 - Screening of Outdoor Storage Areas, Work Areas, Etc. The screening of outdoor storage areas, outdoor work areas (where permitted), and mechanical equipment with walls that utilize the same building materials and architectural design of the buildings is required. Soften screen walls with earth berms and dense landscaping. The intent is to keep walls as low and unobtrusive as possible while performing their screening and security functions.

Duke Warehouse at Patterson Avenue and Nance Street DEIR

- 8.2.1.2 Industrial Site Vehicular/Truck Access and On-Site Circulation:
 - Driveway: Provide for 50-foot turning radii and separate from passenger traffic to the greatest extent possible.
 - Interior Drive Aisles for Trucks: Minimum of 40-feet wide
- 8.2.1.3 Parking and Loading:
 - Parking: Follow City of Perris Ordinance, Chapter 19.69
 - Truck Courts: Automobile Parking is restricted in truck courts
- <u>8.2.1.5 Screening Truck Courts:</u>
 - Industrial operations and truck courts shall be screened from public view and adjacent residential uses.

The following mitigation measures from the PVCCSP EIR are applicable to transportation. Applicable mitigation measures incorporated into the proposed Project are identified below and are assumed in the analysis presented in this section.¹

- **MM Trans 1** Future implementing development projects shall construct on-site roadway improvements pursuant to the general alignments and right-of-way sections set forth in the PVCC Circulation Plan, except where said improvements have previously been constructed.
- **MM Trans 2** Sight distance at the project entrance roadway of each implementing development project shall be reviewed with respect to standard City of Perris sight distance standards at the time of preparation of final grading, landscape and street improvement plans.
- MM Trans 3 Each implementing development project shall participate in the phased construction of off-site traffic signals through payment of that project's fair share of traffic signal mitigation fees and the cost of other off-site improvements through payment of fair share mitigation fees which include TUMF (Transportation Uniform Mitigation Fee), DIF (Development Impact Fee) and the NPRBBD (North Perris Road and Bridge Benefit District). The fees shall be collected and utilized as needed by the City of Perris to construct the improvements necessary to maintain the required LOS and build or improve roads to their build-out level.
- **MM Trans 4** Prior to the approval of individual implementing development projects, the Riverside Transit Agency (RTA) shall be contacted to determine if the RTA has plans for the future provision of bus routing in the project area that would require bus stops at the project access points. If the RTA has future plans for the establishment of a bus route that would serve the project area, road improvements adjacent to the project site shall be designed to accommodate future bus turnouts at locations established through consultation with the RTA. RTA shall be responsible for the construction and maintenance of the bus stop facilities. The area set aside for bus turnouts shall conform

¹ **PVCCSP MM Trans 6** is not applicable to the Project, as the Project site is not located adjacent to a Metropolitan Water District Trail.

to RTA design standards, including the design of the contact between sidewalk and curb and gutter at bus stops and the use of ADA-compliant paths to the major building entrances in the project.

- **MM Trans 5** Bike racks shall be installed in all parking lots in compliance with City of Perris standards.
- **MM Trans 7** Implementing project-level traffic impact studies shall be required for all subsequent implementing development proposals within the boundaries of the PVCC as approved by the City of Perris Engineering Department. These subsequent traffic studies shall identify specific project impacts and needed roadway improvements to be constructed in conjunction with each implementing development project. All intersection spacing for individual tracts or maps shall conform to the minimum City intersection spacing standards. All turn pocket lengths shall conform at least to the minimum City turn pocket length standards. If any of the proposed improvements are found to be infeasible, the implementing development project applicant would be required to provide alternative feasible improvements to achieve levels of service satisfactory to the City.
- **MM Trans 8** Proposed mitigation measures resulting from project-level traffic impact studies shall be coordinated with the NPRBBD to ensure that they are in conformance with the ultimate improvements planned by the NPRBBD. The applicant shall be eligible to receive proportional credits against the NPRBBD for construction of project-level mitigation that is included in the NPRBBD.

5.13.3 Design Considerations

Design considerations refer to ways in which the proposed Project will reduce potential impacts to transportation. The PVCCSP includes Standards and Guidelines relevant to the analysis of transportation impacts summarized below which are incorporated as part of the proposed Project.

The proposed Project includes the following proposed street improvements:

- Construct curb, sidewalk, parkway, and driveway improvements on Patterson Avenue and Nevada Avenue to their ultimate half-width adjacent to the Project site.
- Signing/striping to be implemented along with detailed construction plans for the Project site. Specifically, signage and striping for the existing Class II bicycle lane will be maintained along the Project's frontage of Patterson Avenue. Nevada Avenue along the Project site's frontage will be improved with curb, gutter, parkway, streetlights and sidewalk and paved with 38-feet of asphalt. North of the Project site's frontage, 30-foot-wide roadway paving shall be continued to Harley Knox Boulevard.
- Sight distance at the project driveways will be reviewed with respect to City standards at the time of preparation of final grading, landscape, site development, and street improvement plans.
- Depending on the condition of the existing paved roadway at the time of construction, the Project developer may be required to repave along the frontage, up to the road centerline plus one travel lane on the southbound side.

The proposed Project includes the following pedestrian circulation:

Duke Warehouse at Patterson Avenue and Nance Street DEIR

- ADA path of travel is provided between passenger vehicle parking areas and the office areas.
- Raised planter islands are proposed at the automobile parking lot entrances along Patterson Avenue and a five (5)-foot wide landscaped curb is proposed between the automobile parking area and the truck drive aisle along the north side of the building to provide separation of the cars and trucks.

As indicated on **Figure 3-9 – Development Plan Review 21-00005**, the Project site will have access to Patterson Avenue to the west and Nevada Avenue to the east. Access to the Project site will be provided via five Project driveways, one off Nevada Avenue and four off of Patterson Avenue. as follows (TIA, pp. 3, 15-16):

- Patterson Avenue (NS) / Driveway 1 (EW): Driveway 1 is left in, right in/ right out only access driveway located on the north-west end of the Project site along Patterson Avenue as shown on **Figure 3-9**. This driveway will be designated as a truck only access entry/exit.
- Patterson Avenue (NS) / California Avenue (EW): Driveway 2 is a full access driveway located on the west end of the Project site along Patterson Avenue as shown on **Figure 3-9** This driveway will be designated as a passenger car only access entry/exit.
- Patterson Avenue (NS) / Nance Street (EW): Driveway 3 is a full access driveway located on the west end of the Project site along Patterson Avenue as shown on **Figure 3-9**. This driveway will be designated as a truck only access entry/exit.
- Patterson Avenue (NS) / Driveway 4 (EW): Driveway 4 is a full access driveway located on the south-west end of the Project site along Patterson Avenue as shown in **Figure 3-9** This driveway will be designated as a passenger car only access entry/exit.
- Nevada Avenue (NS) / Nance Street (EW): Driveway 5 is a full access driveway located on the south-east end of the Project site at the intersection of Nance Street and Nevada Avenue as shown in **Figure 3-9.** This driveway will be designated as a truck emergency/secondary access entry/exit.

Trucks serving the proposed Project would be required to use Harley Knox Boulevard and Patterson Avenue to travel to and from the Project site. Signage shall be posted on-site directing truck drivers to use existing City truck routes on Harley Knox Boulevard. The information on the signage will be coordinated with City Planning and the City's Traffic Engineer during the plan check process.

An Specific Plan Amendment to the PVCCSP Circulation Plan is also being proposed to delete Nance Street and California Avenue from Patterson Avenue to Nevada Avenue within the proposed Project site. (TIA, p. 3).

Pursuant to PVCCSP EIR mitigation measure **MM Trans 4**, above, RTA was contacted to determine if future provision of bus routing in the Project area would require bus stops at the Project access points.² RTA staff indicated no bus stops are required along the Project site's frontage. Pursuant to PVCCSP EIR mitigation measure **MM Trans 7**, a project-level traffic report was prepared for the proposed Project.

² Email communication with RTA staff on February 1, 2022. RTA indicated that no bus stop is required at the Project site.

PVCCSP EIR mitigation measures **MM Trans 1**, **MM Trans 2**, **MM Trans 3**, and **MM Trans 5** from the PVCCSP EIR will be implemented by the Project through conditions of Project approval.

Trip Generation and Distribution

Trip Generation

Trip generation represents the amount of traffic traveling to and from the proposed Project site. Determining the traffic generation of a project is based on forecasting the amount of traffic that is expected to be generated by a specific land use. The trip generation rates for the proposed High-Cube Warehouse were calculated based on the weighted average trip generation rates provided in the *Trip Generation Manual* (11th Edition) by the Institute of Transportation Engineers (ITE). The anticipated project trip generation was determined using trip generation rates given by ITE Land Use Code #154 (High-Cube Transload and Short-Term Warehouse). (TIA, p. 8).

From specialized trip generation studies by ITE and the South Coast Air Quality Management District (SCAQMD), average truck fleet mix percentages are applied to the trip generation rates to determine the number of 2-, 3-, and 4+-axle trucks expected to access the project. Truck trips are then weighted by passenger-car equivalent (PCE) factors developed by the San Bernardino County Transportation Authority (SBCTA). (TIA, p. 8.) The traffic generation figures used in this study are based upon the development of 769,668 total square feet gross floor area for a ITE trip generation of "high cube warehouse" land use. **Table 5.13-A – Trip Generation Rates**^a below, displays the peak hour and daily trip generation factors for the proposed Project for the AM and PM peak hours.

	PCE	Estimated	L Inita ³	Doiby	AM Peak Hour			PM Peak Hour		
Vehicle Type	Factor ¹	Mix ²	Units	Dally	In	Out	Total	In	Out	Total
Trip Generation Rates (classification, non-PCE) ⁴										
Passenger Cars	-	-		1.18	0.052	0.008	0.06	0.023	0.067	0.09
2-axle Trucks	-	16.7%		0.037	0.0016	0.0017	0.003	0.0008	0.0009	0.002
3-axle Trucks	-	20.7%	KSF	0.046	0.0020	0.0021	0.004	0.0010	0.0011	0.002
4-axle Trucks	-	62.5%		0.138	0.0061	0.0064	0.013	0.0029	0.0033	0.006
Total		100%		1.40	0.062	0.018	0.08	0.028	0.072	0.10
Calculated Trip Ge	eneration	Rates (PCE)								
Passenger Cars⁵	1	-		1.18	0.052	0.008	0.06	0.023	0.067	0.09
2-axle Trucks	1.5	16.7%		0.055	0.0025	0.0026	0.005	0.0012	0.0013	0.003
3-axle Trucks	2	20.7%	KSF	0.091	0.0041	0.0042	0.008	0.0019	0.0022	0.004
4-axle Trucks	3	62.5%		0.41	0.0184	0.0191	0.038	0.0088	0.0099	0.019
Total		100%		1.740	0.077	0.034	0.110	0.035	0.080	0.120

Table 5.13-A – Trip Generation Rates

Notes: Source: TIA (Appendix K.2), Table 3 – Trip Generation Rates

1 PCE factors per San Bernardino County Transportation Authority

2 Truck mix per High-Cube Warehouse Vehicle Trip Generation Analysis, ITE (2017); Warehouse Truck Trip Study, SCAQMD (2014)

3 KSF = 1,000 square feet gross floor area

4 ITE Trip Generation Manual 11th Ed, 2021 - Land Use 154, High-Cube Transload and Short-Term Warehouse

5 Passenger car rates per ITE vehicle trip generation rates less ITE truck trip generation rates.

The TIA assumed the Project will be developed in a single phase and operational in 2024. Implementation of the proposed Project will result in the construction of a high-cube warehouse building totaling 769,668 square feet gross floor area. Using the Project-specific trip generation rates identified in **Table 5.13-A**, the proposed Project is projected to generate approximately 1,338 daily PCE trip-ends, including 88 PCE trip-ends during the AM peak hour and 92 PCE trip-ends during the PM peak hour. (TIA, p. 9.) **Table 5.13-B– Project Trip Generation** below, summarizes the proposed Project's PCE trip-ends by vehicle type.

	PCE			AM Peak Hour			PM Peak Hour		
Vehicle Type	Factor ¹	Units	Daily	In	Out	Total	In	Out	Total
Proposed Project	Trip Gen	eration (Cla	assificatio	on, non	PCE)				
Passenger Cars	-		908	40	6	46	18	51	69
2-axle Trucks	-		28	1	1	2	1	1	2
3-axle Trucks	-	770 KSF	35	2	2	4	1	1	2
4-axle Trucks	-		106	5	5	10	2	3	5
Total			1,077	48	14	62	22	56	78
Passenger Car Ed	quivalent	(PCE) Proje	ect Trip G	eneratio	on	•			
Passenger Cars	1		908	40	6	46	18	51	69
2-axle Trucks	1.5		42	2	2	4	2	2	4
3-axle Trucks	2	770 KSF	70	4	4	8	2	2	4
4-axle Trucks	3		318	15	15	30	6	9	15
Total			1,338	61	27	88	28	64	92

Table 5.13-B- Project Trip Generation

Notes: Source: TIA (Appendix K.2), Table 4 – Trip Generation Rates.

1 PCE factors per San Bernardino County Transportation Authority

2 KSF = 1,000 square feet gross floor area

Trip Distribution

Trip distribution represents the directional orientation of traffic to and from the Project site. Trip distribution is influenced by the geographical location of the Project site in relation to the surrounding roadway network, type of land use in the study area- such as shopping centers and recreational sites- and proximity to the regional freeway system. (TIA, p. 8.)

The trip directional orientation of traffic for the proposed Project was determined based upon the existing roadway system, existing traffic patterns, and existing and future land uses. The directional distribution for the proposed Project traffic for passenger cars and trucks assumed in this study is shown on Figure 5.13-5 Project Passenger Car Traffic Distribution and Figure 5.13-6 Project Truck Traffic Distribution.



Source: WEBB GIS, 2022

100 200 300 0

ALBERT Α. ASSOCIATES

Duke Warehouse at Patterson Avenue and Nance Street







5.13.4 Thresholds of Significance

The City of Perris has not established local CEQA significance thresholds and instead, defers to the thresholds of significance identified in State CEQA Guidelines Appendix G. Impacts related to this Project may be considered potentially significant if the Project would:

- Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate emergency access.

5.13.5 Environmental Impacts Before Mitigation

Threshold A: Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Connect SoCal

SCAG's 2020 2020 – 2045 RTP/SCS or *Connect SoCal* seek to improve mobility, promote sustainability, facilitate economic development and preserve the quality of life for the residents in the region. Table 5.10-1, SCAG Policy Consistency Analysis, discussed in Section 5.10, Land Use and Planning, of this DEIR, addresses the Project's consistency with *Connect SoCal*. As demonstrated through this analysis, implementation of the Project would be consistent with the goals and policies of SCAG's regional planning program, including the goals related to vehicular and non-vehicular circulation, and goods movement.

Riverside County CMP

The CMP is a component of the RCTC's Long Range Transportation Study (LRTS), the first countywide long range transportation study that identifies and evaluates highway, major roadway and transit projects. There are several roadway improvement projects identified in the LRTS that proposes to reduce traffic congestion within the City. The Harley Knox Boulevard / I-215 interchange project (Project No. 91) proposes to reconstruct and widen Harley Knox Boulevard from 2 to 4 lanes between Harvill Avenue to Western Way and support volumes of 87,800 ADT; it will result in both safety and operational benefits. (LRTS; Appendix A.) This roadway improvement is near the vicinity of the Project site and Project cars and trucks will travel along a portion of this improvement. Considering the Project is consistent with the PVCCSP land use designation and would utilize the designated truck route of Harley Knox Boulevard to access the freeway, the Project would not conflict with the RCTC's CMP.

City of Perris

Perris Comprehensive General Plan

As presented in Section 5.10, Land Use and Planning, of this DEIR, the Project does not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project adopted for the purpose of avoiding or mitigating an environmental effect, including policies outlined in Perris GP 2030. **Table 5.10-A** states the consistency analysis for Perris GP 2030 goals and policies that address the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Duke Warehouse at Patterson Avenue and Nance Street DEIR

Perris Valley Commerce Center Specific Plan (PVCCSP)

As identified previously, the PVCCSP includes various Standards and Guidelines for the provision of onsite and off-roadway improvements, vehicular and non-vehicular circulation, and site access. As discussed through the analysis presented in this section, the Project would be developed in accordance with the PVCCSP Standard and Guidelines.

In compliance with PVCCSP EIR mitigation measure **MM Trans 7**, a *Traffic Impact Analysis* dated January 5, 2022 was prepared for the Project by Albert A. Webb Associates (TIA) to evaluate the proposed Project's impacts on traffic. Additionally, the proposed Project will participate in the phased construction of offsite traffic signals through payment of the Project's fair share of traffic signal mitigation fees which include TUMF, DIF, and NPRBBD as outlined in mitigation measure PVCCSP EIR mitigation measures **MM Trans 3** and **MM Trans 8**. The fees shall be collected and utilized as needed by the City to construct the improvements necessary to maintain the circulation system.

Pursuant to PVCCSP EIR mitigation measure **MM Trans 4**, RTA was contacted to determine if future provision of bus routing in the Project area would require bus stops at the Project access points. In an email dated February 1, 2022, the RTA indicated that no bus stop is required at the Project site. The PVCCSP also includes pedestrian paths and sidewalks into roadway design, and bike trails into its *Standards and Design Guidelines* to accommodate non-motorized forms of transportation along roadways within the Specific Plan area and to encourage bus stops to be provided at large commercial and employment centers along existing and future bus routes. Bike racks are included in the Project design in compliance with PVCCSP EIR mitigation measure **MM Trans 5**. Compliance with these policies and implementation of PVCCSP EIR mitigation measures **MM Trans 4** and **MM Trans 5** will ensure that the Project will not conflict with the City's adopted policies, plans, or programs supporting alternative modes of transportation.

In summary, the Project would not conflict with regional or local programs, plans, ordinances, or policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities through Project design and implementation of PVCCSP EIR mitigation measures **MM Trans 3, MM Trans 4, MM Trans 5, MM Trans 7**, and **MM Trans 8**. This impact is **less than significant with mitigation**, and no new Project specific mitigation is required.

Threshold B: Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?

As previously discussed, SB 743, approved in 2013, changes the way transportation impacts are determined according to CEQA. Updates to the State CEQA Guidelines approved in December 2018 included the addition of State CEQA Guidelines Section 15064.3, of which Subdivision (a), states, "For the purposes of this section, 'vehicle miles traveled' refers to the amount and distance of automobile travel attributable to a project." Here, the term "automobile" refers to on-road passenger vehicles, specifically cars and light trucks (i.e., no heavy-duty trucks). Subdivision (b) establishes criteria for evaluating a project's transportation impacts based on project type and using automobile VMT as the metric. State CEQA Guidelines Section 15064.3 provides that transportation impacts of projects are, in general, best measured by evaluating the project's VMT. Automobile delay (often called Level of Service or LOS) will no longer be considered to be an environmental impact under CEQA. Automobile delay can, however, still be used by agencies to determine local operational impacts.

Transportation

The City of Perris adopted its *Transportation Impact Analysis Guidelines for CEQA* (TIA Guidelines) in June 2020. All discretionary land use projects subject to CEQA must evaluate transportation impacts related to automobile VMT as part of the environmental review process. The first step in evaluating a land use project's VMT impact is to perform an initial screening assessment utilizing the City of Perris VMT Scoping Form for Land Use Projects (hereinafter referred to as VMT Scoping Form). The VMT Scoping Form provides an easy to use tool for streamlining the VMT analysis process. Screening criteria can be used to determine whether a project would be expected to cause a less than significant impact without having to conduct a detailed study. According to the VMT Scoping Form, a project is presumed to have a less than significant impact on VMT if the project satisfies at least one of the following VMT screening criteria:

- A. Is the project 100% affordable housing?
- B. Is the project within one-half mile of qualifying transit
- C. Is the project a local serving land use?
- D. Is the project in a low VMT area?
- E. Are the project's net daily trips less than 500 average daily trips (ADTs)? (TIA Guidelines, pp. 2-6.)

Projects that locate in areas with low VMT, and that incorporate similar features (i.e., land use type, access to the circulation network, etc.), will tend to exhibit similarly low VMT. If a project is located in a Traffic Analysis Zone (TAZ) with VMT per capita or VMT per employee that is less than or equal to the citywide average, then the project is considered to be located in a low VMT area and can be presumed to have a less than significant impact on VMT. (TIA Guidelines, p. 4)

For projects that do not meet the screening criteria above, VMT analysis is prepared. The VMT modeling analysis should include the following scenarios to determine the project-generated VMT per service population:

- Base year conditions
- Base year plus project conditions
- Horizon year without project conditions
- Horizon year with project conditions (TIA Guidelines, p. 9)

The model output should include VMT per service population (population plus employment). Projectgenerated VMT shall be extracted from the travel demand forecasting model using the Origin Destination (O/D) trip matrix and shall multiply that matrix by the final assignment skims. (TIA Guidelines, p. 9) For projects that require RIVTAM/RIVCOM VMT modeling, a project would result in a significant projectgenerated VMT impact if either of the following conditions are satisfied:

- The base model year Project-generated VMT per service population exceeds the City of Perris baseline VMT per service population, or
- The future model year Project-generated VMT per service population exceeds the City of Perris base year VMT per service population. (TIA Guidelines, p. 10)

The Project does not meet any of the above listed screening criteria. As required by the City's TIA Guidelines, a VMT Analysis was prepared for the Project and is included in Appendix K.1 of this EIR. The analysis compared the Project-generated VMT per service population to the Citywide VMT per service population under baseline (2018) and future year (2045) conditions. The analysis methodology for the Project was developed consistent with the City VMT guidelines using RIVCOM v3.0 model. Although not required, the analysis included both automobile and truck VMT. The plus Project conditions VMT was derived by adding the Project land use to a separate TAZ and a full base year and year 2045 model run were performed to isolate the VMT for the Project. The Project-generated VMT was extracted from the model using the origin-destination (O/D) trip matrix. (VMT Analysis, p. 2.)

The results of the VMT analyses are summarized in Table 5.13–C, Project-Generated VMT, below.

	Baseline	e (2018)	Future Year (2045)		
	City Project		City	Project	
VMT	2,931,236	15,412	5,228,215	14,857	
Service Population	90,351	512	165,234	512	
VMT/SP	32.44	30.10	31.64	29.02	

Table 5.13-C – Project-Generated VMT

Source: Table Appendix K.1, Table A

As shown in **Table 5.13-C**, the baseline Project VMT per service population is 30.1 miles. Based on the City thresholds, a project would have a significant VMT impact if the baseline Project-generated VMT per service population exceeds the Citywide VMT per service population of 32.4 miles. Based on the baseline threshold, the Project VMT per service population is less than the threshold.

Table 5.13-C also shows that year 2045 Project VMT per service population is 29.0 miles. Based on the City thresholds, a project would have a significant VMT impact if the year 2045 Project-generated VMT per service population exceeds the Citywide VMT per service population of 31.6 miles. Based on the year 2045 threshold, the 2045 Project VMT per service population is less than the threshold.

The VMT Analysis demonstrates that the Project's VMT is less than the Citywide VMT in both the baseline and future year conditions. Therefore, impacts with regard to being in conflict with or inconsistent with CEQA Guidelines Section 15064.3(b) would be **less than significant**, and no mitigation is required.

Threshold C: Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?

The proposed warehouse/distribution facility is consistent with the onsite and surrounding land use and zoning designations, and as such implementation of the Project will not introduce incompatible uses to the Project area.

Regional access to the Project area is provided via I-215 approximately 0.60 miles to the northwest of the Project site. Local access is provided via Patterson Avenue and Nevada Avenue. The Project site will be accessed through five driveways: three full-access driveways and one right in/right out only access driveway off of Patterson Avenue, and one full-access driveways off Nevada Avenue that will be designated as a truck emergency/secondary access only. The Project will be reviewed by City staff to ensure that adequate turn radii and sight distance, pursuant to PVCCSP EIR mitigation measure **MM**

Trans 2, are provided at each driveway location. All Project-related truck trips will be restricted to using existing City truck routes (Harley Knox Boulevard). Offsite improvements, as described in Section 3.3.5, On- and Off-Site Infrastructure, will be designed pursuant to PVCCSP EIR mitigation measure **MM Trans 1**.

As part of the Project, a Specific Plan Amendment is proposed for the PVCCSP Circulation Plan to delete Nance Street and California Avenue from Patterson Avenue to Nevada Avenue within the proposed Project site. The proposed Tentative Parcel Map will also vacate the existing Nance Street right-of-way. This driveway will be designated as a truck emergency/secondary access entry/exit. This proposed street vacations would not cause a hazard.

The proposed Project is required to comply with the City's development review process including review for compliance with all applicable fire code requirements for construction and access to the site. Construction activities that may temporarily restrict vehicular traffic flow would be required to implement adequate measures to facilitate the passage of vehicles through/around any required lane or road closures (refer to PVCCSP EIR mitigation measure **MM Air 2** in Section 5.2, Air Quality, which requires that a traffic control plan be provided to the City). The Project access does not include new travel lanes and has been designed in conformance with the City's engineering and fire department standards.

In summary, the Project would not substantially increase hazards through Project design, compliance with City's polices, and implementation of PVCCSP EIR mitigation measures **MM Trans 1** and **MM Trans 2**. This impact is **less than significant with mitigation**, and no new Project-specific mitigation is required.

Threshold D: Would the Project result in inadequate emergency access?

As discussed above under Threshold C, construction activities that may temporarily restrict vehicular traffic flow would be required to implement adequate measures to facilitate the passage of vehicles through/around any required lane or road closures (refer to PVCCSP EIR mitigation measure MM Air 2 in Section 5.2, Air Quality, which requires that a traffic control plan be provided to the City). Site-specific activities such as temporary construction activities are finalized on a project-by-project basis by the City and are required to ensure adequate emergency access. The Project site has been designed to comply with all applicable fire codes requirements for construction and access to the site and has been reviewed by Riverside County Fire Department to determine the specific fire requirements applicable to the Project and has been designed in compliance with these requirements. The Project driveways have been designed to accommodate large trucks with trailers that would be used for the distribution of goods to and from the site. As discussed above, adequate turn radii and sight distance would be provided. Thus, the Project would provide ample vehicular access for emergency vehicles to and from the site. Therefore, impacts are less than significant and no mitigation is required.

5.13.6 Recommended Mitigation Measures

An Environmental Impact Report is required to describe feasible mitigation measures which could minimize significant adverse impacts (State CEQA Guidelines Section 15126.4). Mitigation measures were evaluated for their ability to reduce or eliminate impacts. As discussed above, the implementation of the proposed Project will be consistent with programs, plans, ordinances or polices addressing a circulation system, will not conflict with State CEQA Guidelines Section 15064.3, will not increase hazards due to geometric design or incompatible uses, and will provide adequate emergency access; therefore, Project-specific mitigation is not required. However, the proposed Project developer will implement the feasible and applicable PVCCSP EIR mitigation measures discussed in Section 5.13.2,

which include PVCCSP EIR mitigation measures **MM Trans 1**, **Trans 2**, **MM Trans 3**, **MM Trans 4**, **MM Trans 5**, **MM Trans 7**, and **MM Trans 8**.

5.13.7 Summary of Environmental Effects After Mitigation Measures Are Implemented

PVCCSP EIR mitigation measure **MM Trans 1** will ensure that Project truck traffic is limited to Harley Knox Boulevard to remain consistent with the Perris GP 2030 - Circulation Element and PVCCSP Circulation Plan. PVCCSP EIR mitigation measure **MM Trans 2** will ensure that trucks and passenger vehicles traveling to and from the Project site have adequate sight distance and safe operational movement at each driveway entering roadway would occur.

The proposed Project Applicant (or subsequent developer) will also be subject to its fair share of traffic signal mitigation fees and the cost of other off-site improvements through payment of fair share mitigation fees which include TUMF, DIF, and NPRBBD fees as outlined in PVCCSP EIR mitigation measures **MM Trans 3** and **MM Trans 8**. These fees will be used to construct the improvements necessary to maintain the circulation system.

In compliance with PVCCSP EIR mitigation measures **MM Trans 4** and **MM Trans 7**, RTA has been contacted and a Project-specific TIA was prepared.

PVCCSP EIR mitigation measure **MM Trans 5** will ensure that the Project site installs the required bike racks in accordance with City's standards.

Therefore, with implementation of the PVCCSP EIR mitigation measures **MM Trans 1, MM Trans 2, MM Trans 3, MM Trans 5,** and **MM Trans 8**, impacts to transportation will be **less than significant**.

5.14 Tribal Cultural Resources

This section identifies the potential for the Project area and site-adjacent off-site improvement areas (collectively referred to herein as the "Project area") to contain tribal cultural resources and evaluates the Project's potential to cause a substantial adverse change in the significance of tribal cultural resources.

No comments related to tribal cultural resources were received in response to the Notice of Preparation (NOP) and the Scoping meeting held on February 2, 2022.

The following references were used in the preparation of this section of the DEIR:

- Applied Earthworks, *Phase 1 Cultural Resources Assessment Duke Warehouse at Patterson Avenue and Nance Street, City of Perris, Riverside County, California*, July 2022. (Included as Appendix D.1 to this DEIR) [Cited as AE]
- Brian F. Smith and Associates, Phase I Cultural Resources Assessment for the Perris Valley Channel Lateral B Extension Project, City of Perris, Riverside County, California, June 22, 2022. (Included as Appendix D.2 to this DEIR) [Cited as BFSA]
- City of Perris, Perris Comprehensive General Plan 2030- Conservation Element, adopted July 12, 2005; Sustainable Community Amendment, adopted February 18, 2008. (Available at https://www.cityofperris.org/home/showpublisheddocument/449/637203139693370000, accessed April 20, 2022.) [Cited as Perris GP 2030]
- City of Perris, *Perris Valley Commerce Center Specific Plan Amendment No. 12,* Adopted January 10, 2012, and subsequently amended and approved January 11, 2022. (Available at https://www.cityofperris.org/home/showpublisheddocument/2647/637799977032200000, accessed April 20, 2022.) [Cited as PVCCSP]
- City of Perris, Perris Valley Commerce Center Specific Plan Final Environmental Impact Report, State Clearing house # 2009081086 November 2011, certified January 10, 2012. (Available at City of Perris and at <u>https://www.cityofperris.org/home/showpublisheddocument/13874/637455522381730000</u>, accessed April 20, 2022.) [Cited as PVCCSP EIR]

5.14.1 Setting

Section 4.4, Cultural Resources, of the PVCCSP EIR, includes a detailed discussion of the environmental setting for cultural resources, including geologic setting, ethnohistoric setting, archaeological setting, and historic setting. This information remains applicable to the Project. Section 5.4, Cultural Resources, of this DEIR summarizes Project-specific existing setting information presented in the technical reports prepared for this Project based on the research and field surveys conducted. Following is a summary of information provided in the Project-specific technical reports relevant to tribal cultural resources.

Prehistoric Period

Native American occupation of the region can be divided into six periods: Early Archaic (9500–7000 B.P.); Middle Archaic (7000–4000 B.P.); Late Archaic (4000–1500 B.P.); Saratoga Springs (1500–750 B.P.); Late Prehistoric (750–400 B.P.); and Protohistoric (circa 400 to 150 B.P.), which ended in the ethnographic period. (AE, p. 8.)

During the Early Archaic Period (9500–7000 B.P.), small, highly mobile groups traveled widely, utilizing highly portable tool kits to procure and process critical resources, with brief and anticipated intervals of seasonal sedentism near predictable water locations. Due to isolated locations where the conditions for occupation were met, Early Archaic sites are rare compared to later periods of prehistory. In the Middle Archaic Period (7000–4000 B.P.), sites are associated with the margins of pluvial lakes and now-extinct springs. Artifacts include leaf-shaped bifacial knives, atlatl dart points, split cobble choppers and scrapers, scraper-planes, and small milling slabs and manos. Most sites from this interval are small surface deposits of lithic artifacts, suggesting temporary and perhaps seasonal occupation by small groups of people. The Late Archaic Period (4000–1500 B.P.) can be characterized by large occupation sites located adjacent to permanent water sources such as perennial springs and streams. Diagnostic projectile points included large dart points likely used with atlatls. (AE, p. 8.)

Cultural trends during the Saratoga Springs Period (1500–750 B.P.) continued from the Late Archaic Period, except for the adaptation of the bow and arrow. Shoshonean language speakers also likely moved into the vicinity of the Project. Settlement shifted away from marginal desert areas. (AE, p. 8.)

The Late Prehistoric Period (750–400 B.P.) saw a subsequent population increase, definitive use of bow and arrow technology, and a general westward movement of Patayan populations. By the Protohistoric Period (circa 400–150 B.P.), sedentism intensified as did hunting with bow and arrow. Exploitation of acorns became widespread, as indicated by an abundance of mortars and pestles. Populations became more sedentary, and settlement shifted to small villages with resource catchment areas around them. Ceramic technology first appeared in the region around 350 B.P. This period ended in A.D. 1769 when Spanish settlement began in Upper California (also referred to as Alta California). (AE, p. 8.)

Ethnographic Setting

The Project area is situated within the ancestral cultural territory of the Luiseno and Cahuilla. Both of these tribes speak languages of the Cupan branch of the Northern Uto-Aztecan family, part of the larger Uto-Aztecan language-family. The Luiseño and Cahuilla were hunters, collectors, and harvesters.

The Luiseño village was organized as a clan tribelet—a group of people patrilineally related who owned an area in common and who were politically and economically autonomous from neighboring groups. The Cahuilla had nonpolitical, nonterritorial moieties that governed marriage patterns as well as patrilineal clans and lineages. In turn, the political-ritual-corporate units (clans) were composed of 3–10 lineages, distinctly different, named, and claiming a common genitor, with one lineage recognized as the founding lineage. Clans owned a large territory in which each lineage owned a village site and specific resource areas. Clan lineages cooperated in large communal subsistence activities (including animal drives, hunts, and controlled brush burning) and in performing rituals. (AE, p. 9.)

Clans owned land in valley, foothill, and mountain areas, providing them with the resources of many different ecological niches. Individual lineages or families owned specific resource areas within the clan territory. Although any given village had access to only some of the necessary resources, briskly flourishing systems of trade and exchange gave them access to neighboring and distant resources. Rules that forbade marriage to anyone related within five generations or belonging to the same moiety ensured that everyone had relatives living in many ecozones; this was an important arrangement because relatives were invited to ceremonies. The ceremonial exchange of gifts at such events provided a way for drought-stricken groups to get food in exchange for treasure goods. (AE, p. 9.)

Tribal Cultural Resources

As further discussed in Section 5.4, Cultural Resources, of this DEIR, a records search was conducted at the Eastern Information Center (EIC) located at the University of California, Riverside, which is the State of California's official cultural resource records repository for the County of Riverside. The objective of this records search was to determine whether any prehistoric or historical resources had been recorded previously within an area encompassing a 0.5-mile radius around the proposed Project site. Based on the results of the records search, a total of 35 previously recorded cultural resources were identified within the Project study area. Sixteen of the resources are historical archaeological sites. Three built environment resources were also identified within the Project study area. P-33-024092, remnant features of an irrigation system, is adjacent to, but outside, the Project area. Fifteen of the cultural resources previously identified were prehistoric bedrock milling features within proximity to the MDP Lateral-B Stage 4 extension alignment. However, none of these prehistoric features are within a quarter-mile and most cluster over one-half to three-quarters of a mile to the west and southwest. (AE, pp. 17-20, BFSA, pp. 30-32.) No tribal cultural resources were located within the Project area.

During preparation of the Cultural Resources Assessment, and as further discussed under Threshold(A)(II) below, AE contacted various Native American tribes regarding the Project and requested a records search of the Sacred Lands Files (SLFs) from the NAHC. Further, the City of Perris provided a notification of the Project to tribes that have requested such notice, as required by AB 52. The results of this Native American outreach/consultation did not reveal the presence of any tribal cultural resources within the Project area.

AE conducted pedestrian surveys of the Project site and surrounding area on February 16, 2022. BFSA conducted pedestrian surveys of the off-site MDP Lateral-B Stage 4 area on June 2, 2022. Six cultural resources were identified within the Project site and surrounding area during the AE Phase I survey, none of which were archaeological or related to tribal cultural resources. During this BFSA survey, no cultural resources were identified within the MDP Lateral-B Stage 4 extension site. No prehistoric archaeological resources were encountered within the Project area during the archaeological field surveys.

5.14.2 Related Regulations

As previously discussed in Section 5.4, Cultural Resources, of this DEIR, Section 4.4 of the PVCCSP EIR provides a complete discussion of the regulatory framework for the analysis of cultural resources, including regulations relevant to the analysis of tribal cultural resources. The PVCCSP EIR is incorporated by reference. The following discussion addresses regulatory information particularly relevant to tribal cultural resources, including regulations that became effective subsequent to preparation of the PVCCSP EIR.

State Regulations

California Environmental Quality Act

CEQA requires the lead agency to determine whether the proposed development project will have a significant effect on the environment. Public Resources Code Sections 21083.2 and 21084.1 deal with the definitions of unique and non-unique archaeological resources and historical resources respectively. Section 21083.2 directs the lead agency to determine whether the project may have a significant effect on unique archaeological resources. If the lead agency determines that the project may have a significant effect on unique archaeological resources, the environmental impact report shall address the

issue of those resources. Section 21084.1 directs the lead agency to determine whether the project may have a significant effect on historical resources, irrespective of the fact that these historical resources may not be listed or determined to be eligible for listing in the California Register of Historical Resources (CRHR), a local register of historical resources, or they are not deemed significant pursuant to criteria set forth in Public Resource Code Section 5024.1(g).

Unique Archaeological Resources Criteria

CEQA requires the lead agency to consider whether a project will have a significant effect on unique archaeological resources and to avoid unique archaeological resources when feasible or mitigate any effects to less-than-significant levels per Public Resources Code Section 21083.2. Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

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

Human Remains

According to State CEQA Guidelines Section 15064.5, all human remains are a significant resource. This section also assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are discussed within Public Resources Code Section 5097.

California Health and Safety Code (Sections 7050.5, 7051, and 7054)

California Health and Safety Code Sections 7050.5, 7051, and 7054 collectively address the illegality of interference with human burial remains (except as allowed under applicable sections of the Public Resources Code), as well as the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project, treatment of the remains prior to, during and after evaluation, and reburial procedures.

California Public Resources Code Section 5097.98

California Public Resources Code Section 509.98 addresses the disposition of Native American burials in archaeological sites and protects such remains from disturbance, vandalism, or inadvertent destruction; establishes procedures to be implemented if Native American skeletal remains are discovered during construction of a project; and establishes the Native American Heritage Commission (NAHC) to resolve disputes regarding the disposition of such remains. It has been incorporated into State CEQA Guidelines Section 15064.5(e).

California Public Resources Code Section 5097.5

California Public Resources Code Section 5097.5 protects, among other things, paleontological sites on State lands. California Code of Regulations (CCR) Sections 4306 and 4309 establish authority and processes to protect paleontological resources while allowing mitigation through the permit process. Potential impacts to paleontological resources must be assessed for any project subject to review under CEQA.

Senate Bill 18, California Tribal Consultation Guidelines

The State of California Governor's Office of Planning and Research developed these guidelines in order to provide guidance to cities and counties on the process for consulting with Native American tribes during the adoption or amendment of local general plans or specific plans (defined in Government Code Sections 65450 et seq.). Senate Bill 18 (SB 18) requires local agencies to consult with tribes prior to making certain planning decisions and to provide notice to tribes at certain key points in the planning process, thereby providing tribes an opportunity to participate in local land use decisions at an early planning stage.

Assembly Bill 52, Impacts to Tribal Cultural Resources

AB 52, which became effective on July 1, 2015, adds a new requirement to CEQA regarding tribal cultural resources. Public Resources Code Section 21084.2 now establishes that a project with an effect that may cause a substantial adverse change in the significance of a TCR is a project that may have a significant effect on the environment. To help determine whether a project may have such an effect, Public Resources Code Section 21080.3.1 requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. That consultation must take place prior to the release of a negative declaration, mitigated negative declaration, or environmental impact report for a project. As a result of AB 52, the following must take place: 1) prescribed notification and response timelines; 2) consultation on alternatives, resource identification, significance determinations, impact evaluation, and mitigation measures; and 3) documentation of all consultation efforts to support CEQA findings.

Under AB 52, if a lead agency determines that a project may cause a substantial adverse change to a TCR, the lead agency must consider measures to mitigate that impact. Public Resources Code Section 21074 provides a definition of "tribal cultural resources." In brief, in order to be considered a tribal cultural resource, or TCR, a resource must be either 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 supported by substantial evidence, to treat as a TCR. In the latter instance, the lead agency must determine that the resource meets the criteria for listing in the state register of historic resources or City Designated Cultural Resource. In applying those criteria, a lead agency shall consider the value of the resource to the tribe.

Assembly Bill 52 and Senate Bill 18 Consultation Process

In accordance with SB 18 and AB 52, the City initiated consultation with five Native American tribes and interested parties on November 10, 2021. Those five tribes were: Agua Caliente Band of Cahuilla Indians, Rincon Band of Luiseño Indians, Soboba Band of Luiseno Indians, Morongo Band of Mission Indians, and Pechanga Band of Luiseño Indians. Of the five tribes notified by the City, to date, none of the tribes responded.

Local Regulations

Perris Comprehensive General Plan 2030

The following are applicable measures from the City of Perris Comprehensive General Plan 2030 (Perris GP 2030) related to tribal cultural resources:

Conservation Element

- Measure IV.A.2 For all projects subject to CEQA, applicants will be required to submit results of an archaeological records search request through the Eastern Information Center, at the University of California, Riverside.
- Measure IV.A.3 Require Phase I Surveys for all projects located in areas that have not previously been surveyed for archaeological or historic resources, or which lie near areas where archaeological and/or historic sites have been recorded.

City of Perris Historic Points of Interest

The Perris Valley Historical Association and the Riverside County Office of Historic Preservation have identified historic sites and structures within the City of Perris. All of these structures exist in the Downtown area and are not located in the vicinity of the proposed Project site. The Santa Fe Depot was listed in 1994 on the National Register of Historic Places (NRHP) and is currently home to the Perris Valley Historical Museum. The Southern Hotel is listed in the CRHR.

PVCCSP Standards and Guidelines and Mitigation Measures

There are no Standards and Guidelines included in the PVCCSP related to tribal cultural resources. The following mitigation measures from the PVCCSP EIR are applicable to tribal cultural resources.

- **MM Cultural 1** Prior to the consideration by the City of Perris of implementing development or infrastructure projects for properties that are vacant, undeveloped, or considered to be sensitive for cultural resources by the City of Perris Planning Division, a Phase I Cultural Resources Study of the subject property prepared in accordance with the protocol of the City of Perris by a professional archeologist¹ shall be submitted to the City of Perris Planning Division for review and approval. The Phase I Cultural Resources Study shall determine whether the subject implementing development would potentially cause a substantial adverse change to any significant paleontological, archaeological, or historic resources. The Phase I Cultural Resources Study shall be prepared to meet the standards established by Riverside County and shall, at a minimum, include the results of the following:
 - 1. Records searches at the Eastern Information Center (EIC), the National or State Registry of Historic Places and any appropriate public, private, and tribal archives.

¹ For the purpose of this measure, the City of Perris considers professional archaeologists to be those who meet the United States Secretary of the Interior's standards for recognition as a professional, including an advanced degree in anthropology, archaeology, or a related field, and the local experience necessary to evaluate the specific project. The professional archaeologist must also meet the minimum criteria for recognition by the Register for Professional Archaeologists (RPA), although membership is not required.
- 2. Sacred Lands File record search with the NAHC followed by project scoping with tribes recommended by the NAHC.
- 3. Field survey of the implementing development or infrastructure project site.

The proponents of the subject implementing development projects and the professional archaeologists shall also contact the local Native American tribes (as identified by the California Native Heritage Commission and the City of Perris) to obtain input regarding the potential for Native American resources to occur at the project site.

Measures shall be identified to mitigate the known and potential significant effects of the implementing development or infrastructure project, if any. Mitigation for historic resources shall be considered in the following order of preference:

- 1. Avoidance.
- 2. Changes to the structure provided pursuant to the Secretary of Interior's Standards.
- 3. Relocation of the structure.
- 4. Recordation of the structure to Historic American Buildings Survey (HABS)/Historic American Engineering Record (HAER) standard if demolition is allowed.

Avoidance is the preferred treatment for known and discovered significant prehistoric and historical archaeological sites, and sites containing Native American human remains. Where feasible, plans for implementing projects shall be developed to avoid known significant archaeological resources and sites containing human remains. Where avoidance of construction impacts is possible, the implementing projects shall be designed and landscaped in a manner, which would ensure that indirect impacts from increased public availability to these sites are avoided. Where avoidance is selected, archaeological resource sites and sites containing Native American human remains shall be placed within permanent conservation easements or dedicated open space areas.

The Phase I Cultural Resources Study submitted for each implementing development or infrastructure project shall have been completed no more than three (3) years prior to the submittal of the application for the subject implementing development project or the start of construction of an implementing infrastructure project.

MM Cultural 2 If the Phase I Cultural Resources Study required under **MM Cultural 1** determines that monitoring during construction by a professional archaeologist is needed for the implementing development project; the project proponent shall retain a professional archaeologist prior to the issuance of grading permits. The task of the archaeologist shall be to verify implementation of the mitigation measures identified in the approved Phase I Cultural Resources Study and to monitor the initial ground-altering activities² at the subject site for the unearthing of previously unknown archaeological and/or cultural resources. Selection of the archaeologist shall be subject to the approval of the City of

² For the purpose of this measure, ground-altering activities include, but are not limited to, debris removal, vegetation removal, tree removal, grading, trenching, or other site preparation activities. Initial ground-altering activities refer to the first time that the existing materials are altered by construction-related activities. Materials that have already been disturbed by construction-related activities do not require subsequent monitoring.

Perris Planning Manager and no grading activities shall occur at the site until the archaeologist has been approved by the City.

The archaeological monitor shall be responsible for maintaining daily field notes, a photographic record, and reporting all finds in a timely manner. The archaeologist shall also be equipped to record and salvage cultural resources that may be unearthed during initial ground-altering activities. The archaeologist shall be empowered to temporarily halt or divert construction equipment to allow recording and removal of the unearthed resources.

In the event that cultural resources are discovered at the development site, the handling of the discovered resources will differ. However, it is understood that all artifacts with the exception of human remains and related grave goods or sacred objects belong to the property owner. All artifacts discovered at the development site shall be inventoried and analyzed by the professional archaeologist. If any artifacts of Native American origin are discovered, all activities in the immediate vicinity of the find shall stop, the project developer and project archaeologist shall notify the City of Perris Planning Division, the Pechanga Band of Luiseño Indians and the Soboba Band of Mission Indians, and a Native American observer of Luiseño descent shall be retained to help analyze the Native American artifacts for identification as everyday life and/or religious or sacred items, cultural affiliation, temporal placement, and function, as deemed possible. The significance of Native American resources shall be evaluated in accordance with the provisions of CEQA and shall consider the religious beliefs, customs, and practices of the Luiseño tribes. All items found in association with Native American human remains will be considered grave goods or sacred in origin and subject to special handling (see MM Cultural 6, below). Native American artifacts that cannot be avoided or relocated at the project site will be prepared in a manner for curation and the archaeological consultant will deliver the materials to an accredited curation facility approved by the City of Perris within a reasonable amount of time.

Non-Native American artifacts will be inventoried, assessed, and analyzed for cultural affiliation, personal affiliation (prior ownership), function, and temporal placement. Subsequent to analysis and reporting, these artifacts will be subjected to curation or returned to the property owner, as deemed appropriate. Once ground-altering activities have ceased or the professional archaeologist determines that monitoring activities are no longer necessary, monitoring activities may be discontinued following notification to the City of Perris Planning Division.

A report of findings, including an itemized inventory of recovered artifacts, shall be prepared upon completion of the steps outlined above. The report shall include a discussion of the significance of all recovered artifacts. The report and inventory, when submitted to the City of Perris Planning Division, will signify completion of the program to mitigate impacts to archaeological and/or cultural resources. A copy of the report shall also be filed with the Eastern Information Center (EIC).

MM Cultural 3 If the Phase I Cultural Resources Study required under **MM Cultural 1** determines that monitoring during construction by both a professional archaeologist and a Native American representative is needed for the implementing development project, the project proponent shall retain a professional archaeologist and a Native American representative of Luiseño descent prior to the issuance of grading permits. The

professional archaeologist and Native American observer shall be required on site during all initial ground-altering activities. The Native American observer shall have the authority to temporarily divert, redirect, or halt the ground disturbance activities to allow the evaluation of cultural resources with the project archaeologist. The evaluation and treatment provisions of mitigation measure **MM Cultural 2** shall apply to this measure.

- **MM Cultural 4** In the event that cultural resources are discovered at a development site that is not monitored by a professional archaeologist, all activities in the immediate vicinity of the find shall stop, the project developer shall notify the City of Perris Planning Division, and the project developer shall retain a professional archaeologist to analyze the find for identification as prehistoric and historical archaeological resources. The evaluation and treatment provisions of mitigation measure **MM Cultural 2** shall apply to this measure.
- **MM Cultural 6** In the event that human remains (or remains that may be human) are discovered at the implementing development project site during grading or earthmoving, the construction contractors shall immediately stop all activities in the immediate area of the find. The project proponent shall then inform the Riverside County Coroner and the City of Perris Planning Division and the coroner would be permitted to examine the remains.

If the coroner determines that the remains are of Native American origin, the coroner would notify the NAHC and the Commission would identify the "Most Likely Descendent" (MLD)³. Despite the affiliation of any Native American representatives at the site, the Commission's identification of the MLD would stand. The MLD shall be granted access to inspect the site of the discovery of the Native American human remains and may recommend to the project proponent means for treatment or disposition, with appropriate dignity of the human remains and any associated grave goods. The MLD shall complete their inspection and make recommendations or preferences for treatment within 48 hours of being granted access to the site. The disposition of the remains would be determined in consultation with the City of Perris, the project proponent, and the MLD. The City of Perris would be responsible for the final decision, based upon input from the various stakeholders.

If the human remains are determined to be other than Native American in origin, but still of archaeological value, the remains would be recovered for analysis and subject to curation or reburial at the expense of the project proponent. If deemed appropriate, the remains would be recovered by the coroner and handled through the Coroner's Office.

Coordination with the Coroner's Office would be through the City of Perris and in consultation with the various stakeholders.

³ The "Most Likely Descendent" ("MLD") is a reference used by the California Native American Heritage Commission to identify the individual or population most likely associated with any human remains that may be identified within a given project area. Under California Public Resources Code section 5097.98, the Native American Heritage Commission has the authority to name the MLD for any specific project and this identification is based on a report of Native American remains through the County Coroner's office. In the case of the City of Perris, the Native American Heritage Commission may identify the Luiseño descendent, but generally names the Soboba or Pechanga bands of Mission Indians (both Luiseño populations) and alternates between the two groups. The City of Perris will recognize any MLD identified by the Native American Heritage Commission is not tasked with the identification of a Native American representative, the City of Perris reserves the right to make an independent decision based upon the nature of the proposed project.

The specific locations of Native American burials and reburials would be proprietary and not disclosed to the general public. The locations would be documented by the consulting archaeologist in conjunction with the various stakeholders and a report of findings shall be filed with the Eastern Information Center (EIC).

By preparing the Phase 1 Cultural Resources Assessment, the Project has complied with PVCCSP EIR mitigation measure **MM Cultural 1**.

5.14.3 Design Considerations

Because no cultural resources have been identified at the proposed Project site, there are no site design measures incorporated which would lessen impacts related to cultural resources. PVCCSP EIR mitigation measures would lessen impacts to unknown cultural resources which may occur below the surface at the Project site.

5.14.4 Thresholds of Significance

The City of Perris has not established local CEQA significance thresholds and instead, defers to the thresholds of significance identified in State CEQA Guidelines Appendix G. Impacts related to this Project may be considered potentially significant if the proposed Project would:

- 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

5.14.5 Environmental Impacts Before Mitigation

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

I. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

As discussed in Threshold "A" in Section 5.4, Cultural Resources, of this DEIR, a records search and literature review of the Project area and surrounding areas was undertaken at the Eastern Information Center (EIC) at University of California, Riverside. Results of the records search indicated a total of 35 previously recorded cultural resources are located within the Project study area, which is composed of the Project site and a 0.5-mile radius and the MDP Lateral-B Stage 4 extension alignment and a 1.0-mile radius. However, none of these 35 resources are located within the Project study area.

Additionally, a pedestrian survey was conducted and identified an additional six cultural resources within the Project site. All six of these sites are categorized as historical sites such as old roadways and utility poles and are not considered tribal cultural resources. The pedestrian survey of the MDP Lateral-B Stage 4 extension alignment also did not identify any cultural resources within the alignment. Based on this search and review of existing literature related to cultural and historic resources within the Project area, no tribal cultural resources listed or eligible for listing in the CRHR or in a local register of historical resources were identified.

Although there are no known archeological resources within the Project study area, in the event that previously unidentified archaeological resources may be discovered during ground disturbance, Project-specific mitigation measure **MM CR 1**⁴ requires that an archaeological monitor be present during initial ground-disturbing activities and identifies steps that would be taken to ensure potential impacts to tribal cultural resources are less than significant. Project-specific mitigation measure **MM CR 2**,⁵ identifies actions to be taken in the event that human remains are found.

Accordingly, the Project would not have impacts to tribal cultural resources; impacts are considered **less** than significant with implementation of Project-specific mitigation.

II. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency will consider the significance of the resource to a California Native American tribe?

AB 52 requires lead agencies to provide notice to Native American tribes that are traditionally and culturally affiliated with the geographic area of a Project if they have requested notice of projects proposed within that area. The City is also required to coordinate with Native American Tribes through Assembly regarding SB 18 for the proposed Specific Plan Amendment to amend the Circulation Plan to delete two streets: California Avenue and Nance Street between Patterson Avenue to the west and Nevada Avenue to the east.

On November 10, 2021, the City of Perris sent Project notification letters, pursuant to AB 52 and SB 18, to the following tribes: Agua Caliente Band of Cahuilla Indians, Rincon Band of Luiseño Indians, Soboba Band of Luiseno Indians, Morongo Band of Mission Indians, and Pechanga Band of Luiseño Indians. None of the contacted tribes responded requesting consultation with the City.

In addition to the Native American scoping and consultation conducted pursuant to the requirements of AB 52 and SB 18 by the City of Perris, the City requires consultants completing cultural resources studies to contact NAHC for a sacred land file (SLF) search. A records search of the Sacred Lands Files (SLFs) from the NAHC was requested by AE and did not indicate the presence of any sacred sites or locations of religious or ceremonial importance within the subject property. In accordance with the recommendations of the NAHC, AE contacted 14 Native American consultants listed in the NAHC response letter on February 22, 2022. A second attempt at correspondence was made on March 16, 2022, to organizations who had not responded to the initial request on February 22, 2022. (AE, p. 21.)

⁴ Project-specific mitigation measure MM CR 1 replaces PVCCSP EIR mitigation measures MM Cultural 2, MM Cultural 3, and MM Cultural 4.

⁵ Project-specific mitigation measure **MM CR 2** replaces PVCCSP EIR mitigation measure **MM Cultural 6**.

Individuals/organizations contacted include: Patricia Garcia-Plotkin, Tribal Historic Preservation Officer for the Agua Caliente Band of Cahuilla Indians; Amanda Vance, Chairperson for the Augustine Band of Cahuilla Indians; Doug Welmas, Chairperson of the Cabazon Band of Mission Indians; Daniel Salgado, Chairperson for the Cahuilla Band of Indians; Shane Chapparosa, Chairman for the Los Coyotes Band of Cahuilla and Cupeño Indians; Ann Brierty, Tribal Historic Preservation Officer for the Morongo Band of Mission Indians; Shasta Gaughen Tribal Historic Preservation Officer for the Pala Band of Mission Indians; Ebru Ozdil, Cultural Analyst for the Pechanga Band of Luiseno Indians; Jill McCormick, Historic Preservation Officer for the Quechan Tribe of the Fort Yuma Reservation; Joseph Hamilton, Chairperson of the Ramona Band of Cahuilla; Cheryl Madrigal, Tribal Historic Preservation Officer for the Rincon Band of Luiseno Indians; Lovina Redner, Tribal Chair for the Santa Rosa Band of Cahuilla Indians; Joseph Ontiveros, Tribal Historic Preservation Officer for the Soboba Band of Luiseño Indians; and Thomas Tortez, Chairperson of the Torres-Martinez Desert Cahuilla Indians. (AE, pp. 21-22.)

As of April 15, 2022, five responses were received. The Quechan Tribe of the Fort Yuma Reservation stated that the Tribe has no comments on the Project and defers to local Tribes in the area. The Pala Band of Mission Indians stated that the Project is not within the boundaries of the recognized Pala Indian Reservation and is beyond the boundaries of their Traditional Use Area. Therefore, they defer to the wishes of Tribes in closer proximity. The Augustine Band of Cahuilla Mission Indians stated they have no knowledge of cultural resources in the Project area; however, they request to be contacted immediately for further evaluation in the event of any new discoveries. The Agua Caliente Band of Cahuilla Indians (ACBCI) noted that the Project area is not within the boundaries of the ACBCI reservation; however, it is within the Tribe's Traditional Use Area. Therefore, they requested a copy of the records search and cultural resource documentation generated in connection with this Project as well as a cultural resources inventory of the Project area by a qualified archaeologist prior to any development activities. The Rincon Band of Luiseno Indians stated that the Project is within Luiseno territory and the Tribe's specific area of historic interest. The Tribe has no knowledge of cultural resources within the Project area but suggests a records search be conducted. (AE, p. 22.)

BFSA also contacted the NAHC regarding the MDP Lateral B Stage 4 extension to determine if any known Native American cultural properties are present within or adjacent to the drainage alignment. As of the date of BFSA's report (June 22, 2022), the results from the NAHC have not been received. (BFSA, p. 32.)

As previously discussed, no cultural resources, including tribal cultural resources, were observed during the field survey and no information obtained through Native American consultation or review of applicable records indicates that tribal cultural resources are present within the Project area. Therefore, the Project would not impact any known tribal cultural resources.

Although it is not likely, there is a remote possibility that tribal cultural resources may be present beneath the site's subsurface, and if present, could be impacted by deeper ground-disturbing activities associated with Project construction that extend below disturbed soils. Without mitigation, construction activities including excavation could encounter unknown tribal cultural resources resulting in a potentially significant impact. Project-specific mitigation measure **MM CR 1** requires that an archaeological monitor be present during initial ground-disturbing activities and identifies steps that would be taken to ensure potential impacts to tribal cultural resources are less than significant. Project-specific mitigation to be taken in the event that human remains are found.

With implementation of Project-specific mitigation measures **MM CR 1** and **MM CR 2**, potential impacts to tribal cultural resources would be **less than significant**.

5.14.6 Recommended Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (State CEQA Guidelines Section 15126.4). Mitigation measures were evaluated for their ability to eliminate or reduce the potential significant adverse impacts to tribal cultural resources. The proposed Project will implement Project-specific mitigation measures **MM CR 1** and **MM CR 2**, as discussed in Section 5.4 of this DEIR (Cultural Resources), to eliminate or reduce potentially significant tribal cultural resources impacts to below the level of significance.

5.14.7 Summary of Environmental Effects After Mitigation Measures Are Implemented

The proposed mitigation measures will ensure that any unknown buried tribal cultural and/or archaeological resources that are discovered during development of the proposed Project are protected, evaluated and recovered as determined by the appropriate qualified expert. With the implementation of Project-specific mitigation measures from DEIR Section 5.4 (Cultural Resources), **MM CR 1** and **MM CR 2**i, impacts to unknown potentially significant tribal cultural resources will be reduced to a **less than significant level with mitigation**.

Section 6 – Other CEQA Topics

The State CEQA Guidelines set forth several general content requirements for EIRs. Those applicable to this Project include unavoidable adverse impacts (Section 15126(b)), growth inducing impacts (Section 15126(d)), and significant irreversible impacts (Section 15126.2(c)). This section addresses each of those general requirements. Cumulative impacts (Section 15130) are discussed in Section 7.

6.1 Significant Unavoidable Adverse Impacts

This topic is intended to address any impacts that cannot be mitigated to below a level of significance (State CEQA Guidelines Section 15126.2). No significant unavoidable impacts were identified during preparation of this DEIR.

6.2 Growth Inducing Impacts

According to State CEQA Guidelines Section 15126.2(d), a project may foster economic or population growth, or additional housing, either indirectly or directly, in a geographical area if it meets any one of the following criteria below:

- A project would remove obstacles to population growth;
- Increases in the population may tax existing community service facilities, causing significant environmental effects; or
- A project would encourage and facilitate other activities that could significantly affect the environment.

The Project will not remove obstacles to population growth or directly contribute to population growth. The proposed Project involves construction and operation of a single logistics center/high-cube warehouse building in an area that the City has planned for this type of development. In response to the Project's NOP, one comment letter was received from the Southern California Council of Governments (SCAG), recommending that consistency with the SCAG Regional Transportation Plan-Sustainable Communities Strategy (RTP-SCS) is included in the analysis for this Project. Because the Project Applicant proposes an amendment to the Perris Valley Commerce Center Specific Plan (PVCCSP) Circulation Plan, the Project's consistency with the RTP-SCS was evaluated under Threshold B in Section 5.10 – Land Use and Planning. The analysis in that section concluded the proposed Project is consistent with the RTP-SCS and no mitigation measures are necessary.

Although the Project includes expansion of infrastructure and roadway improvements in the immediate Project vicinity, these improvements have been planned for by the PVCCSP and the Perris Comprehensive General Plan 2030 (Perris GP 2030) and are intended to mitigate additional impacts from operation of not only the proposed Project, but other similar development. Therefore, the Project does not remove barriers to population growth nor does it create growth that will overwhelm or exceed existing services.

Project implementation may indirectly induce population growth in the short term because it will be a new source of employment within the City. However, the extent to which the new jobs created by a project are filled by existing residents is a factor that tends to reduce the growth inducing effect of a project. Construction of the proposed Project will create short-term construction jobs which are anticipated to be filled by workers who, for the most part, reside in the Project area; therefore,

construction of the proposed Project will not generate a permanent increase in population within the Project area. The workers constructing the Project are also not expected to require additional housing needs beyond those which are currently available in the City of Perris, or the surrounding County areas.

The SCAG also publishes population, housing, and employment predictions for all cities within their region, including the City of Perris, based on information gathered from local planning documents, such as general and specific plans, within each SCAG-participating jurisdiction. As shown in **Table 6-A** – **Demographics and Growth**, the City's population was 83,088 in 2020 and is anticipated to grow to 121,038 in 2045.¹ Additionally, the number of jobs is anticipated to increase to 26,411 in 2045 from its current level of 19,013.

	2020	2030	2035	2045 (SCAG)	
Population					
City of Perris	83,088	101,117	108,931	121,038	
Housing Units					
City of Perris	21,431	27,458	30,007	33,798	
Employment					
City of Perris	19,013	23,267	24,797	26,411	

Table 6-A – Demographics and Growth

Although the Project Applicant proposes a Specific Plan Amendment, this change is related to circulation and would not result in a significant increase in population and employment and is therefore within SCAG's forecasts. Therefore, any potential increases in population as a consequence of the proposed Project would have been accounted for by SCAG when they developed their growth predictions. The Perris GP 2030 EIR also considered urbanization of land, in general, will have a growth inducing impact and found that development consistent with the Perris GP 2030 reflects the logical, geographic expansion of development within Western Riverside County. Thus, as the Project is substantially similar to other development within the PVCCSP planning area in the Project vicinity and is not inconsistent with the land uses assumed by SCAG in their growth forecasts, the Project will also not result in urbanization in a remote location.

6.2.1 Short-Term Uses versus Long-Term Productivity

The long-term effect of the proposed Project will be to convert the currently vacant and underutilized site into a high-cube warehouse/distribution center. Consequently, the characteristics of the physical, biological, cultural, aesthetic, and human environment will be impacted, as with any form of urbanization. The consequences of this urbanization include: incremental degradation of the regional air quality, incremental demands for public services and utilities, increased storm water runoff and increased natural resource consumption. However, these impacts will not be substantially different from those identified and planned for in the Perris GP 2030 and the PVCCSP.

¹ Source: SCAG Comment Letter on NOP, Appendix A.2

Ultimate development of the Project would create long-term environmental consequences that are connected with any form of urbanization. However, the proposed Project has been designed to benefit the community and population by providing increased opportunities for employment in closer proximity to residential development and will ultimately provide for a form of long-term productivity which appears compatible with human needs in the area.

6.3 Significant Irreversible Impacts

Pursuant to State CEQA Guidelines Section 15126.2(c), an EIR must include a description of significant irreversible environmental changes that would be caused by the proposed action. Section 15126.2(c) reads as follows:

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 highway improvement which provides access to a previously inaccessible area) generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

An impact could fit into this category if:

- The project would involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of the project would generally commit future generations of people to similar uses;
- The project involves uses in which irreversible damage could result from any potential environmental incidents associated with the project; and/or,
- The proposed consumption of resources is not justified (e.g., the project results in wasteful use of energy).

Determining whether the proposed Project may result in significant irreversible effects requires a determination of whether key resources would be degraded or destroyed in such a way that there would be little possibility of restoring them. Although the Project site is currently vacant, the Perris GP 2030 and PVCCSP anticipates that the site will eventually support uses that would generate jobs and revenue while expanding the availability of goods and services and the proposed Project would permanently alter the site by converting a predominantly vacant parcel to a developed use.

6.3.1 Irreversible Commitment of Resources

Implementation of the proposed Project would irreversibly commit the 35.7-acre vacant and underutilized Project site to industrial uses. Although construction and operation of the proposed warehouse at the Project site would contribute to the incremental depletion of renewable and nonrenewable resources, the proposed Project would be consistent with other existing and planned development in the Project vicinity within the PVCCSP planning area.

Construction of the proposed Project will require the use of renewable resources such as lumber and other forest products, which could be expected to be replenished over the lifetime of the Project because sustainably harvested lumber supplies are increased as seedlings mature into trees. As such,

Duke Warehouse at Patterson Avenue and Nance Street DEIR

the development of the Project would not result in the irreversible commitment of renewable resources. Nevertheless, there would be an incremental increase in the demand for these resources during construction of the Project.

Construction of the Project will also result in the use of non-renewable resources including building materials (e.g., asphalt, petrochemical construction materials, steel, copper and other metals, and sand and gravel) and fossil fuels, including the use of fossil fuels for construction equipment, the transport of construction materials to the Project site and the transportation of construction workers to and from the Project site (e.g., natural gas, gasoline, diesel fuel and other petroleum-based products). These materials and the resources used in their production are available in a finite supply and are generally not retrievable, although some of the materials are recyclable. Construction materials like concrete and asphalt, for example, can be crushed and recycled as road base. None of these materials are considered to be in short supply and are readily available for use in Project construction.

During Project operation, the Project would result in an irretrievable commitment of nonrenewable resources, such as energy resources and fossil fuels. Energy resources including petroleum and natural gas will be consumed during construction and operational phases of new development. Short-term, or construction-related, energy uses will include electricity for lights and construction equipment, and fossil fuels for construction equipment, and the transport of construction materials and workers to and from the Project site. Long-term energy resources include fuel consumed for the heating and cooling of the building, transportation of people and goods, as well as for lighting and other energy-related needs. Electricity consumption during construction and operation phases will increase the consumption of oil, coal, and natural gas used at power plants located outside the City of Perris. Accordingly, this represents a long-term commitment to the continued consumption of these resources.

As discussed in Section 5.5 – Energy, of this DEIR, natural gas, energy, and fuel consumption will not be a significant impact and the Project will not result in wasteful use of these resources. Further, this is a justified consumption of resources because the proposed Project is consistent with the City's planned use at the site and because there are no unique characteristics of the proposed Project that would make this Project operate at a less energy efficient level than other similar developments.

6.3.2 Irreversible Environmental Changes

The DEIR found that all potential environmental effects resulting from implementation of the proposed Project are below the level or significance or can be mitigated to below the level of significance. Therefore, although the Project will result in changes to the existing site conditions, the Project does not cause any significant irreversible environmental changes.

6.3.3 Potential Environmental Damage from Accidents

The Project Applicant proposes a high-cube, unrefrigerated warehouse/logistics center; however, potential impacts related to the creation of a significant hazard to the public or environment through the routine transportation, use, or disposal of hazardous materials, and the creation of a significant hazard to the public or environment through reasonably foreseeable upset and accidental conditions involving the release of hazardous materials into the environment were found to be less than significant without mitigation required during preparation of the DEIR (Section 5.8 - Hazards and Hazardous Materials). Additionally, impacts related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or planned school, and safety hazards for people residing or working in the Project area, if within an airport land use plan or within two

Duke Warehouse at Patterson Avenue and Nance Street DEIR

miles of a private or private-use airport will be reduced to less than significant levels through compliance with regulatory requirements and Riverside County Airport Land Use Commission conditions.

The Project site is located within a seismically active region and would be exposed to ground shaking during a seismic event. In order to address the potential for moderate to severe ground-shaking that may occur during the lifetime of the proposed structures, the Project will follow engineering and design parameters in accordance with the most recent edition of the California Building Code and/or the Structural Engineers Association of California parameters, as required in standard City conditions of approval.

Section 7 – Cumulative Impact Analysis

7.1 Introduction

CEQA requires that an EIR examine the cumulative impacts associated with a project, in addition to project-specific impacts. The discussion of cumulative impacts must reflect the severity of the impacts and the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the project alone (State CEQA Guidelines Section15130(b)).

As stated in the State CEQA Guidelines, an EIR "shall discuss cumulative impacts of a project when the project's incremental effect is cumulatively considerable (Section 15130(a)). "Cumulatively considerable" means that "the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects as defined in Section 15130" (Section 15065(c)). State CEQA Guidelines Section 15355 states that "cumulative impacts" occur from "...the change in the environment which results from the incremental impact of the projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time."

A cumulative impact is not considered significant if the impact can be mitigated to below the level of significance through mitigation, including providing improvements and/or contributing funds through feepayment programs. The EIR must examine "reasonable options for mitigating or avoiding any significant cumulative effects of a proposed project" (State CEQA Guidelines Sections 15130(a)(3) and 15130(b)(5)).

State CEQA Guidelines Section 15130(b)(1) requires that a discussion of cumulative impacts be based on either a list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency; or a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area-wide conditions contributing to the cumulative impact.

State CEQA Guidelines Section 15130(d) states that, "Previously approved land use documents such as general plans, specific plans, and local coastal plans may be used in cumulative impact analysis. A pertinent discussion of cumulative impacts contained in one or more previously certified EIRs may be incorporated by reference pursuant to the provisions for tiering and program EIRs. No further cumulative impact analysis is required when a project is consistent with a general, specific, master or comparable programmatic plan where the lead agency determines that the regional or area-wide cumulative impacts of the proposed project have been adequately addressed, as defined in Section 15152(f), in a certified EIR for that plan." Additionally, if a cumulative impact was adequately addressed in a prior EIR for a community plan, zoning action, or general plan, and the project is consistent with that plan or action, then an EIR for such a project should not further analyze that cumulative impact (State CEQA Guidelines Section 15130(e)).

The "summary of projections method" is primarily utilized as the cumulative impact analysis and is based, in part, on information contained in the Perris Valley Commerce Center Specific Plan (PVCCSP) and Draft Environmental Impact Report, SCH No. 2009081086 (PVCCSP EIR), certified by the City of Perris City Council in 2012. This document is hereby incorporated by reference. A pertinent discussion

of cumulative impacts contained in one or more previously certified EIRs may be incorporated by reference pursuant to the provisions for tiered and program EIRs.

7.2 Cumulative Analysis Setting

Because of the nature of individual environmental factors, the cumulative area for every issue addressed in this DEIR will not be identical. The individual cumulative areas for the issues addressed in this DEIR are provided in the respective impact sections.

7.3 Assessment of Cumulative Impacts

7.3.1 Aesthetics

Future development in the same viewshed as the Project could contribute to a cumulative aesthetic impact. If the projects were not near each other, the viewer would not perceive them in the same scene and they would not result in a cumulative change in the visual character. Because the Project site and surrounding areas are within the PVCCSP planning area, future development — which would contribute to a cumulative visual change along with the Project — would be required to comply with the standards and guidelines identified in the PVCCSP in addition to applicable City regulations. The PVCCSP EIR concluded that development of the land uses identified in the PVCCSP, including development of the Project site, would not result in cumulative aesthetic impacts.

As discussed in Section 5.1, light and glare impacts from the Project and future development in the City, including the development allowed by approved Specific Plans, including the PVCCSP, would be reduced through the adherence to applicable lighting standards established in the respective Specific Plans and through City regulations. Implementation of Project-specific mitigation measure **MM AES 1** would ensure that construction-related lighting impacts from the Project are also less than significant. Thus, cumulative impacts are considered less than significant with mitigation incorporated.

7.3.2 Air Quality

The cumulative area for air quality impacts is the South Coast Air Basin (Basin). As discussed in Section 5.2 the portion of the Basin within which the Project is located is designated as a non-attainment area for PM-10 under State standards, and for ozone and PM-2.5 under both State and federal standards. Ozone is not directly emitted into the atmosphere; rather, it forms via a reaction of VOC and NO_x in the atmosphere. Therefore, it is also important to consider these emissions and their potential to contribute to ozone pollution in the region even if the region is not in non-attainment for these constituent pollutants. Based on the Air Quality analysis prepared for the proposed Project (Appendix B.1), the Project's emissions would not exceed applicable thresholds for criteria pollutant emissions or diesel particulate matter emissions.

SCAQMD considers the thresholds for project-specific impacts and cumulative impacts to be the same. Therefore, projects that exceed project-specific significance thresholds are considered by SCAQMD to be cumulatively considerable. Based on SCAQMD's regulatory jurisdiction over regional air quality, it is reasonable to rely on its thresholds to determine whether there is a cumulative air quality impact. Therefore, because the proposed Project's emissions will not exceed the applicable SCAQMD significance thresholds, the Project will also not have a cumulatively considerable air quality impact.

7.3.3 Biological Resources

The Project site and the entire City are located within the Western Riverside County Multiple Species Habitat Conservation Plan¹ (MSHCP); thus the geographical context for the analysis of cumulative biological impacts includes the MSHCP Plan Area of western Riverside County and accounts for all anticipated cumulative growth within this geographic area. The City of Perris reviews all public and private development and construction projects and other land use plans/activities within the MSHCP area to ensure compliance with the conservation criteria procedures and mitigation requirements set forth in the MSHCP.

Through compliance with the MSHCP, the proposed Project and other public and private development and construction projects in the City will not result in a cumulative adverse effect, either directly or through habitat modifications, on any of the Covered Species listed in the MSHCP because implementation of the MSHCP requires habitat preservation for Covered Species in order to address their life cycle needs. Further, no candidate, sensitive, or special status species were documented on the Project site, the Project site does not occur within a MSHCP Survey Area for narrow endemic plant species, and the results of the focused burrowing owl surveys completed for the Project site did not detect burrowing owl or characteristic owl sign within or immediately adjacent to the Project site. Thus, through compliance with the MSHCP and based on the features of the MSHCP itself, direct, indirect, and cumulative impacts to Covered Species are mitigated below a level of significance.

Additionally, the proposed Project and other public and private development and construction projects in the City will not cause adverse cumulative impacts by conflicting with the provisions of any adopted Habitat Conservation Plan (HCP), Natural Communities Conservation Plan or other approved local, regional, or state habitat conservation plan either within or outside of the Plan area. The MSHCP has been written specifically to complement existing HCPs, such as the Stephens' kangaroo rat long-term HCP. Through compliance with the MSHCP and existing HCPs, local, regional, and state plans, and the mitigation measures described in Section 5.2 – Biological Resources, cumulative impacts are considered less than significant with mitigation incorporated.

7.3.4 Cultural Resources

The geographic scope for cumulative impacts to cultural resources is defined by the cultural setting and territory of the prehistoric and historic people who occupied the area of southern California in which the City is located. Western Riverside County was part of the territory of the Cahuilla and perhaps Luiseño people. Cumulative projects in the Project area and other development in western Riverside County could result in the progressive loss of as-yet unrecorded archaeological resources. This loss, without proper mitigation, would be an adverse cumulative impact.

Cumulative projects within the City have the potential to impact cultural resources; however, to reduce impacts to cultural resources, cumulative development projects within the Project vicinity will be required to comply with the resource protection requirements of the Perris Comprehensive General Plan 2030 (Perris GP 2030) EIR and the PVCCSP EIR, as applicable. Thus, cultural resource reports will be required for each public and private development project to assess the potential for significant impacts to these resources and to identify mitigation measures if necessary. Additionally, all public and private development and construction projects, as well as the proposed Project, will be required to comply with

¹ The MSHCP is discussed in Section 5.3.2 – Related Regulations under the subheading Regional Regulations.

state code in the event of discovery of human remains, which will reduce impacts in this regard to less than significant.

As discussed previously, with implementation of with mitigation measures described in Section 5.4 – Cultural Resources, the proposed Project will have a less than significant impact on cultural resources. Likewise, as discussed in the Perris GP 2030 EIR and the PVCCSP EIR, cumulative development projects within the City will have a less than significant impact on cultural resources. Therefore, cumulative impacts will be less than significant with mitigation incorporated.

7.3.5 Energy

Project construction and operations would not result in the inefficient, wasteful or unnecessary consumption of energy. Further, the energy demands of the Project can be accommodated within the context of available resources and energy delivery systems. The Project would not engage in wasteful or inefficient uses of energy and aims to achieve energy conservations goals within the State of California. Future developments within the region would similarly be required to demonstrate that the wasteful, inefficient, or unnecessary consumption of energy would not occur. Additionally, future developments would be subject to the same regulatory requirements as the proposed Project, including compliance with the current Title 24 Building and Energy Efficiency Standards, which would ensure that future development does not result in the wasteful, inefficient, or unnecessary consumption of energy. As such, the Project would not result in a potentially cumulatively-considerable environmental impact due to wasteful, inefficient, or unnecessary consumption of energy. Thus, impacts would be less-than-cumulatively considerable.

There are no adopted State or local plans for renewable energy or energy efficiency in the Project area. Further, the proposed Project and future developments are subject to current California Building Code requirements and must comply with the 2019 Building and Energy Efficiency Standards and the 2019 California Green Building Standards requirements (and subsequent updates). As such, impacts due to a conflict with or obstruction of a State or local plan for renewable energy or energy efficiency would be less-than-cumulatively considerable.

7.3.6 Geology/Soils

The geographic scope for cumulative impacts relative to geology/soils and paleontological resources is the City of Perris as governed by the General Plan and the development projected under the Perris GP 2030. Geologic hazards such as liquefaction or rockslides are localized by nature, as they are related to the soils and geologic character of a particular site and thus are not cumulative. Cumulative impacts could occur related to an earthquake if the magnitude of the quake and location of the fault(s) traversed the region. Impacts due to seismic activity would be cumulative if State and local building and development codes and regulations were not being implemented throughout the region, resulting in structural collapse.

Pursuant to City requirements and the current edition of the California Green Building Standards Code requirements, the proposed Project and all new development in the City will be required to incorporate appropriate design and construction measures to guard against ground-shaking hazards. In addition, per the Perris GP 2030 Policy S-7.2, the City requires geological and geotechnical investigations by State-licensed professionals as part of the environmental and development review and approval process in areas with the potential for seismic and geologic hazards. Proposals for development or redevelopment projects which do not provide for mitigation of seismic or geologic hazards to the

satisfaction of responsible agencies will not be approved. Since all local jurisdictions in the region are subject to local, State, and federal laws, including CEQA, through compliance with existing regulations, cumulative impacts related to seismic safety are reduced to less than significant.

New private and public development and construction projects within the City could encroach on areas with paleontological resources, which could be lost if not identified and avoided or monitored properly. All future public and private development projects in the City are required to adhere to Perris GP 2030 Conservation Element Policy IV.A. This policy requires compliance with state and federal regulations for preservation of significant paleontological resources. Projects are also required to comply with Conservation Element Measure IV.A, which provides for paleontological monitoring in those areas of the City with high sensitivity for paleontologic resources. Development projects within the PVCCSP that require subsurface excavation that exceeds five feet in depth are required to implement PVCCSP EIR mitigation measure **MM Cultural 5**, which requires paleontological monitoring. Since the proposed Project will implement PVCCSP EIR mitigation measure **MM GEO 1** identified in Section 5.6 – Geology and Soils, the Project's incremental contribution to the potential loss of paleontological resources is not cumulatively considerable.

Thus, the proposed Project's incremental contribution to geology and soils impacts is not cumulatively considerable. Therefore, cumulative impacts with regard to geology and soils are less than significant with mitigation incorporated.

7.3.7 Greenhouse Gas Emissions

Individual projects would incrementally contribute toward the potential for global climate change on a cumulative basis in concert with all other past, present, and probable future projects. While individual projects are unlikely to measurably affect global climate change, each of these projects incrementally contributes toward the potential for global climate change on a cumulative basis, in concert with all other past, present, and probable future projects.

Despite the global nature of GHG impacts, it is important to note that the scope of the City's jurisdictional authority is limited to certain types of emissions generated within the City's physical boundaries. The City's authority does not include the regulation of the majority of actions, including for example, transportation policy, fuel consumption, and energy generation, which the state has determined are necessary to meet all of AB 32's greenhouse gas reduction goals. Further, some of the GHG emissions associated with the Project can be reduced only by measures to be implemented by other governmental agencies which are outside the City's jurisdiction. GHG emissions are clearly significant on a global basis, and when GHG emissions are outside of the lead agency's jurisdiction and control, consistent with Public Resources Code Section 21081(a)(2), a project has cumulatively considerable significant and unavoidable GHG impacts if other agencies do not take necessary action. These other agencies can and should adopt requirements to ensure cumulative GHG reductions.

As described in Section 5.7, Greenhouse Gas Emissions, greenhouse gas emission modeling was used to predict the amount of greenhouse gasses the Project would generate during construction and operation. The total GHG emissions from the Project are below the SCAQMD interim significance threshold level of 10,000 MTCO₂e/year for industrial projects.

Although the proposed Project is expected to emit greenhouse gases, given the global reach of climate change, the emission of greenhouse gases by a single project into the atmosphere is not itself

necessarily an adverse environmental effect. Rather, it is the increased accumulation of greenhouse gas from more than one project and many sources in the atmosphere that may result in global climate change. The resultant consequences of that climate change can cause adverse environmental effects on a cumulative basis. The fact that GHG emissions are cumulative was noted by the CRNA in its Public Notice for the SB 97's CEQA amendments regarding GHG (DEIR, p. 5.7-23). Because the proposed Project's GHG emissions would not exceed the SCAQMD's recommended 10,000 MTCO₂e/yr screening threshold, the cumulative impact of the proposed Project on GHG emissions would be less than significant.

7.3.8 Hazards and Hazardous Materials

The cumulative study area associated with hazardous materials is typically site-specific except where past, present, and/or proposed land uses would impact off-site land uses and persons or where past, present, or foreseeable future development in the surrounding area would cumulatively expose a greater number of persons to hazards (e.g., hazardous materials and/or waste contamination). Although the future occupants of the Project's proposed buildings are not presently known, if businesses that use or store hazardous materials occupy the Project area, the business owners and operators would be required to comply with all applicable federal, state, and local regulations to ensure proper use, storage, and disposal of hazardous substances. Such uses also would be subject to review and permitting requirements by the City of Perris or other oversight agencies, as appropriate. Similarly, any other developments in the area proposing the construction of uses with the potential for use, storage, or transport of hazardous materials also would be required to comply with applicable federal, state, and local regulations, and such uses would also be subject to review and permitting requirements by the City of Perris or other oversight agencies, as appropriate. Therefore, the potential for release of toxic substances or hazardous materials into the environment, either through accidents or due to routine transport, use, or disposal of such materials, would be less than significant for the Project and development in the surrounding area. Accordingly, the Project would not result in a cumulatively considerable contribution to a significant cumulative impact related to hazardous materials.

The Project area is not located within ¼-mile of an existing or planned school; therefore, the Project would not contribute to a cumulatively significant hazards/hazardous materials impact on any public or private schools located within ¼-mile of the site. The Project area is not located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. In the unlikely event that hazardous materials are encountered beneath the surface of the site during grading or construction, the materials would be handled and disposed of in accordance with regulatory requirements. As discussed in Section 5.8 – Hazards and Hazardous Materials, the Project will implement Project-specific mitigation measures **MM HAZ 1**, which requires soil testing prior to grading to confirm soil safety and **MM HAZ 2**, which requires the Project Applicant to perform an investigation of the Project site prior to grading to determine if a well is still present on the Property, and if so, ensure it is properly abandoned. Therefore, the Project would not result in a cumulative considerable contribution to a significant cumulative impact related to an accidental release of hazardous materials.

The Project area is within the Airport Influence Area (AIA) for March Air Reserve Base/Inland Port Airport (MARB/IPA) and would not conflict with requirements outlined in the MARB/IPA ALUCP, PVCCSP, and PVCCSP EIR. The Project would have a less than significant impact related to the potential to result in a safety hazard or excessive noise for people residing or working in the Project area. Cumulative development within the MARB/IPA's AIA would similarly be required to demonstrate consistency with the MARB/IPA ALUCP and adhere to requirements outlined in the PVCCSP and PVCCSP EIR (for

Duke Warehouse at Patterson Avenue and Nance Street DEIR

projects in the PVCCSP area). Therefore, the Project would not result in a cumulatively considerable contribution to a significant cumulative impact related to aviation hazards.

The Project would involve implementation of roadway and site access improvements and would not impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan area. Similarly, cumulative development in proximity to the Project site would be implemented in compliance with the PVCCSP, including the construction of required roadways and site access. The Project would not contribute to any cumulative impacts associated with an adopted emergency response plan or emergency evacuation plan. The Project site is not located within or in proximity to areas identified as being subject to wildland fire hazards. Additionally, surrounding areas that are currently vacant would be developed in a manner consistent with jurisdictional requirements for fire protection, and would generally decrease the fire hazard potential in the local area. As such, fire hazards are anticipated to decline over time, and the Project would not contribute to any cumulative impacts will be less than significant with mitigation incorporated.

7.3.9 Hydrology and Water Quality

The geographic context for the Hydrology and Water Quality cumulative impact analysis is the San Jacinto River Watershed. Cumulative development within this watershed will increase the area of impervious surfaces, which will increase the amount of runoff, pollutant loads, reduce potential for groundwater recharge, and pose a greater number of people and structures to flood hazards.

Cumulative impacts to surface water and ground water quality could be significant with the addition of substantial increases in development and temporary construction activities in the San Jacinto River Watershed. These cumulative effects from stormwater and non-stormwater runoff include increased flow rates, increased erosion, increased sedimentation/siltation, higher concentrations of urban pollutants entering waterbodies and soil, and decreased potential for groundwater recharge. The proposed Project, along with all of the public and private development and construction projects in the watershed, are required to comply with current storm water regulations to reduce the discharge of pollutants to the maximum extent practicable from construction-related activities and post-construction operation of the site. Erosion control best management practices (BMPs) will be implemented during construction of the Project in compliance with the National Pollutant Discharge Elimination Systems (NPDES) General Permit for Construction Activities. After construction, the proposed Project will implement the permanent runoff treatment systems identified in Project-Specific Water Quality Management Plan Duke-Patterson P21-00005 (included as Appendix H.2 to this DEIR). In regard to groundwater recharge, the Project is consistent with the current (September 2021) Groundwater Sustainability Plan for the local groundwater basin, which outlines the efforts to be undertaken by local water suppliers to sustainably manage the basin by no later than 2042. Therefore, through implementation of existing regulations, project construction and long-term operations would not considerably contribute to significant cumulative impacts to water quality and groundwater recharge in the San Jacinto River Watershed.

Likewise, each development project in the San Jacinto River Watershed will be required to ensure that its contribution of runoff will not exceed the capacity of existing or planned stormwater drainage systems. The proposed Project includes off-site and on-site design features to ensure that runoff from the Project, in conjunction with development of upstream properties will not individually or collectively overwhelm downstream drainage systems or properties (included as Appendix H.2 to this DEIR). Therefore, through implementation of existing regulations by the Riverside County Flood Control and Water Conservation District (RCFC&WCD) and the City addressing sufficient drainage system capacity,

the Project would not contribute to significant cumulative impacts to drainage systems in the San Jacinto River Watershed. With regard to flood hazards, the Project is not located within a FEMA flood hazard area, nor is it in a dam inundation zone or within reasonable proximity to a tsunami or seiche. Therefore, the Project will not contribute to cumulative impacts related to flood hazards.

7.3.10 Land Use

The geographic context for land use is the City of Perris. As with the proposed Project, all development projects within the City are required to comply with applicable local and regional land use plans and policies. Accordingly, a project with the City cannot be approved that is not consistent with the Perris GP 2030 and Perris Municipal Code unless amendments, variances, or exceptions are proposed and adopted as part of the project. The proposed Project is located within the PVCCSP planning area. As described in Section 3 – Project Description, the Project Applicant proposes an amendment to the PVCCSP Circulation Plan to delete California Avenue and Nance Street between Patterson Avenue and Nevada Avenue. Implementation of the proposed specific plan amendment was determined to have a less than significant impact on the environment. Additionally, the proposed Project was found to be consistent with the applicable policies and guidelines of the Perris GP 2030 and the PVCCSP. Therefore, the Project's contribution with regard to conflicts with applicable land use plans, policies, or regulations is not considerable and cumulative impacts in this regard are not significant.

7.3.11 Noise

As identified in the PVCCSP EIR, the geographic context for the analysis of cumulative noise impacts is the City of Perris. The Perris GP 2030 EIR concluded that implementation of the Perris GP 2030 would represent a less than significant impact regarding exposure of people to severe noise levels in excess of established standards or a substantial permanent increase in ambient noise levels. The PVCCSP EIR identified that implementation of land uses within the specific plan area would result in the introduction of new noise sources and levels. Construction crew commutes and the transport of construction equipment and materials to the site for the proposed Project would incrementally increase noise levels on access roads leading to the site. Secondary sources of noise would include noise generated during excavation, grading, and construction on the Project site.

Noise, by definition, is a localized phenomenon and noise levels rapidly reduce exponentially as distance from the noise source increases. Consequently, only noise resulting from the proposed Project and growth anticipated to occur in the immediate area of the proposed Project site would be likely to contribute to cumulative noise impacts. The Project construction noise impacts on-site and for the off-site roadway improvements are localized in nature and decrease substantially with distance. Consequently, in order to achieve a substantial cumulative increase in construction noise levels, more than one source emitting high levels of construction noise would need to be in close proximity to a sensitive noise receptor location.

As discussed in Section 5.11 – Noise, Project-generated construction noise impacts would be less than significant. Nonetheless, the Project will implement PVCCSP EIR mitigation measures **MM Noise 1** through **MM Noise 4** to minimize construction noise levels. Although the Project is in proximity to non-conforming residential uses that are considered sensitive noise receptors (see **Figure 5.11-1 – Receptor and Monitoring Locations**), it is unlikely that there would be construction on any adjacent parcels occurring at the same time as construction on the Project site that would contribute to a cumulatively considerable short-term construction noise impact. Further, each future public and private development project would be required to mitigate construction noise impacts to the extent feasible and to comply

with all applicable city, state, and federal standards related to noise. Further, the PVCCSP EIR concluded that the impact of construction of the PVCCSP's implementing development and infrastructure projects would not be cumulatively considerable or significant.

Regarding long-term noise from Project operation, the analysis in Section 5.11 – Noise, demonstrates Project-generated operational noise contributions, shown in **Table 5.11-P – Daytime Operational Noise Levels (dBA L**eq) and **Table 5.11-Q – Nighttime Operational Noise Levels (dBA L**eq) would not result in a cumulative increase in noise levels that would exceed the City's established thresholds of significance. As such, the Project's incremental contribution to long-term stationary-source noise in the City would not be cumulatively considerable.

Regarding mobile-source noise, the PVCCSP EIR concluded that the cumulative impact of build out of the PVCCSP would have significant noise impacts for 12 roadway segments of the 79 roadway segments studied.² The proposed Project is not located along any of these 12 roadway segments and, based on the analysis in the *Nance Warehouse Project Traffic Impact Analysis for DPR 21-00005*, none of the Project-generated trips are expected to use these 12 roadway segments. As shown in **Table 5.11-M – Change in Existing Noise Levels at Road Segments as a Result of Project** and discussed in Section 5.11.5, the Project will result in a less than 1 dBA increase in noise. Thus, Project-generated traffic will not result in a substantial noise increase in the proximity of any sensitive receptor or exceed the noise standards of the Perris GP 2030 or the Perris Municipal Code. Therefore, when taken into consideration along with the future public and private development projects, the Project's contribution to cumulative noise impacts are considered less than significant.

With regard to operational noise, each cumulative development project will be responsible for ensuring that City noise standards are not exceeded; therefore, cumulative impacts will be less than significant.

7.3.12 Transportation

Utilizing the summary of projections method, the geographic context for an analysis of transportation impacts considers total buildout of the City of Perris.

Regarding conflicts with programs, plans, ordinances, or policies addressing the circulation system, as described in Section 3 – Project Description, the Project Applicant proposes an amendment to the PVCCSP Circulation Plan to delete California Avenue and Nance Street between Patterson Avenue and Nevada Avenue. Implementation of the proposed Specific Plan Amendment was determined to have a less than significant impact on the environment. As discussed in Section 5.13 – Transportation, the proposed Project is consistent with all other applicable PVCCSP Standards and Guidelines. Future development projects would be reviewed for consistency with adopted programs, plans, ordinances, or policies, including but not limited to the SCAG RTP/SCS, Perris GP 2030, and the PVCCSP, as applicable. Even if future public and private development projects are in conflict, the Project would not

² The 12 roadways are: Ramona Expressway from Redlands Avenue to Evans Road and from Evans Road to Bradley Road; Rider Street from Evans Road to Bradley Road; Placentia Avenue from Perris Boulevard to Redlands Avenue, from Redlands Avenue to Wilson Avenue, from Wilson Avenue to Murrieta Road, and from Murrieta Road to Evans Road;. Perris Boulevard from Orange Avenue to Placentia Avenue and from San Michele Road to Krameria Avenue; and Redlands Avenue from Nuevo Road to Citrus Avenue, from Citrus Avenue to Orange Avenue and from Orange Avenue to Placentia Avenue.

It should be noted that the noise increases along the analyzed roadway segments of Placentia Avenue from Wilson Avenue to Murrieta Road and From Murrieta Road to Evans Road (adjacent to sensitive receptors) are solely due to the fact that these roadway segments do not currently exist and therefore there is no existing noise level. (PVCCSP EIR, pp. 4.9-194.9-20.)

contribute to a cumulative impact because the Project does not conflict with a program, plan, ordinance, or policy addressing the circulation system.

State CEQA Guidelines Section 15064.3 addresses Vehicle Miles Traveled (VMT). As discussed in Section 5.13- Transportation, a VMT Analysis consistent with the requirements of SB 743 and the City of Perris' *Transportation Impact Analysis Guidelines for CEQA* (TIA Guidelines) to determine the Project-generated VMT and projected effect on VMT for the following scenarios as presented in Table 7.4 Project

Table 7- A - Project-Generated VMT.

- Base year conditions;
- Base year plus project conditions;
- Horizon year without project conditions; and
- Horizon year with project conditions.

Per the City's TIA Guidelines, a project would result in a significant project-generated VMT impact if either of the following conditions are satisfied:

- The base model year Project-generated VMT per service population exceeds the City of Perris baseline VMT per service population, or
- The future model year Project-generated VMT per service population exceeds the City of Perris base year VMT per service population. (TIA Guidelines, p. 10)

When evaluating cumulative VMT impacts, a project that falls below an efficiency-based threshold such as VMT per service population and that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact. (OPR 2018.) As such, the Project's cumulative impacts are evaluated based on consistency with the PVCCSP and the findings of the VMT Analysis. As stated in Section 3.0 – Project Description, although the Project Applicant proposes an amendment to the PVCCSP Circulation Map, the land use proposed by the Project Applicant is consistent with the land use designations in the PVCCSP.

Per the City's TIA Guidelines, modeling was performed for the with and without Project scenarios under baseline (2018) and future year (2045) conditions. The plus Project conditions VMT was derived by adding the Project land use to a separate TAZ and a full base year and year 2045 model run were performed to isolate the VMT for the Project. The Project-generated VMT was extracted from the model using the origin-destination (O/D) trip matrix. (VMT Analysis, p. 2.) The results of the VMT analyses are summarized in **Table 7.0-A**.

	Baseline (2018)		Future Year (2045)	
	City	Project	City	Project
VMT	2,931,236	15,412	5,228,215	14,857
Service Population	90,351	512	165,234	512
VMT/SP	32.44	30.10	31.64	29.02

Table 7-A -	- Project Generated V	/MT
-------------	-----------------------	-----

Source: Appendix K.1, Table A

As shown above in **Table 7-A**, and further discussed in detail in Section 5.13 of this DEIR, impacts are less than significant under the baseline and 2045 per service population. Under the baseline condition, the Project's VMT service population (30.10) is less than the City's VMT service population (32.44).

Duke Warehouse at Patterson Avenue and Nance Street DEIR

Under the 2045 condition, the Project's VMT service population (29.02) is less than the City's VMT service population (31.64).

Therefore, since the Project's VMT is less than the Citywide VMT in both the baseline and future year conditions, Project-specific impacts are less than significant. Because the Project does not contribute to an increase in City-wide VMT, cumulative impacts with regard to being in conflict with or inconsistent with State CEQA Guidelines Section 15064.3(b) would be less than significant.

Regarding a substantial increase in hazards due to geometric design features or incompatible uses, as with the Project, future public and private development projects in the vicinity of the Project site would be required to construct roadways and access driveways in accordance with applicable PVCCSP Standards and Guidelines to ensure impacts are less than significant. Further, providing sufficient emergency access during construction and operation is also a standard requirement. The Project would not result in a cumulatively considerable contribution to a significant cumulative impact associated with traffic-related hazards or emergency access.

For the reasons set forth above, the proposed Project's incremental contribution to cumulative traffic impacts would be less than significant.

7.3.13 Tribal Cultural Resources

The geographic scope for cumulative impacts to tribal cultural resources is defined by the cultural setting and territory of the prehistoric and historic people who occupied the area of southern California in which the City is located. Western Riverside County was part of the territory of the Cahuilla and perhaps Luiseño people. Cumulative projects in the Project area and other development in western Riverside County could result in the progressive loss of as-yet unrecorded tribal cultural resources. This loss, without proper mitigation, would be an adverse cumulative impact.

Future public and private development and construction projects within the City have the potential to impact tribal cultural resources; however, to reduce impacts to tribal cultural resources, future public and private development and construction projects within the City for which a negative declaration, mitigated negative declaration, or environmental impact report are required are subject to the Assembly Bill 52 (AB 52) consultation process with Native American Tribes. Future projects that entail adoption or amendment of a specific plan or general plan will also require consultation with Native American Tribes per Senate Bill 18 (SB 18).

In addition to the consultation processes required per AB 52 and SB 18, each development proposal received by the City undergoes environmental review and would be subject to the same resource protection requirements as the Project. Neither the Project nor other cumulative developments are expected to result in significant impacts to tribal cultural resources, provided site-specific surveys are conducted and required measures to protect the tribal cultural resources are implemented.

As discussed in Section 5.14 – Tribal Cultural Resources, as required by AB 52 the City of Perris conducted Native American consultation with five potentially culturally affiliated tribes. To date none of the five tribes notified by the City have responded. As further discussed in Section 5.14, the Project will have a less than significant impact on tribal cultural resources as defined in Public Resources Code Section 21074 with the implementation of Project-specific mitigation measures **MM CR 1** and **MM CR 2**. Therefore, the Project's incremental contribution to cumulative impacts will be less than significant with mitigation incorporated.

7.3.14 Utilities and Service Systems

The geographic context for cumulative impacts to Utilities and Service Systems are the service areas for the respective utility providers. Future public and private development projects in these service areas will result in the expansion of utilities to serve all of the developable parcels in the PVCCSP, City of Perris, and surrounding jurisdictions, if they have not already been expanded.

Cumulative impacts to potable water delivery and supply, wastewater conveyance and treatment capacity, stormwater drainage, dry utilities (i.e., electric power, natural gas, and telecommunications), and solid waste generation and disposal could be significant if the providers of these utilities had not accounted for development of the Project site and its effect on their projections to meet customer demands. These cumulative effects include insufficient water supply, insufficient wastewater treatment capacity, impairment of solid waste reduction goals and construction of utilities that would cause significant environmental effects. The proposed Project, including the other planned developments in the PVCCSP, will be conditioned to construct the off-site and on-site infrastructure consistent with the overall development envisioned by the PVCCSP and in consultation with the utility providers to ensure each project can receive service. The utility providers for the PVCCSP have accounted for development of the PVCCSP area and the Project in their respective planning documents, including the EMWD's *2020 UWMP*, EMWD's *2015 Wastewater Collection System Master Plan Update*, RCFC&WCD's *Perris Valley Master Drainage Plan (MDP*), and City of Perris' solid waste reduction policies in conjunction with Riverside County's responsibility to ensure sufficient landfill capacity for countywide buildout. At such time that these providers undertake expansion projects, they will make their own CEQA determinations.

The cumulative growth from the PVCCSP, including the Project, has been addressed in the Perris GP 2030 EIR. Regarding water and wastewater utilities, the PVCCSP EIR determined, "there is adequate existing capacity to provide water and sewer service to the PVCC project" (p. 5.0-11) and "project-related contribution to impacts related to the construction of new water or wastewater treatment facilities or the expansion of existing water and wastewater facilities would not be cumulatively considerable and is less than significant (p. 5.0-11)." The Project requires a short connection to an existing water pipeline and an extension of wastewater pipelines in roadways. The environmental impacts of constructing these facilities, and all off-site utilities, have been addressed throughout this DEIR and will be less than significant with mitigation. Therefore, the Project will not have cumulatively considerable impacts related to the construction of water and wastewater facilities.

The sufficiency of water supplies available to serve the Project in addition to the supplies required for the cumulative development within EMWD's service area is analyzed every five years in EMWD's UWMP. Pursuant to the Water Code, the UWMP makes a minimum 20-year projection of water demands and water supplies in the service area. According to the WSA prepared by EMWD for the Project and approved by EMWD's Board of Directors on April 16, 2022, the water demand of the Project has been accounted for in the *2020 UWMP* demand projections including demand projections for normal years and drought years up to a five dry year period. Because EMWD determined in its *2020 UWMP* that supplies will be sufficient to meet water demands in all year types through 2040, the Project will not have cumulatively considerable impacts to water supplies.

The sufficiency of wastewater treatment capacity for the Project and for the cumulative development in the tributary area of the Perris Valley RWRF is analyzed in EMWD's 2015 Wastewater Collection System Master Plan. Because EMWD accounted for the wastewater generation of the tributary area to the Perris Valley RWRF, which includes the PVCCSP and the Project with generally the same land use

Duke Warehouse at Patterson Avenue and Nance Street DEIR

designations as proposed, the Project will not have cumulative considerable impacts to wastewater treatment capacity.

Regarding drainage, cumulative development and changes in land use in the San Jacinto River Watershed will increase the area of impervious surface, which increases flow rates and results in higher concentrations of pollutants in stormwater, as described previously in Section 7.3.5. The PVCCSP EIR determined that, "storm water runoff from the proposed project [PVCCSP] will not exceed the capacity of existing or planned storm water drainage systems" and "potential impacts related to existing or planned storm water drainage systems are therefore less than significant." (PVCCSP EIR p. 4.11-28.) Furthermore, "construction of the storm water drainage facilities associated with the PVCC will not cause significant environmental effects beyond those discussed throughout this DEIR. (PVCCSP EIR p. 4.11-29.) The Project requires several on-site and off-site drainage facilities. Because the PVCCSP EIR determined the PVCCSP will not have cumulatively considerable impacts related to drainage systems, the Project's proposed drainage facilities which are consistent with the local Master Drainage Plan will also not be cumulatively considerable.

Regarding dry utilities (i.e., electricity, natural gas, and telecommunications), the Project will relocate existing power poles and make connections to each provider's network. The environmental impacts of said off-site facilities is analyzed in this DEIR. SCE is the electricity provider, SoCal Gas is the natural gas provider, and Frontier Communications is the telecommunication provider for the Project. Future public and provide development projects within the City including those within the PVCCSP and the proposed Project, will increase the number of connections to these utilities, the cumulative impact of which would be increased demand for electricity, natural gas, and telecommunications. Traditionally, dry utilities are installed or upgraded by the appropriate service providers as new development is built and installation is supported by the service fees customers pay to have these services. According to the Perris GP 2030 EIR, "both SoCal Gas and SCE indicated that, as reactive providers, which supply services to customers at their request they would be able to service future developments under General Plan 2030 build-out within the City, in combination with all projected future developments within their service boundaries" (p. IV-252). Therefore, for the reasons stated above, the Project will not have cumulatively considerable impacts related to dry utilities.

The solid waste collection and disposal provider is CR&R Waste Services through a contract with the City. CR&R disposes waste from the City at either the Badlands Landfill or El Sobrante Landfill. These solid waste facilities are currently projected to remain open and have sufficient daily capacity to handle solid waste from the Project and other cumulative developments. As stated in the PVCCSP EIR, "With planned expansion activities of County landfills and projected growth rates contained with a Landfill System Capacity Projection Study (August 2001) prepared for the County, the Riverside County Integrated Project Final EIR concluded sufficient landfill capacity would exist to accommodate future disposal needs through County buildout in 2040" (p. 5.0-12). All development projects in the PVCCSP and City are required to comply with regulations to reduce solid waste. Therefore, for the reasons stated above, the Project would not have a cumulatively considerable contribution to solid waste disposal capacity and compliance with regulations addressing the reduction of solid waste.

7.4 Conclusion

The Project and cumulative development projects in the Project vicinity will not result in cumulatively considerable impacts.

Section 8 – Alternatives to the Proposed Project

The following discussion considers alternatives to implementation of the Project. The discussion examines the potential environmental impacts resulting from each alternative. Through comparisons of these alternatives to the Project, the relative advantage(s) of each can be weighed and analyzed.

State CEQA Guidelines Section 15126.6 identifies the parameters within which consideration and discussion of alternatives to the proposed Project should occur. As stated in this section of the Guidelines, alternatives must focus on those that would feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any of the significant effects of the Project.

8.1 Project Objectives

As stated previously in Section 3.6 of the DEIR, the objectives of the proposed Project are:

- Develop and operate a logistics center that takes advantage of existing City infrastructure and is adjacent to similar industrial logistics and distribution center uses.
- Develop and operate a logistics center that is in close proximity to March Air Reserve Base/Inland Port Airport (MARB/IPA), Interstate 215 (I-215)/State Route 60 (SR-60) and Interstate 10 (I-10), to support the distribution of goods throughout the region and that also limits traffic truck disruption to residential areas within the City and neighboring jurisdictions.
- Develop and operate a logistics center that takes advantage of visibility from I-215 that will attract quality tenants and will be competitive with other similar facilities in the region.
- Maximize efficient goods movement throughout the region by locating a logistics center in close proximity to the Ports of Los Angeles and Long Beach, enabling trucks servicing the site to achieve a minimum of two roundtrips per day.
- Develop and operate a logistics center that meets industry standards for operational design criteria.
- Implement the Perris Valley Commerce Center Specific Plan (PVCCSP) through development of a land use allowed by the Industrial land use designation and consistent with the development standards and criteria relevant to the site and proposed use.
- Positively contribute to the economy of the City through new capital investment, creation of new employment opportunities, including opportunities for highly trained workers, and expansion of the tax base.
- Provide local employment for residents of the City to improve jobs-housing balance within the City.

8.2 Summary of the Project's Significant Unavoidable Impacts

The analysis in Section 5.0 determined that are there are no significant unavoidable impacts associated with the implementation of the proposed Project.

8.3 Rationale for Alternative Selection

State CEQA Guidelines Section 15126.6(a) requires that an EIR "...describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives." According to this section of the State CEQA Guidelines "...an EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation." An EIR is not required to consider alternatives for examination, and there is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the "rule of reason." (State CEQA Guidelines Section 15126.6 (a).) 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 an alternative. (State CEQA Guidelines Section 15126.6 (f)(1).)

With respect to the selection of alternatives to be considered in an EIR, State CEQA Guidelines Section 15126.6(b) states "...the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly." That is, each alternative must be capable of avoiding or substantially lessening any significant effects of the proposed Project.

The rationale for selecting the alternatives to be evaluated, and a discussion of the "no project" alternative are also required. (State CEQA Guidelines Section 15126.6(e).) Since there are no potentially significant impacts associated with the Project, the only alternative that must be considered is the "no project" alternative. The "no project" alternative could take two forms: 1) no change from the existing uses (vacant land); or 2) development per the approved Perris Valley Commerce Center Specific Plan (PVCCSP), (i.e. no specific plan amendment). Because the "no project" alternative per the PVCCSP is not significantly different from the proposed Project, it was rejected from further consideration and only the "no project" alternative with no change from the existing use will be evaluated in this section.

8.4 Alternatives Rejected from Further Consideration

State CEQA Guidelines Section 15126.6(c) specify that an EIR should identify alternatives that were considered by the lead agency but were rejected during the scoping process and identify the reasons for eliminating the alternatives from further consideration. Section 15126.6(c) further indicates that a lead agency may eliminate an alternative from detailed consideration in an EIR if it fails to meet the basic Project objectives, is infeasible, or does not avoid significant environmental impacts. Two such alternatives were considered and rejected by the City.

8.4.1 Alternative Project Location

Pursuant to State CEQA Guidelines Section 15126.6(f)(2), alternate sites should be evaluated, if any feasible sites exist, where significant impacts can be lessened. An alternative location was considered and rejected by the City as discussed below.

Alternative Location

This alternative was rejected from further consideration because the Project is consistent with existing PVCCSP land use designations of General Industrial (GI) and Light Industrial (LI) for the Project site and there are no site-specific significant and unavoidable impacts that would be lessened if a different site were selected. Moving the proposed Project site would still generate a similar level of impacts that can be mitigated and may result in worse air quality, greenhouse gas emissions, and traffic impacts if the alternative site were to be located further from the freeway system. Rather, because the proposed Project site is in close proximity to MARB/IPA, the I-215 freeway, and existing warehouse facilities to the south, the potential for an alternative site was rejected from further consideration.

It is required under CEQA that alternative site(s) be evaluated if any feasible sites exist where significant impacts can be lessened. The environmental impacts of development on any other site in the City are expected to be similar to those of the proposed Project. In addition, other sites, depending on their biological or cultural resources may have similar or worse impacts than the Project. Given the nature of the proposed Project, an alternative location would not alleviate the impacts because a relocation of the proposed Project would simply move the potential impacts. Thus, an alternative location may meet most of the basic Project objectives but would not substantially lessen impacts and meet the CEQA definition of an alternative. Therefore, this alternative was not further considered.

8.4.2 No Project/No Specific Plan Amendment Alternative

Pursuant to State CEQA Guidelines Section 15126.6(e)(3)(C), the impacts of the No Project Alternative should also be evaluated by projecting what would reasonably be expected to occur in the foreseeable future if the proposed Project were not approved. The "no project" alternative could take two forms: 1) no change from the existing uses (vacant land); or 2) development per the approved PVCCSP (i.e. no specific plan amendment). This alternative was rejected from further consideration because there are no site-specific significant and unavoidable impacts that would be lessened if the proposed street vacations were not pursued.

As noted above, the PVCCSP land use designation for the northern portion of the Project site is GI and the southern portion of the Project site, south of Nance Street, is LI. Most of the Project site, approximately 26 acres, is zoned GI. Approximately 9 acres are zoned LI. Nance Street is designated as a local street that runs an east-west and in its current condition is an unimproved road dirt road between Patterson Avenue and Webster Avenue. The GI zone designation provides for the development of basic industrial uses which may support a wide range of manufacturing and non-manufacturing uses, from large-scale warehouse and warehouse/distribution facilities to outdoor industrial activities. The LI zone designation provides for development of light industrial uses and related activities including manufacturing, research, warehouse and distribution, assembly of non-hazardous products or materials, and retail related to manufacturing. Nance Street bisects the Project site. Under this Alternative, Nance Street between Patterson Avenue and Nevada Avenue would not be vacated. Because California Avenue between Patterson Avenue and Nevada Avenue was dedicated as public right-of-way, but never accepted, it is assumed that this area would be developed. Hence, two separate buildings would be developed under this Alternative since Nance Street would not be vacated.

The maximum Floor Area Ratio, or FAR, for GI and LI is 0.75 based on PVCCSP Development Standards. Under this Alternative, it is assumed that each building would still be developed as a warehouse. Although the maximum FAR is 0.75, for the purposes of this Alternative it is assumed that maximum site coverage would be approximately 50 percent to account for parking, landscape, drainage/water quality, and street setbacks. This is consistent with what the proposed Project site accommodates. As such, under this Alternative, the northern 26 acres would be developed with an approximately 566,300 square foot high-cube unrefrigerated warehouse building and the southern 9-acres would be developed with an approximately 196,000 square foot unrefrigerated non-high-cube warehouse building.¹ Total warehouse building size would be approximately 762,300 square feet, which is similar to and slightly less than the proposed Project.

This No Project/No Specific Plan Amendment Alternative would disturb the same footprint as the proposed Project which means impacts would be similar to the proposed Project for site-specific resources such as biological, cultural, tribal cultural, geology and soils, hazards, and utilities. This Alternative would construct warehouses that total a similar square footage than the proposed Project which means that impacts would be similar to the proposed Project for resources based on building size and use, such as air quality, greenhouse gas emissions, noise and transportation that are based on anticipated trip generation. Therefore, the environmental impacts would be similar to those of the proposed Project. Thus, the No Project/No Specific Plan Amendment Alternative may meet most of the basic Project objectives because the total building size would be similar, but it would not substantially lessen impacts and meet the CEQA definition of an alternative. Therefore, this alternative was not further considered.

8.5 Description of Alternatives Evaluated in the DEIR

This section of the DEIR presents the analysis of one alternative in comparison to the potential environmental effects associated with the proposed Project. In accordance with State CEQA Guidelines Section 15126.6(d), the discussion of the environmental effects of the alternatives may be less detailed than the discussion of the impacts of the proposed Project. Following a description of the alternative is a discussion of potential impacts to each of the environmental topics evaluated in this DEIR. A comparison of alternatives matrix is presented in Section 8.6.

8.5.1 Alternative 1 – No Project/No Build

Pursuant to State CEQA Guidelines Section 15126.6(e)(3)(B), the No Project Alternative for a development project on identifiable property is the circumstance under which the proposed Project does not proceed, and the discussion of the No Project Alternative must compare the environmental effects from the Project site remaining in its existing state, versus the environmental effects that would occur if the proposed Project is approved. Accordingly, under the No Build Alternative, the site would remain in its existing condition and no development would occur.

Evaluation of Alternative 1 – No Project/No Build

Aesthetics

Under Alternative 1, no development would occur, and the existing undeveloped Project site, aside from one, three-parcel lot in the northwest corner utilized for semi-truck trailer storage, would remain undeveloped. Since no development would occur, Alternative 1 would not create any new source of substantial light or glare and would not result in any change in the existing visual character of the site. Therefore, impacts associated with Alternative 1 would be less than that of the proposed Project.

¹ Warehouse building size = lot area in square feet x 50% lot coverage (i.e., 26 acres = 1,132,560 square feet x 50% = approximately 566,300 square feet)

City of Perris Duke Warehouse at Patterson Avenue and Nance Street DEIR

Air Quality

Since no construction activity would occur, Alternative 1 would not generate any short-term construction emissions. Further, no new long-term emissions would result from increased traffic and increased use of energy resources. Due to the avoidance of short-term and long-term criteria pollutant emissions, Alternative 1's air quality impact would be avoided compared to the proposed Project. Therefore, impacts associated with Alternative 1 would be less than that of the proposed Project.

Biological Resources

Since no site preparation or construction activity would occur, Alternative 1 would not result in a change to the existing biology of the Project site. Existing and potential biological species would be able to continue to utilize the Project site as habitat (including breeding and/or seasonal foraging habitat). Thus, impacts would be avoided compared to the proposed Project. Therefore, impacts associated with Alternative 1 would be less than that of the proposed Project.

Cultural Resources

Alternative 1 would retain the Project site's existing conditions. Because there would be no site preparation, grading, or construction, there would be no potential to disturb cultural resources. Thus, impacts would be avoided compared to the proposed Project.

Energy

Under Alternative 1, no development would occur, and the existing undeveloped Project site, aside from the three parcels, totaling 2.7 acres, in the northwest corner utilized for semi-truck trailer storage, would remain undeveloped. Since no development would occur, Alternative 1 would not result in the consumption of energy use from increased vehicle or equipment use or building-related energy. Therefore, impacts associated with Alternative 1 would be less than that of the proposed Project.

Geology and Soils

Under Alternative 1, no development would occur, and the existing undeveloped Project site, aside from the three parcels, totaling 2.7 acres, in the northwest corner utilized for semi-truck trailer storage, would remain undeveloped. Since there would be no development, there would be no potential for geologic hazards to impact people or buildings. Further, since no construction activities would occur, potential impacts to paleontological resources would be avoided. Therefore, impacts associated with Alternative 1 would be less than that of the proposed Project.

Greenhouse Gas Emissions

Due to the avoidance of short-term and long-term GHG emissions, Alternative 1's impacts with regard to GHG emissions would be less than that of the proposed Project.

Hazards and Hazardous Materials

Under Alternative 1, no development would occur, and the existing undeveloped Project site, aside from the three parcels, totaling 2.7 acres, in the northwest corner utilized for semi-truck trailer storage, would remain undeveloped. Since there would be no development, there would be no potential for the routine transport, use, or disposal of hazardous materials, reasonably foreseeable upset and accident conditions, or airport safety hazards or excessive noise for people residing or working in the area. Therefore, impacts associated with Alternative 1 would be less than that of the proposed Project.

Hydrology and Water Quality

Alternative 1 would retain the Project site's existing conditions. Under Alternative 1 the existing hydrologic conditions would continue, and the existing storm drain facilities and storm flow patterns and capacity would remain. However, due to the area's relatively flat terrain and the lack of regional drainage infrastructure, flooding would occur in both major and minor storm events. With no development at the Project site the Project proponent would not contribute to construction of regional drainage infrastructure to alleviate flooding conditions in the Project vicinity. Thus, impacts to hydrology and water quality associated with Alternative 1 would be increased and worse than those of the proposed Project.

Land Use and Planning

Alternative 1 would retain the Project site's existing conditions. The Project site would not be developed and the Project site would remain vacant and underutilized and certain goals and policies of the Perris Comprehensive General Plan 2030 (Perris GP 2030) and the PVCCSP would not be realized. Therefore, impacts with regard to land use and planning would be greater than or worse than that of the proposed Project.

Noise

Since no construction activity would occur, Alternative 1 would not have any short-term noise impacts. Ambient noise increases created by Project-related operations and traffic would also not occur. Therefore, under Alternative 1, impacts to noise would be avoided and less than that of the proposed Project.

Transportation

Alternative 1 would retain the Project site's existing undeveloped and vacant conditions and the existing circulation patterns in the Project site vicinity would remain. Under Alternative 1, no new VMT would be generated at the Project site. Therefore, impacts to transportation would be avoided and less than that of the proposed Project.

Tribal Cultural Resources

Alternative 1 would retain the Project site's existing conditions. Because there would be no site preparation, grading, or construction, there would be no potential to disturb tribal cultural resources. Thus, impacts would be avoided compared to the proposed Project.

Utilities and Service Systems

Alternative 1 would retain the Project site's existing condition and no improvements would occur. No sewer or recycled water service exists. With no development at the Project site the Project proponent would not contribute to construction of infrastructure in the Project vicinity. Therefore, impacts to utilities and service systems would be increased compared to the proposed Project.

Relationship to Project Objectives

Under Alternative 1 it is assumed no development would take place within the Project site limits. No ground-disturbing activities would take place, nor would any form of structure be erected. **Table 8-A – Ability to Achieve Project Objectives, Alternative 1 – No Project/No Build** identifies the Project objectives and whether or not Alternative 1 meets each objective.

Table 8-A – Alternative 1 (No Project Alternative) Ability to Meet ProjectObjectives

Project Objective	Alternative Meets Objective?	
Develop and operate a logistics center that takes advantage of existing City infrastructure and is adjacent to similar industrial logistics and distribution center uses.	No. Alternative 1 will not develop and operate a logistics center adjacent to similar uses that can take advantage of existing City infrastructure.	
Develop and operate a logistics center that is in close proximity to MARB/IPA, I-215/SR-60 and I-10, to support the distribution of goods throughout the region and that also limits traffic truck disruption to residential areas within the City and neighboring jurisdictions.	No. Alternative 1 will not develop and operate a logistics center; thus, this Alternative will not support the distribution of goods throughout the region.	
Develop and operate a logistics center that takes advantage of visibility from I-215 that will attract quality tenants and will be competitive with other similar facilities in the region.	No. Alternative 1 will not develop and operate a logistics center; thus, this Alternative will not attract quality tenants or be regionally competitive.	
Maximize efficient goods movement throughout the region by locating a logistics center in close proximity to the Ports of Los Angeles and Long Beach, enabling trucks servicing the site to achieve a minimum of two roundtrips per day.	No. Alternative 1 will not maximize efficient goods movement because it will not locate a logistics center in proximity to the ports.	
Develop and operate a logistics center that meets industry standards for operational design criteria.	No. Alternative 1 will not develop and operate a logistics center that meets industry standards for operational design criteria.	
Implement the PVCCSP through development of a land use allowed by the Industrial land use designation and consistent with the development standards and criteria relevant to the site and proposed use.	No. Alternative 1 will not implement the PVCCSP.	
Positively contribute to the economy of the City through new capital investment, creation of new employment opportunities, including opportunities for highly trained workers, and expansion of the tax base.	No. Alternative 1 will not contribute to the economy of the City.	
Provide local employment for residents of the City to improve jobs-housing balance within the City.	No. Alternative 1 will not provide local employment for City residents to improve jobs-housing balance within the City.	

Alternative 1 Conclusion

While most environmental impacts would be less than significant with Alternative 1, this Alternative would greatly underutilize the Project site and would not meet any of the Project objectives. State CEQA Guidelines Section 15126.6(f)(1) states that among the factors that may be taken into account when addressing the feasibility of alternatives, are site suitability and economic viability; Alternative 1 is neither suitable for the site nor economically viable. Although in the short-term this alternative may be feasible, over the long-term it is expected that the owners of the site would seek some productive use of this property and that the Project site would therefore be developed in some form. Therefore, since it can be reasonably anticipated that the site would not remain in an undeveloped state over the long term, Alternative 1 is not feasible, as its ability to be implemented would not appear to be feasible.

Remainder of Page Intentionally Left Blank

8.6 Comparison of Alternatives

Table 8-B – Comparison of Alternatives Matrix, below, compares the potential environmental impacts of each alternative and ranks each alternative as having impacts that are increased, similar, or reduced in comparison to the proposed Project.

Environmental Issue	Proposed Project	Alternative 1 No Project/ No Build
Aesthetics	LTSM	Reduced
Air Quality	LTSM	Reduced
Biological Resources	LTSM	Reduced
Cultural Resources	LTSM	Reduced
Energy	LTS	Reduced
Geology and Soils	LTSM	Reduced
Greenhouse Gas (GHG) Emissions	LTSM	Reduced
Hazards and Hazardous Materials	LTSM	Reduced
Hydrology and Water Quality	LTS	Increased
Land Use and Planning	LTS	Increased
Noise	LTS	Reduced
Transportation	LTS	Reduced
Tribal Cultural Resources	LTSM	Reduced
Utilities/Service Systems	LTS	Increased
LTS = Less than Significant Impact LTSM = Less than Significant Impact with Mitigation SU = Significant and Unavoidable Impact		

Table 8-B – Comparison of Alternatives Matrix

8.7 Environmentally Superior Alternative

State CEQA Guidelines Section 15126.6(e)(2) requires the identification of the environmentally superior alternative. Alternative 1 (No Project/No Build) is the environmentally superior alternative. Under this alternative, the Project site would stay in its existing condition and no development would occur. Alternative 1 would avoid most environmental impacts to the Project site for the exception of Hydrology and Water Quality and Utilities and Service Systems. The State CEQA Guidelines also require the identification of another environmentally superior alternative if the No Project Alternative is the environmentally superior alternative. However, the proposed Project did not result in any significant and unavoidable impacts.

Section 9 – References

Environmental Effects Found Not Significant

- California Department of Conservation. California Important Farmland Finder website (search results for Patterson Avenue and Nance Street, CA.) (Available at <u>https://maps.conservation.ca.gov/DLRP/CIFF/</u>, accessed December 22, 2021.) [Cited as DOC]
- California Department of Conservation. Well Finder website (search results for Patterson Avenue and Nance Street, CA.) (Available at <u>https://www.conservation.ca.gov/calgem/Pages/Wellfinder.aspx</u>, accessed December 21, 2022.) [Cited as DOC Well Finder]
- California Department of Forest and Fire Protection, Map of CAL FIRE's Fire Hazard Severity Zones in Local Responsibility Areas – Perris, December 21, 2009. (Available at <u>https://osfm.fire.ca.gov/media/5921/perris.pdf</u>, accessed December 22, 2021.) [Cited as Cal Fire]
- City of Perris, *Perris Valley Commerce Center Specific Plan Initial Study*. August 2009. (Available at the City of Perris) [Cited as PVCCSP IS]
- City of Perris, *Perris Valley Commerce Center Specific Plan Environmental Impact Report*, November 2011. (Available at <u>https://www.cityofperris.org/departments/development-</u><u>services/specific-plans</u>, accessed April 28, 2022.) [Cited as PVCCSP EIR]
- City of Perris, City of Perris General Plan Safety Element. Adopted January 25, 2022. (Available at https://www.cityofperris.org/home/showpublisheddocument/15024/637807110903270000, accessed January 10, 2022.) [Cited as Perris GP 2030]
- City of Perris, *City of Perris website. Perris City Parks.* 2021. (Available at <u>https://www.cityofperris.org/our-city/community-info/perris-city-parks</u>, accessed December 22, 2021.) [Cited as Perris 2021]
- Google Earth Pro, 2021, Version 7.3.4.8248 (Accessed on December 15, 2021) [Cited as Google Earth]
- County of Riverside, Riverside County General Plan, Multipurpose Open Space Element. Revised December 2015. (Available at <u>https://planning.rctlma.org/Portals/14/genplan/general Plan 2017/elements/OCT17/Ch05 MOS</u> <u>E 120815.pdf?ver=2017-10-11-102103-833</u>, accessed December 22,2021.) [Cited as COR GP OS]
- Southern California Association of Governments, *Current Context Demographics and Growth Forecast Technical Report,* Adopted on September 2020. (Available at <u>https://scag.ca.gov/sites/main/files/file-attachments/0903fconnectsocal_demographics-and-growth-forecast.pdf?1606001579</u>, accessed December 22, 2021.) [Cited as SCAG]
- VVUSD, Val Verde Unified School District website. Attendance Boundary Maps. 2021. (Available at <u>https://www.valverde.edu/en-US/attendance-boundary-maps-632a4f64</u>, accessed December 22, 2021) [Cited as VVUSD 2021a]
- VVUSD, Val Verde Unified School District website. District Infographic. 2021. (Available at https://drive.google.com/file/d/1oAs0YGt1yDs43NCd1WOCqRJlbv-WZkig/view, accessed December 21, 2021) [Cited as VVUSD 2021b]

 United States Census Bureau, Quickfacts, Perris City, California. 2021.(Available at http://www.census.gov/quickfacts/table/PST045215/0656700.00, accessed December 21, 2021.) [Cited as USCB]

Aesthetics

- Caltrans, California Department of Transportation website: *Scenic Highways*, 2022. (Available at <u>https://dot.ca.gov/programs/design/lap-landscape-architecture-and-community-livability/lap-liv-i-scenic-highways</u>, accessed on April 28, 2022.) [Cited as Caltrans 2022]
- City of Perris, *Draft Environmental Impact Report City of Perris General Plan 2030*, State Clearinghouse #2004031135, October 2004, certified April 26, 2005. (Available at <u>https://www.cityofperris.org/home/showpublisheddocument/451/637203139698630000</u>, accessed) [Cited as Perris GP 2030 EIR]
- City of Perris, *Perris Valley Commerce Center Specific Plan Initial Study*, August 2009. (Available at the City of Perris.) [Cited as PVCCSP IS]
- City of Perris, *Perris Valley Commerce Center Specific Plan Environmental Impact Report*, November 2011. (Available at <u>https://www.cityofperris.org/departments/development-</u><u>services/specific-plans</u>, accessed April 28, 2022.) [Cited as PVCCSP EIR]
- City of Perris, Perris Valley Commerce Center Specific Plan Amendment No. 12, Adopted January 10, 2012, and subsequently amended and approved January 11, 2022. (Available at <u>https://www.cityofperris.org/Home/ShowDocument?id=2647</u>, accessed on April 28, 2022.) [Cited as PVCCSP]
- City of Perris Municipal Code. (Available at https://library.municode.com/ca/perris/codes/code_of_ordinances. accessed April 28, 2022.) [Cited as Perris MC]
- Riverside County, *Riverside County Ordinance No. 655 Regulating Light Pollution*. Adopted June 7, 1988. (Available at <u>https://www.rivcocob.org/ords/600/655.htm</u>, accessed April 28, 2022.)
 [Cited as Ordinance No. 655]
- United States Census Bureau, *Quickfacts, Perris City, California.* (Available at https://www.census.gov/quickfacts/perriscitycalifornia, accessed May 9, 2022.) [Cited as USCB]

Air Quality

- Albert A. Webb Associates, Air Quality/Greenhouse Gas Analysis for the Duke Warehouse at Patterson Avenue and Nance Street (DPR No. 21 00005), City of Perris, April 21, 2022. (Included as Appendix B.1 to this DEIR) [Cited as AQ Study]
- Albert A. Webb Associates, *Health Risk Assessment Duke Warehouse at Patterson Avenue and Nance Street DPR 21-00005) City of Perris.* January 2022. (Included as Appendix B.2 to this DEIR) [Cited as HRA]
- Albert A. Webb Associates, *Patterson-Nance Warehouse Project Traffic Impact Analysis (DPR 21-00005)*, January 2022. (Included as Appendix B.3 to this DEIR) [Cited as TIA]
- California Air Resources Board, Air Quality and Land Use Handbook: A Community Perspective, April 2005. (Available at <u>www.arb.ca.gov/ch/landuse.htm</u>, accessed February 3, 2022.) [Cited as CARB 2005]
- California Air Resources Board, *The California Almanac of Emissions and Air Quality 2013 Edition*, 2013. (Available at https://ww2.arb.ca.gov/our-work/programs/resource-center/technical-assistance/air-quality-and-emissions-data/almanac, accessed December 23, 2021.) [Cited as CARB 2013]
- California Air Resources Board, *Strategies to Reduce Air Pollution Exposure Near High-Volume Roadways*, April 2017. (Available at https://ww2.arb.ca.gov/sites/default/files/2017-10/rd technical advisory final.pdf, accessed February 3, 2022.) [Cited as CARB 2017]
- Californa Buidling Standards Commission, *California Green Building Standards code, Title 24, Part 11 with July 2021 Supplement*. (Available at https://codes.iccsafe.org/content/CAGBC2019JUL21S, accessed February 4, 2022.) [Cited as CBSC]
- California Energy Commission, 2019 Building Energy Efficiency Standards Fact Sheet, March 2018. (Available at https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency, accessed February 3, 2022.) [Cited as CEC 2019]
- California Energy Commission, 2022 Building Energy Efficiency Standards, December 2021. (Available at https://www.energy.ca.gov/programs-and-topics/programs/building-energyefficiency-standards/2022-building-energy-efficiency, accessed May 12, 2022.) [Cited as CEC 2021]
- City of Perris, City of Perris General Plan, Conservation Element, adopted July 12, 2005, Sustainable Community Amendment adopted February 18, 2008. (Available at <u>https://www.cityofperris.org/departments/development-services/general-plan</u>, accessed February 17, 2022.) [Cited as Perris GP 2030]
- City of Perris, *Perris Valley Commerce Center Specific Plan Final Environmental Impact Report*, State Clearing house # 2009081086, November 2011, certified January 10, 2012. (Available at the City of Perris.) [Cited as PVCCSP EIR]
- Metropolitan Transportation Authority, 2004 Congestion Management Plan for Los Angeles County, Adopted July 22, 2004. (Available at <u>https://planning.lacity.org/eir/CrossroadsHwd/deir/files/references/B12.pdf</u>, accessed February 18, 2022.) [Cited as MTA]
- South Coast Air Quality Management District, *2003 Air Quality Management Plan*, August 1, 2003. (Available at <u>https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/2003-aqmp</u>, accessed on March 2, 2022.) [Cited as 2003 AQMP]
- Southern Califronia Associateaion of Gevernments, 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016 RTP/SCS) April 2016. (Available at <u>https://scag.ca.gov/resources-prior-plans</u>, accessed on February 4, 2022.) [Cited as SCAG 2016]
- Southern Califronia Associateaion of Governments, 2020-2045 Regional Transportation Plan/ Sustainable Communities Strategy of the Southern California Association of Governments-Connect SoCal, September 2020 (Available at <u>https://scag.ca.gov/post/connect-socal-plan</u> accessed on February 4, 2023.) [Cited as SCAG 2020]
- South Coast Air Quality Management District, Application of the South Coast Air Quality Management District for Leave to File Brief of Amicus Curiae in Support of Neither Party and [Proposed] Brief of Amicus Curiae, April 13, 2015. (Available at https://www.courts.ca.gov/documents/9-s219783-ac-south-coast-air-quality-mgt-dist-041315.pdf, February 4, 2022.) [Cited as SCAQMD 2015]
- South Coast Air Quality Management District, CEQA Air Quality Handbook, 1993. (Available at SCAQMD.) [Cited as SCAQMD 1993]
- South Coast Air Quality Mangement District, *Final 2016 Air Quality Mnagement Plan*, March 2017.(Availale at http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp, accessed Februay 17, 2022) [Cited as SCAQMD 2016]

- South Coast Air Quality Management District, *Final Localized Significance Threshold* Methodology, Revised July 2008 (Available at http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf, accessed March 2, 2022.) [Cited as SCAQMD 2008b]
- South Coast Air Quality Management District, *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, May 6, 2005. (Available at <u>http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf</u>, accessed Febraury 3, 2021.) [Cited as SCAQMD 2005]
- South Coast Air Quality Management District, Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions for CEQA Air Quality Analysis, August 2003. (Available at: http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysishandbook/mobile-source-toxics-analysis, accessed February 4, 2022.) [Cited as SCAQMD 2003a]
- South Coast Air Quality Management District, Historical Data by Year, 2020, 2019, 2018. (Available at <u>http://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year</u>, accessed February 16, 2022.) [Cited as SCAQMD 2021a]
- South Coast Air Quality Management District, Mates V Estimated Risk Online Map. (Available at https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23?views=Navigate-the-map, accessed July 13, 2022.) [Cited as SCAQMD 2021b]
- South Coast Air Quality Management District, *Revision to the 1992 Carbon Monoxide Attainment Plan*, September 1994. (Available at SCAQMD.) [Cited as 1992 CO Plan]
- South Coast Air Quality Management District, Multiple Air Toxics Exposure Study (MATES-II), March 2000. (Available at <u>http://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-ii</u>, accessed February 3, 2022.) [Cited as SCAQMD 2000]
- South Coast Air Quality Management District, *Multiple Air Toxics Exposure Study (MATES-III)*, September 2008. (Available at <u>MATES III (aqmd.gov)</u>, accessed February 3, 2022.) [Cited as SCAQMD 2008a]
- South Coast Air Quality Management District, *Multiple Air Toxics Exposure Study (MATES-IV)*, May 2015. (Available at <u>MATES IV (aqmd.gov)</u>, accessed February 3, 2022.) [Cited as SCAQMD 2014]
- South Coast Air Quality Management District, *Multiple Air Toxics Exposure Study* (MATES-V), August 2021. (Available at <u>http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-v</u>, accessed July 14, 2022.) [Cited as SCAQMD 2021c]
- South Coast Air Quality Management District, White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution, August 2003. (Available at http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impactsworking-group/cumulative-impacts-white-paper.pdf, accessed Februaury 4, 2022.) [Cited as SCAQMD 2003b]
- U.S. Environmental Protection Agency, *Criteria Air Pollutants.* (Available at <u>https://www.epa.gov/criteria-air-pollutants</u>, accessed February 3, 2022.) (USEPA 2021)
- United States Environmental Protection Agency, Memorandum, Haul Road Workgroup Final Report Submission to EPA-OAQPS, March 2, 2012. (Available at <u>https://www.epa.gov/sites/production/files/2020-10/documents/haul road workgroup-final report package-20120302.pdf</u>, accessed February 17, 2022.) [Cited as USEPA 2012]
- Western Regional Climate Center, Southern California Cooperative Climatological Data Summaries 2021, (Available at <u>https://wrcc.dri.edu/summary/Climsmsca.html</u>, accessed on February 18, 2022.) [Cited as WRCC 2021]

Biological Resources

- Cadre Environmental, General MSHCP Habitat Assessment/Consistency Analysis and Regulatory Constraints Assessment for 35.65-Acre Duke Patterson & Nance Warehouse Project Site, City of Perris, California, July 16, 2022. (Included as Appendix C.1 to this DEIR) [Cited as Cadre (a)]
- Cadre Environmental, *MSHCP Focused Burrowing Owl Surveys for the 35.65-Acre Duke Patterson & Nance Warehouse Project Site, City of Perris, California,* July 16I, 2022. (Included as Appendix C.2 to this DEIR) [Cited as Cadre (b)]
- Cadre Environmental, Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Biological Resources Compliance Analysis for the 7.65-acre Duke Realty Perris Valley Channel Lateral B Stage 4 Connection, City of Perris/unincorporated Riverside County, California, May 7, 2022. (Included as Appendix C.3 to this DEIR) [Cited as Cadre (c)]
- City of Perris, *Perris Comprehensive General Plan 2030, Conservation Element*, Adopted July 12, 2005; *Sustainable Community Amendment*, Adopted February 18, 2008. (Available at www.cityofperris.org/city-hall/general-plan/Conservation Element 01-08-09.pdf, accessed March 3, 2022.) [Cited as Perris GP 2030)
- City of Perris, *Perris Valley Commerce Center Specific Plan Amendment No. 12*, Adopted January 10, 2012, and subsequently amended and approved January 11, 2022. (Available at https://www.cityofperris.org/home/showpublisheddocument/2647/637799977032200000, accessed March 3, 2022.) [Cited as PVCCSP]
- City of Perris, Perris Valley Commerce Center Specific Plan Final Environmental Impact Report, State Clearing house # 2009081086 November 2011, certified January 10, 2012. (Available at the City of Perris and at <u>https://www.cityofperris.org/home/showpublisheddocument/13874/637455522381730000</u>, accessed March 3, 2022.) [Cited as PVCCSP EIR]
- County of Riverside, *Western Riverside County Multiple Species Habitat Conservation Plan*, Adopted June 17, 2003. (Available at <u>http://wrc-rca.org/about-rca/multiple-species-habitat-conservation-plan/</u>, accessed March 3, 2022.) [Cited as MSHCP]
- Regional Conservation Authority, RCA MSHCP Information App. (Available at http://wrcrca.maps.arcgis.com/apps/webappviewer/index.html?id=2ba3285ccc8841ed978d2d8
 25e74c5fa, accessed March 3, 2022.) [Cited as RCA Info. App]

Cultural Resources

- Applied Earthworks, *Phase I Cultural Resources Assessment for the Duke Warehouse at Patterson Avenue and Nance Street, City of Perris, Riverside County, California*, July 2022. (Included as Appendix D.1 to this DEIR) [Cited as AE]
- Brian F. Smith and Associates, *Phase I Cultural Resources Assessment for the Perris Valley Channel Lateral B Extension Project, City of Perris, Riverside County, California*, June 22, 2022. (Included as Appendix D.2 to this DEIR) [Cited as BFSA]
- City of Perris, *Perris Comprehensive General Plan 2030, Conservation Element*, Adopted July 12, 2005; *Sustainable Community Amendment* Adopted February 18, 2008. (Available athttps://www.cityofperris.org/home/showpublisheddocument/449/637203139693370000, accessed May 6, 2022.) [Cited as Perris GP 2030]

- City of Perris, 2009. Perris Valley Commerce Center Specific Plan Initial Study. August 2009. (Available at the City of Perris Planning Department.) [Cited as PVCCSP IS]
- City of Perris, Perris Valley Commerce Center Specific Plan Final Environmental Impact Report, State Clearinghouse #2009081086. November 2011, certified January 10, 2012. (Available at https://www.cityofperris.org/home/showpublisheddocument/13874/637455522381730000, accessed May 9, 2022.) [Cited as PVCCSP EIR]
- California Health and Safety Code, *Division 7, Part 1, Chapter 2, Section 7050.5*, amended 1987. (Available at http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC§ionNum =7050.5, accessed May 6, 2022.)
- California Health and Safety Code, *Division 7, Part 1, Chapter 2, Section 7051*, January 1, 2018. (Available at http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC§ionNum =7051, accessed May 6, 2022.)
- California Health and Safety Code, *Division 7, Part 1, Chapter 2, Section 7054*, January 1, 2018. (Available at <u>http://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=HSC§ionNum</u> <u>=7054</u>, accessed May 6, 2022.)
- Native American Heritage Commission, *Welcome*, 2022. (Available at <u>http://nahc.ca.gov/</u>, accessed May 6, 2022.) [Cited as NAHC]
- California Public Resource Code, *Division 5, Chapter 1, Section 5024*, amended 1980. (Available at https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=PRC§ionNum_=5024., accessed May 6, 2022.)
- California Public Resources Code, *Division 5, Chapter 1.75, Section 5097.98*, last amended 2009, effective January 1, 2010. (Available at https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?sectionNum=5097.98.&law Code=PRC, accessed May 6, 2022.)
- Office of Historic Preservation, *About the Office of Historic Preservation, 2022*. (Available at <u>http://ohp.parks.ca.gov/?page_id=27961</u>, accessed May 6, 2022.) [Cited as SHPO-A]
- Office of Historic Preservation, *Mission and Responsibilities*, 2022. (Available at http://ohp.parks.ca.gov/?page_id=1066, accessed May 6, 2022.) [Cited as SHPO-B]

Energy

- California Air Resources Board, Advanced Clean Cars Program About. (Available at https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about, accessed May 13, 2022.) [Cited as CARB ACCP]
- California Air Resources Board, Advanced Clean Trucks Fact Sheet, August 20, 2021. (Available at https://ww2.arb.ca.gov/sites/default/files/2021-08/200625factsheet_ADA.pdf, accessed May 13, 2022.) [Cited as CARB ACT]

- California Air Resources Board, *Climate Change Scoping Plan*, December 2008. (Available at http://www.arb.ca.gov/cc/scopingplan/document/adopted scoping_plan.pdf, accessed May 12, 2022.) [Cited as CARB 2008]
- California Air Resources Board, *California's 2017 Climate Change Scoping Plan*, November 2017. (Available at <u>https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf</u>, accessed May 11, 2022.) [Cited as CARB 2017]
- California Air Resources Board, *Truck and Bus Regulation Amendments, Final Statement of Reasons for Rulemaking*, December 16-17, 2010. (Available at http://www.arb.ca.gov/regact/2010/truckbus10/tbfsor.pdf, accessed May 13, 2022.) [Cited as CARB 2010a]
- California Air Resources Board, LEV III and ZEV Regulation Amendments for Federal Compliance Option, December 31, 2012. (Available at http://www.arb.ca.gov/regact/2012/leviiidtc12/leviiidtc12.htm, accessed May 13, 2022.) [Cited as CARB 2012]
- California Air Resources Board, *2020 Mobile Source Strategy*, October 21, 2021. (Available at <u>https://ww2.arb.ca.gov/sites/default/files/2021-12/2020 Mobile_Source_Strategy.pdf</u>, accessed May 13, 2022.) [Cited as CARB 2020]
- California Air Resources Board, Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles, October 2000. (Available at <u>https://ww3.arb.ca.gov/diesel/documents/rrpfinal.pdf</u>, accessed May 13, 2022.) [Cited as CARB 2000]
- California Energy Commission, 2022 Building Energy Efficiency Standards Summary. (Available at https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency, accessed May 17, 2022.) [Cited as CEC 2022]
- California Energy Commission, Appliance Efficiency Regulations-Title 20, 2022. (Available at https://www.energy.ca.gov/rules-and-regulations/appliance-efficiency-regulations-title-20, accessed May 13, 2022.) [Cited as CEC Title 20]
- California Building Standards Commission, 2019 California Green Building Standards Code, Part 11. (Available at https://codes.iccsafe.org/content/CAGBSC2019/cover,accessed May 13, 2022.) [Cited as CALGreen]
- California Department of Energy Commission Fuel Data, *Facts and Statistics*. (Available at <u>https://www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm</u>, accessed May 17, 2022.) [Cited as CDEC]
- California Department of Resources Recycling and Recovery, *Glossary of Terms, Integrated Waste Management Act*, Last Updated September 5, 2018. (Available at https://www.calrecycle.ca.gov/LGCentral/Glossary/#IWMA, accessed May 17, 2022.) [Cited as CalRecycle 2018]
- California Department of Resources Recycling and Recovery, *Jurisdiction Diversion/Disposal Rate Summary*, Last Updated August 22, 2018. (Available at

https://www.calrecycle.ca.gov/LGCentral/Datatools/Reports/DivDispRtSum, accessed May 12, 2022.) [Cited as CalRecycle JD]

- California Department of Resources Recycling and Recovery, Annual Reporting Requirements, Last Updated April 2, 2019. (Available at <u>https://www.calrecycle.ca.gov/LGCentral/AnnualReport/</u>, accessed May 12, 2022.) [Cited as CalRecycle 2019]
- California Department of Resources Recycling and Recovery, *Jurisdiction Diversion/Disposal Rate Summary*, (2007-Current), Jurisdiction Perris. (Available at <u>https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionPost2006</u>, accessed May 11, 2022.) [Cited as CalRecycle Perris]
- California Department of Resources Recycling and Recovery, California's 75 Percent Initiative Defining the Future, Last Updated January 21, 2020. (Available at <u>https://sj-admin.s3-us-west-2.amazonaws.com/2019_0000_CalRecycle_75PercentInitiative.pdf</u>, accessed May 11, 2022.) [Cited as CalRecycle 2020]
- California Energy Commission, Energy Consumption Data Management System, California Energy Consumption Database, Electricity Consumption by Entity, interactive web tool. (Available at http://www.ecdms.energy.ca.gov/elecbyutil.aspx, accessed May 18, 2022.) [Cited as CEC ECDMSa]
- California Energy Commission, Energy Consumption Data Management System, California Energy Consumption Database, Natural Gas Consumption by Entity, interactive web tool. (Available at http://www.ecdms.energy.ca.gov/gasbyutil.aspx, accessed May 18, 2022.) [Cited as CEC ECDMSb]
- California Energy Commission, *Final 2021 Integrated Energy Policy Report Volume IV*, February 2022. (Available at <u>https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2020-integrated-energy-policy-report-update</u> accessed May 11, 2022.) [Cited as TEFA]
- California Gas and Electric Utilities, 2020 California Gas Report, 2020. (Available at https://www.socalgas.com/sites/default/files/2020-10/2020_California_Gas_Report_Joint_Utility_Biennial_Comprehensive_Filing.pdf, accessed May 13, 2022.) [Cited as 2020 CGR]
- California Public Utilities Commission, *Energy Division Resolution E-4456*, January 12, 2012. (Available at http://docs.cpuc.ca.gov/PUBLISHED/FINAL_RESOLUTION/157542.htm, accessed May 13, 2022.) [Cited as CPUC 2012]
- California Public Utilities Commission, California Renewables Portfolio Standard (RPS), Current Renewable Procurement Status. (Available at https://www.energy.ca.gov/programs-andtopics/programs/renewables-portfolio-standard, accessed May 13, 2022.) [Cited as CPUC 2022a]
- California Public Utilities Commission, 2020 California Renewable Portfolio Standard, November 2020. (Available at https://www.cpuc.ca.gov/-/media/cpucwebsite/files/uploadedfiles/cpuc_public_website/content/utilities_and_industries/energy_electricity_and_natural_gas/2020-rps-annual-report.pdf, May 18, 2022) [Cited as CPUC 2020

- California Public Utilities Commission, California's Natural Gas Market, webpage (Available at <u>https://www.cpuc.ca.gov/industries-and-topics/natural-gas</u>, accessed May 13, 2022.) [Cited as CPUC NGC]
- City of Perris, *Perris Comprehensive General Plan 2030, Conservation Element*, adopted July 12, 2005, Sustainable Community Amendment adopted February 18, 2008. (Available at https://www.cityofperris.org/home/showpublisheddocument/449/637203139693370000, accessed May 13, 2022.) [Cited as Perris GP 2030]
- City of Perris, *Perris Comprehensive General Plan 2030, Healthy Community Element*, adopted June 9, 2015. (Available at https://www.cityofperris.org/home/showpublisheddocument/453/637203139703670000, accessed May 13, 2022.) [Cited as Perris GP 2030]
- City of Perris, *Perris Comprehensive General Pan 2030, Land Use Element*, adopted April 26, 2005. (Available at https://www.cityofperris.org/home/showpublisheddocument/457/637203139714030000, accessed May 13, 2022.) [Cited as Perris GP 2030]
- City of Perris, *Perris Valley Commerce Center Specific Plan Final Environmental Impact Report*, State Clearing house # 2009081086 November 2011, certified January 10, 2012. (Available at the City of Perris.) [Cited as PVCCSP EIR]
- City of Perris, City of Perris Climate Action Plan, adopted February 23, 2016. (Available at https://www.cityofperris.org/Home/ShowDocument?id=12935#:~:text=This%20Climate%20Acti on%20Plan%20Climate%20Acti https://www.cityofperris.org/Home/ShowDocument?id=12935#:~" https://www.cityofperris.org https://www.cityo
- Government Publishing Office, Energy Policy and Conservation Act, Public Law 94-163, As Amended Through 115-270, Enacted October 23, 2018, November 5, 2018 (Available at https://www.govinfo.gov/content/pkg/COMPS-845/pdf/COMPS-845.pdf, accessed May 11, 2022.) [Cited as EPCA]
- National Highway Traffic Safety Administration, Federal Register, Vol. 77, No. 199, Rules & Regulations, 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards, effective December 14, 2012. (Available at <u>https://www.gpo.gov/fdsys/pkg/FR-2012-10-15/pdf/2012-21972.pdf</u>, accessed May 13, 2022.) [Cited as NHTSA]
- National Highway Traffic Safety Administration, *Corporate Average Fuel Economy-Finalizes CAFÉ Standards for MYs 2024-2026*. May 2, 2022. (Available at https://www.govinfo.gov/content/pkg/FR-2022-05-02/pdf/2022-07200.pdf, accessed May 13, 2022.) [Cited as NHTSA 2022]
- Legislative Counsel of California, California Senate Bill 100, September 2018. (Available at https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100, accessed May 11, 2022.) [Cited as SB 100]
- Southern California Edison, About Us Who We Are, webpage. (Available at https://www.sce.com/wps/portal/home/about-us/who-we-are/, accessed May 13, 2022.) [Cited as SCE 2022a]

- Southern California Edison, *Projects in Progress: Tehachapi Renewable Transmission Project*, webpage. (Available at <u>https://www.sce.com/wps/portal/home/about-us/reliability/upgrading-transmission/TRTP-4-</u>, accessed May 13, 2022.) [Cited as SCE 2022b]
- Southern California Edison, Projects in Progress: West of Devers Upgrade Project, webpage. (Available at <u>https://www.sce.com/wps/portal/home/about-us/reliability/upgrading-transmission/west-of-devers/</u>, accessed May 13, 2022.) [Cited as SCE 2022c]
- United States Court of Appeals, Rocky Mountain Farmers Union v. Corey (September 18, 2013), U.S. Court of Appeals for the 9th Circuit No. 12-15131. (Available at http://cdn.ca9.uscourts.gov/datastore/opinions/2013/09/18/12-15131.pdf, accessed May 12, 2022.)
- United States Department of Energy, *Energy Sources, Fossil, Oil*, webpage. (Available at http://www.energy.gov/energysources/oil.htm, accessed May 13, 2022.) [Cited as USDOE ES]
- United States Department of Transportation, Federal Highway Administration, Legislation, Regulations, and Guidance, Intermodal Surface Transportation Efficiency Act of 1991 Information, February 24, 2020. (Available at <u>https://www.fhwa.dot.gov/planning/public_involvement/archive/legislation/istea.cfm</u>, accessed May 13, 2022.) [Cited as DOT]
- United States Energy Information Administration, State Profile and Energy Estimates, Profile Overview, Updated March 2022, California. (Available at <u>https://www.eia.gov/state/?sid=CA</u>,accesed accessed May 11, 2022.) [Cited as USEIAa]
- United States Energy Information Administration, *Table CT7: Transportation Sector Energy Consumption Estimates, 1960-2018*, California. (Available at <u>https://www.eia.gov/state/seds/data.php?incfile=/state/seds/sep_use/tra/use_tra_CA.html&sid=</u> <u>CA</u>, accessed May 11, 2022.) [Cited as USEIAb]

Geology and Soils

- Applied Earthworks Inc., *Paleontological Technical Memorandum for the Duke Warehouse at the Patterson Avenue and Nance Street, City of Perris, Riverside County, California.* July 29, 2022. (Included as Appendix F.2 to this DEIR). [Cited as AE]
- Brain F. Smith and Associates, Inc., Paleontological Assessment for the Perris Valley Channel Lateral B Extension Project Perris California. June 22, 2022. (Included as Appendix F.3 to this DEIR) [Cited as BFSA]
- City of Perris, *Draft Environmental Impact Report City of Perris General Plan 2030*, State Clearinghouse #2004031135. October 2004, certified April 26, 2005. (Available at <u>https://www.cityofperris.org/home/showpublisheddocument/451/637203139698630000</u>, accessed January 10, 2022.) [Cited as Perris GP 2030 EIR]
- City of Perris. Perris Valley Commerce Center Specific Plan Initial Study. August 2009. (Available at the City of Perris Planning Department.) [Cited as PVCCSP IS]
- City of Perris, *Perris Valley Commerce Center Specific Plan Final Environmental Impact Report*, State Clearing house # 2009081086 November 2011, certified January 10, 2012. (Available at

https://www.cityofperris.org/home/showpublisheddocument/13874/637455522381730000, accessed January 10, 2022.) [Cited as PVCCSP EIR]

- City of Perris, *Perris Comprehensive General Plan 2030 Safety Element*. Adopted January 25, 2022. (Available at https://www.cityofperris.org/home/showpublisheddocument/15024/637807110903270000https://www.cityofperris.org/home/showdocument?id=465, accessed January 10, 2022.) [Cited as Perris GP 2030]
- City of Perris, *Perris Valley Commerce Center Amendment No. 12 Specific Plan*, adopted January 10, 2012, and subsequently amended and approved January 11, 2022. (Available at <u>https://www.cityofperris.org/Home/ShowDocument?id=2647</u>, accessed April 5, 2022.) [Cited as PVCCSP]
- Google Earth Pro, 2021, Version 7.3.4.8248 (Accessed on December 15, 2021) [Cited as Google Earth]
- Southern California Geotechnical, *Geotechnical Investigation Proposed Warehouse NEC Patterson Avenue and Nance Street Perris California for Duke Realty*. Updated December 13, 2021. (Included as Appendix F.1 to this DEIR.) [Cited as SCG]
- USDA, United States Department of Agriculture Natural Resources Conservation Service website: Web Soil Survey. (Available at <u>https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx</u>, accessed on December 8, 2021.) [Cited as USDA]
- USGS, United States Geological Survey website: U.S. Quaternary Faults. (Available at https://usgs.maps.arcgis.com/apps/webappviewer/index.html?id=5a6038b3a1684561a9b0aadf 88412fcf, accessed on December 14, 2021.) [Cited as USGS]

Greenhouse Gas Emissions

- Albert A. Webb Associates, Air Quality/Greenhouse Gas Analysis for the Duke Warehouse at Patterson Avenue and Nance Street (DPR No.21-00005), City of Perris, July 25, 2022, (Included as Appendix B.1 to this DEIR) [Cited as AQ Study]
- City of Perris, *Perris Comprehensive General Plan 2030, Conservation Element*, adopted July 12, 2005, Sustainable Community Amendment adopted February 18, 2008. (Available at https://www.cityofperris.org/home/showpublisheddocument, accessed May 5, 2022.) [Cited as Perris GP 2030]
- City of Perris, *Perris Comprehensive General Plan 2030, Healthy Community Element,* adopted June 9, 2015. (Available at <u>https://www.cityofperris.org/home/showpublisheddocument,</u> accessed May 5, 2022.) [Cited as Perris GP 2030]
- City of Perris, *Perris Valley Commerce Center Specific Plan Final Environmental Impact Report*, State Clearing house # 2009081086, November 2011, certified January 10, 2012. (Available at the City of Perris.) [Cited as PVCCSP EIR]
- City of Perris, *Climate Action Plan*, adopted February 23, 2016. (Available at https://www.cityofperris.org/Home/ShowDocument, accessed May 5, 2022.) [Cited as Perris CAP]
- California Air Resources Board, Advanced Clean Cars Program About. (Available at <u>https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/about</u>, accessed May 11, 2022.) [Cited as CARB ACCP]

- California Air Resources Board, Staff Report, California 1990 Greenhouse Gas Emissions Level and 2020 Emissions Limit, November 16, 2007. (Available at <u>http://www.arb.ca.gov/cc/inventory/pubs/reports/staff_report_1990_level.pdf</u>, accessed April 19, 2022.) [Cited as CARB 2007a]
- California Air Resources Board, Summary of Board Meeting, Consideration of Recommendations for Discrete Early Actions for Climate Change Mitigation in California, June 21-22, 2007. (Available at <u>http://www.arb.ca.gov/board/ms/2007/ms062107.pdf</u>, accessed April 19, 2022.) [Cited as CARB 2007b]
- California Air Resources Board, Summary of Board Meeting, Public Meeting to Consider Approval of Additions to Reduce Greenhouse Gas Emissions under the California Global Warming Solutions Act of 2006 and to Discuss Concepts for Promoting and Recognizing Voluntary Early Actions, October 25-26, 2007. (Available at <u>http://www.arb.ca.gov/board/ms/2007/ms102507.pdf</u>, accessed April 19, 2022.) [Cited as CARB 2007c]
- California Air Resources Board, *Climate Change Scoping Plan*, December 2008. (Available at <u>http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf</u>, accessed April 19, 2022.) [Cited as CARB 2008]
- California Air Resources Board, Initial Statement of Reason for Proposed Regulation for The Management of High Global Warming Potential Refrigerant for Stationary Sources, October 23, 2009. (Available at <u>http://www.arb.ca.gov/regact/2009/gwprmp09/isorref.pdf</u>, accessed April 19, 2022.) [Cited as CARB 2009]
- California Air Resources Board, Regional Plan Targets; SB375 Regional Plan Climate Targets, March 8, 2018. (Available at <u>Regional Plan Targets | California Air Resources Board</u>, accessed May 24, 2022.) [Cited as CARB 2018]
- California Air Resources Board, *Final Statement of Reasons for Rulemaking*, December 16-17, 2010. (Available at <u>http://www.arb.ca.gov/regact/2010/truckbus10/tbfsor.pdf</u>, accessed April 19, 2022.) [Cited as CARB 2010a]
- California Air Resources Board, Proposed Regulation to Implement the California Cap-and-Trade Program, December 16, 2010. (Available at <u>http://www.arb.ca.gov/regact/2010/capandtrade10/capandtrade10.htm</u>, accessed April 29, 2022.) [Cited as CARB 2010b]
- California Air Resources Board, California Cap-and-Trade Program, *Resolution 10-42, December 16, 2010*. (Available at <u>http://www.arb.ca.gov/regact/2010/capandtrade10/res1042.pdf</u>, accessed April 29, 2022.) [Cited as CARB 2010c]
- California Air Resource Board, *Commitment Letter to National Program*, July 28, 2011. (Available at <u>https://www.epa.gov/sites/production/files/2016-10/documents/carb-commitment-ltr.pdf</u>, accessed April 29, 2022.) [Cited as CARB 2011]
- California Air Resources Board, LEV III and ZEV Regulation Amendments for Federal Compliance Option, December 31, 2012. (Available at <u>http://www.arb.ca.gov/regact/2012/leviiidtc12/leviiidtc12.htm</u>, accessed May 11, 2022.) [Cited as CARB 2012]
- California Air Resources Board, First Update to the Climate Change Scoping Plan: Building on the Framework, May 2014. (Available at <u>https://www.arb.ca.gov/cc/scopingplan/2013 update/first update climate change scoping pla</u> <u>n.pdf</u>, accessed May 11, 2022.) [Cited as CARB 2014]
- California Air Resources Board, *California's 2017 Climate Change Scoping Plan,* November 2017. (Available at <u>https://ww3.arb.ca.gov/cc/scopingplan/scoping_plan_2017.pdf</u>, accessed May 11, 2022.) [Cited as CARB Scoping 2017]

- California Air Resources Board, Short-Lived Climate Pollutant Reduction Strategy, March 2017. (Available at <u>https://ww2.arb.ca.gov/sites/default/files/2018-12/final_slcp_report%20Final%202017.pdf</u>, accessed May 6, 2022.) [Cited as CARB 2017a]
- California Air Resources Board, Clean Car Standards Pavley, Assembly Bill 1493, January 11, 2017. (Available at <u>https://ww3.arb.ca.gov/cc/ccms/ccms.htm</u>, accessed May 11, 2022.) [Cited as CARB 2017b]
- California Air Resources Board, Linkage with Quebec Cap-and Trade System, website. (Available at https://ww2.arb.ca.gov/sites/default/files/cap-andtrade/linkage_archived.pdf, accessed on May 24, 2022.) [Cited as CARB 2019.]
- California Air Resources Board, et al., v. Association of Irritated Residents, et al., (2011). (Available at <u>https://grist.org/wp-content/uploads/2011/05/document_pm_02.pdf</u>, accessed May 6, 2022.) [Cited as AIR 2011]
- California Energy Commission, 2022 Building Energy Efficiency Standards Summary. (Available at https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency, accessed May 25, 2022.) [Cited as CEC 2022]
- California Energy Commission, Appliance Efficiency Regulations-Title 20, 2022. (Available at https://www.energy.ca.gov/rules-and-regulations/appliance-efficiency-regulations-title-20, accessed May 25, 2022.) [Cited as CEC Title 20]
- California Building Standards Commission, Guide to the 2019 California Green Building Standards Code, July 2019. (Available at <u>https://calgreenenergyservices.com/wp/wp-</u> <u>content/uploads/2019 california green code.pdf</u>, accessed May 25, 2022.) [Cited as CBSC 2019]
- California Constitution, Article 4, Section 8(b), June 5, 1990. (Available at https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=CONS§ionNu m=SEC.%208.&article=IV, accessed May 5, 2022.)
- California Office of the Governor, *Governor's Executive Order B-30-15*. April 29, 2015. (Available at <u>https://www.ca.gov/archive/gov39/2015/04/29/news18938/</u>, accessed May 25, 2022.) [Cited as EO B-30-15]
- California Department of Resources Recycling and Recovery, Glossary of Terms, Integrated Waste Management Act, Last Updated September 5, 2018. (Available at <u>https://www.calrecycle.ca.gov/LGCentral/Glossary/#IWMA</u>, accessed May 17, 2022.) [Cited as CalRecycle 2018]
- California Department of Resources Recycling and Recovery, *Jurisdiction Diversion/Disposal Rate Summary*, Last Updated August 22, 2018. (Available at <u>https://www.calrecycle.ca.gov/LGCentral/Datatools/Reports/DivDispRtSum</u>, accessed May 12, 2022.) [Cited as CalRecycle JD]
- California Department of Resources Recycling and Recovery, *Jurisdiction Diversion/Disposal Rate Summary*, (2007-Current), Jurisdiction Perris. (Available at <u>https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionPost2006</u>, accessed May 11, 2022.) [Cited as CalRecycle Perris]
- California Department of Resources Recycling and Recovery, California's 75 Percent Initiative Defining the Future, Last Updated January 21, 2020. (Available at <u>https://sj-admin.s3-us-west-2.amazonaws.com/2019 0000 CalRecycle 75PercentInitiative.pdf</u>, accessed May 11, 2022.) [Cited as CalRecycle 2020]

- California Energy Commission, *Our Changing Climate*, Publication CEC-500-2006-077, July 2006. (Available at http://400.sydneyplus.com/CaliforniaEnergy_sydneyEnterprise/Portal/public.aspx?lang=en-US&p_AAAIR=tab5&d=d, accessed May 11, 2022.) [Cited as CEC 2006]
- California Energy Commission, Guidelines for Certification of Combined Heat and Power Systems Pursuant to the Waste Heat and Carbon Emissions Reduction Act, Public Utilities Code, Section 2840 et seq. (CEC-200-2015-001CMF), Revised February 2015. (Available at <u>https://www.energy.ca.gov/sites/default/files/2020-01/CEC-200-2015-001-CMF_ada.pdf</u>, accessed May 11, 2022.) [Cited as CEC 2015]
- California Energy Commission, 2022 Building Energy Efficiency Standards, March 2018. (Available at <u>https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency</u>, accessed May 12, 2022.) [Cited as CEC 2021]
- California Natural Resources Agency, *Revised Text of the Proposed Guidelines Amendments*, 2009. (Available at <u>http://resources.ca.gov/ceqa/docs/FINAL_Text_of_Proposed_Amendemts.pdf</u>, accessed May 25, 2022.) [Cited as CNRA 2009a]
- California Natural Resources Agency, Notice of Public Hearings and Notice of Proposed Amendment of Regulations Implementing the California Environmental Quality Act, 2009. (Available at <u>http://resources.ca.gov/ceqa/docs/Notice of Proposed Action.pdf</u> accessed May 5, 2022.) [Cited as CNRA 2009b]
- California Natural Resources Agency, 2009 California Climate Adaptation Strategy, 2009. (Available at <u>http://resources.ca.gov/docs/climate/Statewide_Adaptation_Strategy.pdf</u>, accessed May 28, 2022.) [Cited as CNRA 2009c]
- California Ocean Protection Council, State of California Sea-Level Rise Guidance 2018 Update, 2018. (Available at <u>http://www.opc.ca.gov/webmaster/ftp/pdf/agenda_items/20180314/Item3_Exhibit-</u> <u>A OPC_SLR_Guidance-rd3.pdf</u>, accessed May 11, 2022.) [Cited as OPC 2018]
- City of Long Beach, Office of Sustainability, Sustainable City Action Plan, adopted February 2, 2010. (Available at http://www.longbeach.gov/sustainability/media-library/documents/nature-initiatives/action-plan/scap-final/, accessed May 6, 2022.) [Cited as LB 2010]
- City of Los Angeles, Green LA: An Action Plan to Lead the Nation in Fighting Global Warming, May 2007. (Available at <u>http://www.environmentla.org/pdf/GreenLA_CAP_2007.pdf</u>, accessed May 6, 2022.) [Cited as LA 2007a]
- City of Los Angeles, Green LA, City of Los Angeles Harbor Department, Climate Action Plan, December 2007. (Available at <u>https://kentico.portoflosangeles.org/getmedia/7121313c-b303-494c-9f98-834e8282ecd3/report_climate_action_plan</u>, accessed May 24, 2022.) [Cited as LA 2007b]
- Council on Environmental Quality, Memorandum for Heads of Federal Departments and Agencies, Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions, February 18, 2010. (Available at <u>https://obamawhitehouse.archives.gov/sites/default/files/microsites/ceq/20100218-nepaconsideration-effects-ghg-draft-guidance.pdf</u>, accessed May 6, 2022.) [Cited as CEQ 2010]
- Council on Environmental Quality, *Memorandum for Heads of Federal Departments and Agencies, Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in NEPA Reviews*, August 1, 2016. (Available at

https://obamawhitehouse.archives.gov/sites/whitehouse.gov/files/documents/nepa_final_ghg_g uidance.pdf, accessed May 6, 2022.) [Cited as CEQ 2016]

- Government Printing Office, Federal Register, Vol. 75, No. 101, Presidential Documents, Improving Energy Security, American Competitiveness and Job Creation, and Environmental Protection Through a Transformation of Our Nation's Fleet of Cars and Trucks, May 21, 2010. (Available at <u>http://www.gpo.gov/fdsys/pkg/FR-2010-05-26/html/2010-12757.htm</u>, accessed May 6, 2022.) [Cited as GPO FR 2010]
- Government Printing Office, Federal Register, Vol. 76, No. 153, Proposed Rules, 2017-2025 Model Year Light-Duty Vehicle GHG Emissions and CAFÉ Standards: Supplemental Notice of Intent. (Available at <u>https://www.epa.gov/regulations-emissions-vehicles-and-</u> engines/proposed-rule-and-related-materials-2017-and-later-model, accessed May 6, 2022.) [Cited as GPO FR 2011]
- Intergovernmental Panel on Climate Change, Intergovernmental Panel on Climate Change, Fifth Assessment Report, Climate Change 2013 – The Physical Science Basis, 2013. (Available at <u>http://www.ipcc.ch/report/ar5/wg1/</u>, accessed May 6, 2022.) [Cited as IPCC 2013]
- Legislative Counsel of California, California Assembly Bill 32, September 2006. (Available at http://www.leginfo.ca.gov/pub/05-06/bill/asm/ab_0001-0050/ab_32_bill_20060927_chaptered.pdf, accessed May 6, 2022.) [Cited as AB32]
- Legislative Counsel of California, Senate Bill 375, September 2008. (Available at http://www.leginfo.ca.gov/pub/07-08/bill/sen/sb_0351-0400/sb_375_bill_20080930 chaptered.pdf, accessed May 6, 2022.) [Cited as SB 375]
- Legislative Counsel of California, Senate *Bill 605*, September 21, 2014. (Available at http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB605, accessed May 5, 2022.) [Cited as SB 605]
- Legislative Counsel of California, Senate Bill 1078, September 2002. (Available at <u>Bill Text SB-1078 Sea Level Rise Revolving Loan Pilot Program. (ca.gov</u>), accessed May 6, 2022.) [Cited as SB 1078]
- Legislative Counsel of California, Senate Bill 1368, September 2006. (Available at <u>Bill Text SB-1368 State of emergency: termination after 45 days: extension by the Legislature. (ca.gov)</u>, accessed May 6, 2022.) [Cited as SB 1368]
- Legislative Counsel of California, *California Senate Bill 1*, August 2006. (Available at <u>http://www.leginfo.ca.gov/pub/05-06/bill/sen/sb_0001-</u>0050/sb_1_bill_20060821_chaptered.html, accessed May 11, 2022.) [Cited as SB1]
- Legislative Counsel of California, California Senate Bill 100, September 2018. (Available at https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100, accessed May 11, 2022.) [Cited as SB100]
- Legislative Counsel of California, Senate Bill 7, November 2009. (Available at http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200920107SB7, accessed May 11, 2022.) [Cited as WCA 2009]
- Massachusetts v. Environmental Protection Agency (2007) 549 U.S. 497. (Available at http://www.law.cornell.edu/supct/html/05-1120.ZS.html, accessed May 6, 2022.)
- National Highway Traffic Safety Administration, Laws & Regulations, CAFE Fuel Economy, Average Fuel Economy Standards Passenger Cars and Light Trucks Model Year 2011, Final Rule, March 23, 2009. (Available at <u>http://www.nhtsa.gov/DOT/NHTSA/Rulemaking/Rules/Associated%20Files/CAFE_Updated_Fin</u> <u>al_Rule_MY2011.pdf</u>, accessed May 6, 2022.) [Cited as NHTSA 2009]

City of Perris

- National Highway Traffic Safety Administration, Federal Register, Vol. 77, No. 199, Rules & Regulations, 2017 and Later Model Year Light-Duty Vehicle Greenhouse Gas Emissions and Corporate Average Fuel Economy Standards, effective December 14, 2012. (Available at https://federalregister.gov/a/2012-21972, accessed May 6, 2022.) [Cited as NHTSA 2012a]
- National Highway Traffic Safety Administration, Corporate Average Fuel Economy Standards, Passenger Cars and Light Trucks, Model Years 2017-2025, Final Environmental Impact Statement, July 2012. (Available at http://www.nhtsa.gov/staticfiles/rulemaking/pdf/cafe/FINAL_EIS.pdf, accessed May 6, 2022.) [Cited as NHTSA 2012b]
- National Highway Traffic Safety Administration, *Federal Register Notice, Proposed Rule, Corporate Average Fuel Economy Preemption, (86 FR 25980), May 12, 2021. (Available at: https://www.federalregister.gov/documents/2021/05/12/2021-08758/corporate-average-fuel-economy-cafe-preemption, accessed May 11, 2022.) [Cited as NHTSA 2021]*
- National Highway Traffic Safety Administration, Corporate Average Fuel Economy-Finalizes CAFÉ Standards for MYs 2024-2026. May 2, 2022. (Available at https://www.govinfo.gov/content/pkg/FR-2022-05-02/pdf/2022-07200.pdf, accessed May 13, 2022.) [Cited as NHTSA 2022]
- National Oceanic and Atmospheric Administration, President Announces Clear Skies & Global Climate Change Initiatives, February 14, 2002. (Available at <u>http://georgewbush-</u> <u>whitehouse.archives.gov/news/releases/2002/02/20020214-5.html</u>, accessed May 6, 2022.) [Cited as NOAA]
- Office of News and Public Information of the National Academies. *California Sea Level Projected to Rise a Higher Rate than Global Average; Slower Rate for Oregon, Washington, But Major Earthquake Could Cause Sudden Rise*, June 22, 2012. (Available at http://www8.nationalacademies.org/onpinews/newsitem.aspx?RecordID=13389, accessed May 6, 2022.) [Cited as ONPI 2012]
- Professional Engineers in Cal. Gov't v. Schwarzenegger (2010) 50 Cal.4th 989. (Available at http://appellatecases.courtinfo.ca.gov/search/case/mainCaseScreen.cfm?dist=0&doc_id=1945484&doc_no=S183411, accessed May 25, 2022.)
- Rocky Mountain Farmers Union v. Corey(2013) 730 F.3d 940 (Available at http://cdn.ca9.uscourts.gov/datastore/opinions/2013/09/18/12-15131.pdf, accessed May 6, 2022.)
- San Pedro Bay Ports, Clean Air Action Plan 2010 Update, CAAP Update Overview & Technical Documents, October 2010. (Available at https://kentico.portoflosangeles.org/getmedia/68ad1b1f-2241-4edb-8bf2-d9621af288b2/2010 caap update final, accessed May 25, 2022.) [Cited as SPBP 2010]
- Santa Ana Hospital Medical Center v. Belshe (1997) 56 Cal.App.4th 819 (Available at County of Riverside.)
- South Coast Air Quality Management District, *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*, May 6, 2005. (Available at <u>http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf?sfvrsn=4</u>, accessed May 6, 2022.) [Cited as SCAQMD 2005]
- South Coast Air Quality Management District, *Draft AQMD Staff CEQA Greenhouse Gas* Significance Threshold, October 22, 2008. (Available at <u>http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds</u>, accessed May 25, 2022.) [Cited as SCAQMD 2008]
- South Coast Air Quality Management District, *Greenhouse Gas CEQA Significance Threshold Stakeholder Working Group Meeting #15*, September 28, 2010. (Available at

http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqasignificance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-mainpresentation.pdf?sfvrsn=2, accessed May 25, 2022.) [Cited as SCAQMD 2010]

- Southern California Association of Governments, 2012-2035 Regional Transportation Plan/Sustainable Communities Strategies, adopted April 2012. (Available at <u>http://libraryarchives.metro.net/DPGTL/scag/2012-2035-regional-transportation-plan.pdf</u>, accessed May 24, 2022.) [Cited as SCAG 2012]
- Southern California Association of Governments, 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy, adopted April 7, 2016. (Available at <u>https://scag.ca.gov/sites/main/files</u>, accessed May 5, 2022.) [Cited as SCAG 2016]
- Southern California Association of Governments, Connect SoCal, The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy, adopted September 3, 2020. (Available at https://scag.ca.gov/read-plan-adopted-final-plan, accessed May 11, 2022.) [Cited as SCAG 2020]
- State of California Department of Justice, Office of the Attorney General, *Climate Change Impacts in California*, webpage. (Available at https://oag.ca.gov/environment/impact, accessed May 11, 2022.) [Cited as OAG 2022]
- United Nations, Kyoto Protocol to the United Nations Framework Convention on Climate Change, December 11, 1997. (Available at <u>http://unfccc.int/essential_background/kyoto_protocol/items/1678.php</u>, accessed May 6, 2022.) [Cited as UN 1997]
- United Nations, *Paris Agreement*, December 12, 2015. (Available at http://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement .pdf, accessed May 6, 2022.) [Cited as UN 2016a]
- United Nations, Paris Agreement Status of Ratification, webpage. (Available at http://unfccc.int/paris_agreement/items/9444.php, accessed May 6, 2022.) [Cited as UN 2016b]
- United States Environmental Protection Agency, *Recovery: EPA Gets Involved*. (Available at <u>http://www.epa.gov/recovery</u>, accessed May 6, 2022.) [Cited as EPA 2009]
- United States Environmental Protection Agency, Light Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, Final Rule, May 7, 2010. (Available at <u>https://www.gpo.gov/fdsys/pkg/FR-2010-05-07/pdf/2010-8159.pdf</u>, accessed May 6, 2022.) [Cited as EPA 2010]
- United States Environmental Protection Agency, Office of Transportation and Air Quality. EPA and NHTSA Adopt First-Ever Program to Reduce Greenhouse Gas Emissions and Improve Fuel Efficiency of Medium-and Heavy-Duty Vehicles, August 2011. (Available at <u>https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=P100BOT1.TXT</u>, accessed May 6, 2022.) [Cited as EPA 2011]
- United States Environmental Protection Agency, Energy Resources for State, Local, and Tribal Governments, Last updated March 8, 2022. (Available at <u>https://www.epa.gov/statelocalenergy</u> accessed May 6, 2022.) [Cited as EPA 2019]
- United States Environmental Protection Agency, *Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act*. (Available at https://www.epa.gov/climate-change/endangerment-and-cause-or-contribute-findings-greenhouse-gases-under-section-202a, accessed May 4, 2022.) [Cited as EPA ECCF]
- United States Environmental Protection Agency, *Diesel Emissions Reduction Act (DERA) Funding*, webpage. (Available at <u>https://www.epa.gov/dera</u> accessed May 6, 2022.) [Cited as EPA DERA]

- United States Environmental Protection Agency, *Transportation and Air Quality, SmartWay*, Basic Information, webpage. (Available at <u>https://www3.epa.gov/smartway/about/index.htm</u>, accessed May 6, 2022.) [Cited as EPA SW]
- Western Climate Initiative, Design for the WCI Regional Program, July 2010. (Available at https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2010/capandtrade10/capv3appi.pdf, accessed May 24, 2022.) [Cited as WCI 2010]
- Western Riverside Council of Governments, Subregional Climate Action Plan, September 2014. (Available at <u>http://www.wrcog.cog.ca.us/DocumentCenter/View/188</u>, accessed May 6, 2022.) [Cited as WRCOG Subregional CAP-A]
- Western Riverside Council of Governments, *Climate Action Plan*, 2021. (Available at https://wrcog.us/172/Planning#:~:text=Climate%20Action%20Plan%20In%202014%2C%20W RCOG%20completed%20a,to%20assist%20with%20implementation%20of%20recommended %20CAP%20measures, accessed May 11, 2022.) [Cited as WRCOG Subregional CAP-B]

Hazards and Hazardous Materials

- Apex Companies, LLC, *Phase I Environmental Site Assessment Update 39 Parcels at 4946-4800 Patterson Avenue Perris, California 92571*, December 20, 2021. (Included as Appendix G.1 to this DEIR.) [Cited as Apex, 2021]
- City of Perris, *Perris Comprehensive General Plan 2030 Safety Element.* Adopted January 25, 2022. (Available at https://www.cityofperris.org/home/showpublisheddocument/15024/637807110903270000https://www.cityofperris.org/home/showdocument?id=465, accessed January 10, 2022.) [Cited as Perris GP 2030]
- City of Perris, *Perris Valley Commerce Center Specific Plan Amendment No. 12*, Adopted January 10, 2012, and subsequently amended and approved January 11, 2022. (Available at https://www.cityofperris.org/home/showpublisheddocument/2647/637799977032200000, accessed May 4, 2022.) [Cited as PVCCSP]
- City of Perris, *Perris Valley Commerce Center Specific Plan Final Environmental Impact Report*, State Clearing house # 2009081086, November 2011, certified January 10, 2012. (Available at the City of Perris and at <u>https://www.cityofperris.org/home/showpublisheddocument/13874/637455522381730000</u>, accessed May 4, 2022.) [Cited as PVCCSP EIR]
- California Department of Water Resources, *Part III. Destruction of Water Wells.* (Available at https://water.ca.gov/Programs/Groundwater-Management/Wells/Well-Standards/Combined-Well-Standards/Water-Destruction, accessed May 11, 2022,) [Cited as DWR Part III]
- California Department of Toxic Substances Control, Official California Code of Regulations (CCR), Title 22, Division 4.5, webpage. (Available at <u>https://dtsc.ca.gov/title22/</u>, accessed May 4, 2022. [Cited as DTSC]
- Department of the Air Force, Air Force Reserve Command, *Final Air Installations Compatible Use Zones Study, March Air Reserve Base, Riverside, California*, 2018. (Available at https://www.march.afrc.af.mil/Portals/135/documents/MARCH_AICUZ_2018.pdf?ver=2018-02-21-161029-473, accessed May 4, 2022. [Cited as MARB 2018]
- Riverside County Airport Land Use Commission, *Airport Land Use Commission Development Review Findings*, March 10, 2022. (Included as Appendix G.2 to this DEIR.)

- Riverside County Airport Land Use Commission, *Riverside County Airport Land Use Compatibility Plan*, October 14, 2004. (Available at https://www.rcaluc.org/Plans/New-Compatibility-Plan, accessed May 4, 2022.) [Cited as RCALUCP]
- United States Environmental Protection Agency. Summary of the Occupational Safety and Health Act, webpage. (Available at: <u>https://www.epa.gov/laws-regulations/summaryoccupational-safety-and-health-act</u>, accessed on May 4, 2022.) [Cited as EPA]

Hydrology and Water Quality

- Albert A. Webb Associates, *Duke Patterson and Nance, P21-00005, Preliminary Drainage Study*, April 2021, revised March 2022. (Included as Appendix H.1 to this DEIR.) [Cited as WEBB(a)]
- Albert A. Webb Associates, Project Specific Water Quality Management Plan, Duke Patterson & Nance, P21-00005, April 2021, revised March 2022. (Included as Appendix H.2 to this DEIR.) [Cited as WEBB(b)]
- California Regional Water Quality Control Board, Santa Ana Region. Water Quality Control Plan Santa Ana River Basin (aka "Basin Plan"). January 24, 1995, updated February 2016 to include approved amendments. (Available at <u>www.swrcb.ca.gov/rwqcb8/water issues/programs/basin plan/index.shtml</u>, accessed March 18, 2022.) [Cited as RWQCB(a)]
- City of Perris. *Perris Comprehensive General Plan 2030,* originally approved July 12, 2005. (Available at <u>https://www.cityofperris.org/departments/development-services/general-plan,</u> accessed March 18, 2022.) [cited as Perris GP 2030]
- City of Perris. *Perris Valley Commerce Center Specific Plan Amendment No. 12.* Approved January 10, 2012 and subsequently amended and approved January 11, 2022. (Available at https://www.cityofperris.org/departments/development-services/specific-plans, accessed March 18, 2022.) [Cited as PVCCSP]
- City of Perris. *Draft Environmental Impact Report for Perris Valley Commerce Center, SCH No.* 2009081086. July 2011. (Available at the City of Perris Planning Department.) [Cited as PVCCSP EIR]
- Dudek. Groundwater Sustainability Plan for the San Jacinto Groundwater Basin. September 2021. (Available at https://www.emwd.org/sites/main/files/file-attachments/00 cover and table of contents.pdf?1633990715, accessed March 18, 2022.) [Cited as Dudek 2021]
- Eastern Municipal Water District. *Water Supply Assessment Report for Patterson and Nance Project.* February 16, 2022 (included as Appendix H.3 to this DEIR). [Cited as WSA]
- Federal Emergency Management Agency, *National Flood Insurance Program Flood Insurance Rate Map Panel 1410 of 3805 (Map No. 06065C1410G)*, effective 28, 2008. (Available at https://msc.fema.gov/portal/home, accessed March 18, 2022.) [Cited as FIRM 2008].
- Federal Emergency Management Agency, *National Flood Insurance Program Flood Insurance Rate Map Panel 1430 of 3805 (Map No. 06065C1430H)*, map revised August 18, 2014. (Available at https://msc.fema.gov/portal/home, accessed March 18, 2022.) [Cited as FIRM 2014].
- Riverside County. *Rules and Regulations for Administration of Area Drainage Plans*. Adopted June 10, 1980 by Resolution no. 80-244. (Available at

https://rcflood.org/Portals/0/Downloads/ADP Rules and Regulations 9-17-2019.pdf?ver=2020-03-06-115822-727, accessed March 18, 2022.)

- Riverside County. Ordinance No. 460, Regulating the Division of Land of the County of Riverside. As amended through Ordinance No. 460-152, effective 8/14/14. (Available at <u>http://www.rivcocob.org/ords/400/460.pdf</u>, accessed March 18, 2022.)
- Riverside County Flood Control and Water Conservation District. *Master Drainage Plan for the Perris Valley Area.* July 1987, revised June 1991. (Available at <u>http://rcflood.org/downloads/Master%20Drainage%20Plans/MDP_Reports/Zone%204/Perris%</u> <u>20Valley%20MDP.pdf</u>, accessed November 30, 2021.) [Cited as MDP 1991]
- Riverside County Flood Control and Water Conservation District. *Perris Valley Area Drainage Plan and Exhibit.* July 1987, revised June 1991. (Available at <u>http://www.floodcontrol.co.riverside.ca.us/Downloads/Area%20Drainage%20Plans/Updated/Re</u> <u>ports/Perris%20Valley%20ADP.pdf</u>, accessed March 18, 2022.) [Cited as ADP 1991]
- Riverside County Flood Control and Water Conservation District. Water Quality Management Plan: A Guidance Document for the Santa Ana Region of Riverside County. Approved October 22, 2012. (Available at <u>http://rcflood.org/NPDES/SantaAnaWS.aspx</u>, accessed March 18, 2022.) [Cited as WQMP Guidance]
- Riverside County Flood Control and Water Conservation District. Low Impact Development: Guidance and Standards for Transportation Projects for the Santa Ana Region Riverside County Co-Permittees. October 2012. (Available at <u>http://www.floodcontrol.co.riverside.ca.us/NPDES/LIDBMP.aspx</u>, accessed March 18, 2022.) [Cited as LID 2012]
- Southern California Geotechnical. *Geotechnical Investigation Proposed Warehouse, NEC Patterson Avenue and Nance Street, Perris, CA for Duke Realty. Project No. 20G239-3,* Updated December 13, 2021. (Included as Appendix F.1 of this DEIR) [Cited as SCG 2021]
- State Water Resources Control Board. Order No. 2009-0009-DWQ, NPDES No. CAS000002, National Pollutant Discharge Elimination System General Permit (and Waste Discharge Requirements) for Storm Water Discharges Associated with Construction and Land Disturbance Activities. Adopted September 2, 2009. (Available at <u>https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2009/wqo/wqo_2009_0009_dwq.pdf</u>, accessed April 11, 2022.) [Cited as CGP]
- State of California, Regional Water Quality Control Board, Santa Ana Region. Order No. R8-2010-0033, NPDES No. CAS 618033, National Pollutant Discharge Elimination System Permit and Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the Count of Riverside, and the Incorporated Cities of Riverside County within the Santa Ana Region, Area-Wide Urban Runoff Management Program. Adopted January 29, 2010. (Available at https://www.waterboards.ca.gov/santaana/board_decisions/adopted_orders/orders/2010/10_03 3 RC MS4 Permit 01 29 10.pdf, accessed March 18, 2022.) [Cited as MS4]
- State of California, Department of Water Resources. *Sustainable Groundwater Management Act 2019 Basin Prioritization Process and Results.* (Available at https://data.cnra.ca.gov/dataset/13ebd2d3-4e62-4fee-9342-d7c3ef3e0079/resource/ffafd27b-

5e7e-4db3-b846-e7b3cb5c614c/download/sgma_bp_process_document.pdf, accessed March 18, 2022.) [Cited as CASGEM]

- State of California, Department of Water Resources. Sustainable Groundwater Management Act (SGMA) Portal website. Available at <u>https://sgma.water.ca.gov/portal/#intro</u>, accessed March 18, 2022.) [Cited as SGMA]
- U.S. Environmental Protection Agency, *Basic Information about Nonpoint Source (NPS) Pollution* website. (Available at <u>https://www.epa.gov/nps/basic-information-about-nonpoint-source-nps-pollutionhttps://oceanservice.noaa.gov/education/kits/pollution/03pointsource.html</u>, accessed March 18, 2022.) [Cited as USEPA]

Land Use and Planning

- City of Perris, *Perris Comprehensive General Plan 2030*, originally approved July 12, 2005. (Available at the City of Perris and at <u>https://www.cityofperris.org/departments/development-services/general-plan</u>, accessed January 28, 2022.) [Cited as Perris GP 2030]
- City of Perris, Perris Valley Commerce Center Specific Plan Final Environmental Impact Report, State Clearing house # 2009081086 November 2011, certified January 10, 2012. (Available at the City of Perris and at <u>https://www.cityofperris.org/home/showpublisheddocument/13874/637455522381730000</u>, accessed January 28, 2022.) [Cited as PVCCSP EIR]
- City of Perris, *Perris Valley Commerce Center Amendment No. 12 Specific Plan.* January 10, 2012, and subsequently amended and approved January 11, 2022. (Available at https://www.cityofperris.org/home/showpublisheddocument/2647/637799977032200000, accessed April 20, 2022.) [Cited as PVCCSP]
- Mead & Hunt, March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, November 13, 2014. (Available at https://rcaluc.org/Portals/13/17%20-%20Vol.%201%20March%20Air%20Reserve%20Base%20Final.pdf?ver=2016-08-15-145812-700, accessed April 6, 2022.) [Cited as MARB/IPA ALUCP]
- Southern California Association of Governments, 2020 2045 Regional Transportation Plan/Sustainable Communities Strategy of the Southern California Association of Governments Connect SoCal Amendment No.1, adopted September 3, 2020. (Available at <u>https://scag.ca.gov/read-plan-adopted-final-plan</u>, accessed April 20, 2022.) [Cited as SCAG 2020]

Noise

- Albert A. Webb Associates, Patterson- *Nance Warehouse Project Traffic Impact Analysis for DPR 21-00005, January 2022.* (Included as Appendix K.2 in this DEIR) [Cited as TIA]
- California Department of Transportation Division of Environmental Analysis, *Traffic Noise* Supplement to the Traffic Noise Analysis Protocol, 2013. (Available at <u>https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tens-sep2013-a11y.pdf</u>, accessed April 6, 2022)
- City of Perris, *Perris Comprehensive General Plan 2030, Noise Element.* Adopted August 30, 2005, last amended August 30, 2016. (Available at https://www.cityofperris.org/home/showpublisheddocument/461/637203139725000000, accessed April 5, 2022.) [Cited as Perris GP 2030]

- City of Perris, Perris Comprehensive General Plan 2030 Draft Environmental Impact Report, State Clearinghouse #2004031135, October 2004. (Available at <u>https://www.cityofperris.org/home/showpublisheddocument/451/637203139698630000</u>, accessed April 5, 2022.) [Cited as Perris GP 2030 DEIR]
- City of Perris, *Perris Municipal Code, Section 7, Health and Welfare,* 1992. (Available at the City of Perris and at https://library.municode.com/ca/perris/codes/code_of_ordinances?nodeld=COOR_TIT7HEWE_CH7.34NOCO_S7.34.060CONO, accessed April 5, 2022.)
- City of Perris, *Perris Valley Commerce Center Specific Plan Environmental Impact Report,* State Clearing house # 2009081086 November 2011, certified January 10, 2012. (Available at https://www.cityofperris.org/departments/development-services/specific-plans accessed April 5, 2022.) [Cited as PVCCSP EIR]
- City of Perris, *Perris Valley Commerce Center Specific Plan Amendment No. 12*, approved January 10, 2012, and subsequently amended and approved January 11, 2022. (Available at https://www.cityofperris.org/home/showpublisheddocument/2647/637799977032200000, accessed April 5, 2022.) [Cited as PVCCSP]
- ENTECH, Noise and Vibration Study Duke Warehouse at Patterson Avenue & Nance Street, Perris, California, October 2022. (Included as Appendix I in this DEIR) [Cited as ENTECH]
- Mead & Hunt, March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, November 13, 2014. (Available at <u>https://rcaluc.org/Portals/13/17%20-</u> %20Vol.%201%20March%20Air%20Reserve%20Base%20Final.pdf?ver=2016-08-15-145812-700, accessed April 6, 2022.) [Cited as MARB/IPA ALUCP]
- Riverside County Airport Land Use Commission, *Airport Land Use Commission (ALUC)* Development Review. March 10, 2022. (Included as Appendix G.2 in this DEIR) [Cited as ALUC]

Utilities and Service Systems

- Albert A. Webb Associates, *Duke Patterson and Nance, P21-00005, Preliminary Drainage Study*, April 2021, revised March 2022. (Included as Appendix H.1 to this DEIR.) [Cited as WEBB(a)]
- Albert A. Webb Associates, Project Specific Water Quality Management Plan, Duke Patterson & Nance, P21-00005, April 2021, revised March 2022. (Included as Appendix H.2 to this DEIR.) [Cited as WEBB(b)]
- Albert A. Webb Associates, *Design Conditions Report for Patterson & Nance, WS: 2020-1153, WO: 16238*. June 2022. (Included as Appendix J.1 to this DEIR.) [Cited as WEBB(c)]
- California Department of Resources, Recycling, and Recovery website. *History of California Solid Waste Law, 1985-1989.* Last updated July 27, 2018. (Available at <u>https://www.calrecycle.ca.gov/laws/legislation/calhist/1985to1989.</u> accessed January 10, 2022.) [Cited as CalRecycle 2018a]
- California Department of Resources, Recycling, and Recovery website. *History of California Solid Waste Law, 1990-1994.* Last updated July 27, 2018. (Available at <u>https://www.calrecycle.ca.gov/Laws/Legislation/calhist/1990to1994, accessed January 10,</u> <u>2022.</u>) [Cited as CalRecycle 2018b]

- California Department of Resources, Recycling, and Recovery website. *History of California Solid Waste Law, 2010-2014.* Last updated September 5, 2018. (Available at <u>https://www.calrecycle.ca.gov/Laws/Legislation/CalHist/2010to2014/#2011, January 10, 2022.)</u> [Cited as CalRecycle 2018c]
- California Department of Resources Recycling and Recovery, California's 75 Percent Initiative Defining the Future, Last Updated January 21, 2020. (Available at <u>https://sj-admin.s3-us-west-</u>2.amazonaws.com/2019_0000_CalRecycle_75PercentInitiative.pdf, accessed May 11, 2022.) [Cited as CalRecycle 2020c]
- California Department of Resources, Recycling, and Recovery website. SWIS Facility Detail, Badlands Sanitary Landfill (33-AA-0006). (Available at <u>https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2245?siteID=2367.</u> Accessed December 7, 2021.) [Cited as CalRecycle 2020a]
- California Department of Resources, Recycling, and Recovery website. SWIS Facility Detail, El Sobrante Landfill (33-AA-0217). (Available at <u>https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2280?siteID=2402, a</u>ccessed December 7, 2021.) [Cited as CalRecycle 2020b]
- California Legislative Information, Senate Bill No. 1016 Diversion: compliance: per capita disposal rate. Version September 26, 2008. (Available at http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=200720080SB1016, accessed January 10, 2022.) [Cited as CLI 2008]
- City of Perris. *Perris Comprehensive General Plan 2030, Land Use Element* (adopted April 26, 2005, amended August 30, 2016) and *Conservation Element* (adopted July 12, 2005, amended February 18, 2008). (Available at https://www.cityofperris.org/departments/development-services/general-plan, accessed March 18, 2022.) [Cited as Perris GP 2030]
- City of Perris. Perris Valley Commerce Center Specific Plan, Amendment No. 12. Approved January 10, 2012. Ordinance No. 1284 and subsequently amended and approved January 11, 2022. (Available at <u>https://www.cityofperris.org/Home/ShowDocument?id=2647</u>, accessed March 18, 2022.) [Cited as PVCCSP]
- City of Perris, *Draft Environmental Impact Report for Perris Valley Commerce Center, SCH No.* 2009081086. July 2011. (Available at the City of Perris Planning Department.) [Cited as PVCCSP EIR]
- Department of Water Resources. Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001. October 2003. (Available at http://sntbberry.cityofsanteeca.gov/sites/FanitaRanch/Public/Remainder%20of%20the%20Rec ord/(2)%20Reference%20Documents%20from%20EIR%20&%20Technical%20Reports/Tab%2 0185%20-%202003-10%20CDWR%20Guidebook%20for%20Impl%20SB%20610.pdf, accessed March 18, 2022) [Cited as DWR 2003]
- Eastern Municipal Water District. 2020 Urban Water Management Plan. July 1, 2021. (Available at https://www.emwd.org/sites/main/files/file-attachments/urbanwatermanagementplan_0.pdf?1625160721, accessed November 30, 2021.) [Cited as EMWD(a)]

- Eastern Municipal Water District. *Perris Valley Regional Water Reclamation Facility*. January 2021. (Available at <u>https://www.emwd.org/sites/main/files/file-attachments/pvrwrffactsheet.pdf</u>, accessed November 30, 2021.) [Cited as EMWD(b)]
- Eastern Municipal Water District. *Water Supply Assessment*, approved February 16, 2022. (Included as Appendix H.3 to this DEIR.) [Cited as EMWDI]
- Riverside County Flood Control and Water Conservation District. *Master Drainage Plan for the Perris Valley Area.* July 1987, revised June 1991. (Available at <u>http://rcflood.org/downloads/Master%20Drainage%20Plans/MDP_Reports/Zone%204/Perris%</u> <u>20Valley%20MDP.pdf</u>, accessed March 18, 2022.) [Cited as MDP 1991]
- Riverside County Flood Control and Water Conservation District. *Perris Valley Area Drainage Plan and Exhibit.* July 1987, revised June 1991. (Available at <u>http://www.floodcontrol.co.riverside.ca.us/Downloads/Area%20Drainage%20Plans/Updated/Re</u> <u>ports/Perris%20Valley%20ADP.pdf</u>, accessed March 18, 2022.) [Cited as ADP 1991]
- Riverside County Flood Control and Water Conservation District. *Rules and Regulations for Administration of Area Drainage Plans*, Adopted June 10, 1980 by Resolution No. 80-244. (Available at <u>https://rcflood.org/Portals/0/Downloads/ADP Rules and Regulations 9-17-</u> <u>2019.pdf?ver=2020-03-06-115822-727</u>, accessed March 18, 2022.) [Cited as ADP Rules]
- Riverside County Flood Control and Water Conservation District. Water Quality Management Plan: A Guidance Document for the Santa Ana Region of Riverside County. Approved October 22, 2012. (Available at <u>http://rcflood.org/NPDES/SantaAnaWS.aspx</u>, accessed March 18, 2022.) [Cited as WQMP Guidance]
- Riverside County Planning Department. County of Riverside Volume 2: Draft Program Environmental Impact Report No. 521. February 2015. (Available at <u>https://planning.rctlma.org/Portals/14/genplan/general_plan_2015/DEIR%20521/DEIR%20No.%</u> 20521.pdf, accessed May 22, 2022.) [Cited as RCGP EIR]
- State of California, Regional Water Quality Control Board, Santa Ana Region. Order No. R8-2010-0033, NPDES No. CAS 618033, National Pollutant Discharge Elimination System Permit and Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the Count of Riverside, and the Incorporated Cities of Riverside County within the Santa Ana Region, Area-Wide Urban Runoff Management Program. Adopted January 29, 2010. (Available at https://www.etach.example.com/output/contenent

https://www.waterboards.ca.gov/santaana/board_decisions/adopted_orders/orders/2010/10_03 <u>3 RC_MS4_Permit_01_29_10.pdf</u>, accessed March 18, 2022.) [Cited as MS4]

Transportation

- Albert A. Webb Associates, *Patterson-Nance Warehouse Project, Traffic Impact Analysis (DPR 21-00005, January 5, 2022.* (Included as Appendix K.2 to this DEIR) [Cited as TIA]
- City of Perris, *Perris Comprehensive General Plan 2030*, July 12, 2005. (Available at https://www.cityofperris.org/departments/development-services/general-plan, accessed April 20, 2012.) [Cited as Perris GP 2030]
- City of Perris, *Perris Comprehensive General Plan 2030 Circulation Element*, adopted June 14, 2005, amended January 11, 2022. (Available at

https://www.cityofperris.org/home/showpublisheddocument/447/637806276230830000, accessed April 20, 2022) [Cited as Perris GP 2030]

- City of Perris, *Perris Valley Commerce Center Specific Plan Amendment No. 12*, approved January 10, 2012, and subsequently amended and approved January 11, 2022. (Available at https://www.cityofperris.org/home/showpublisheddocument/2647/637799977032200000, accessed April 18, 2022.) [Cited as PVCCSP]
- City of Perris, *Perris Valley Commerce Center Specific Plan Final Environmental Impact Report*, State Clearing house # 2009081086 November 2011. (Available at the City of Perris and <u>https://www.cityofperris.org/departments/development-services/specific-plans</u>, accessed April 18, 2022.) [Cited as PVCCSP EIR]
- City of Perris, *Transportation Impact Analysis Guidelines for CEQA*, May 2020. (Available at https://www.cityofperris.org/Home/ShowDocument?id=13227, accessed May 3, 2022.) [Cited as TIA Guidelines]
- Riverside County Transportation Commission, *Riverside County Long Range Transportation Study*. December 2019. (Available at <u>https://www.rctc.org/wp-content/uploads/2019/12/RCTC-Draft-LRTS-120119-GV22.pdf</u>, accessed April 28, 2022.) [Cited as LRTS]
- Translutions, Patterson-Nance Warehouse VMT Analysis Case number DPR 21-00005 Memorandum, January 10, 2022. (Included as Appendix K.1 to this DEIR) [Cited as VMT Analysis]
- Western Riverside Council of Governments, *Transportation Uniform Mitigation Fee Nexus Study*, 2016 Update, adopted July 10, 2017. (Available at http://www.wrcog.cog.ca.us/DocumentCenter/View/1020, accessed May 2, 2022.) [Cited as TUMF Nexus 2016]

Tribal Cultural Resources

- Applied Earthworks, *Phase 1 Cultural Resources Assessment Duke Warehouse at Patterson Avenue and Nance Street, City of Perris, Riverside County, California*, July 2022. (Included as Appendix D.1 to this DEIR) [Cited as AE]
- Brian F. Smith and Associates, Phase I Cultural Resources Assessment for the Perris Valley Channel Lateral B Extension Project, City of Perris, Riverside County, California, June 22, 2022. (Included as Appendix D.2 to this DEIR) [Cited as BFSA]
- City of Perris, *Perris Comprehensive General Plan 2030- Conservation Element*, adopted July 12, 2005; *Sustainable Community Amendment*, adopted February 18, 2008. (Available at <u>https://www.cityofperris.org/home/showpublisheddocument/449/637203139693370000</u>, accessed April 20, 2022.) [Cited as Perris GP 2030]
- City of Perris, *Perris Valley Commerce Center Specific Plan Amendment No. 12*, Adopted January 10, 2012, and subsequently amended and approved January 11, 2022. (Available at https://www.cityofperris.org/home/showpublisheddocument/2647/637799977032200000, accessed April 20, 2022.) [Cited as PVCCSP]
- City of Perris, *Perris Valley Commerce Center Specific Plan Final Environmental Impact Report*, State Clearing house # 2009081086 November 2011, certified January 10, 2012. (Available at City of Perris and at

https://www.cityofperris.org/home/showpublisheddocument/13874/637455522381730000, accessed April 20, 2022.) [Cited as PVCCSP EIR]

Documents Incorporated by Reference

The following reports and/or studies are hereby incorporated by reference:

- *Perris Comprehensive General Plan 2030*, City of Perris, originally approved on April 26, 2005. (Available at <u>https://www.cityofperris.org/departments/development-services/general-plan</u>.)
- Perris General Plan 2030 Draft Environmental Impact Report, SCH No. 2004031135, certified April 26, 2005. (Available at https://www.cityofperris.org/home/showpublisheddocument/451/637203139698630000.)
- Perris Valley Commerce Center Specific Plan Amendment No.12, approved January 11, 2022 (Ordnance 1414). (Available at https://www.cityofperris.org/Home/ShowDocument?id=2647.)
- Perris Valley Commerce Center Final Environmental Impact Report, SCH 2009081086, July 2011, certified January 10, 2012. (Available at https://www.cityofperris.org/Home/ShowDocument?id=13874 and https://www.cityofperris.org/Home/ShowDocument?id=13876.)
- Riverside County Flood Control and Water Conservation District, *1991 Perris Valley Master Drainage Plan Initial Study and Negative Declaration*, State Clearinghouse No. 91042072, approved June 11, 1991. (Available at the City of Perris.)
- Riverside County Flood Control and Water Conservation District, 1991 Perris Valley Master Drainage Plan, June 1991. (Available at: <u>https://content.rcflood.org/Downloads/Area%20Drainage%20Plans/Updated/Maps/Zone%204/</u> <u>Perris%20Valley%20ADP.pdf?Mon%20Oct%2010%202022%2009:02:13%20GMT-0700%20(Pacific%20Daylight%20Time)</u>.)

These reports/studies are also available for review at:

Public Service Counter City of Perris Planning Division 135 North "D" Street Perris, California 92570 (951) 943-5003

Hours: Monday - Friday: 8:00 AM to 6:00 PM

Document Preparation Staff

Albert A. Webb Associates, Planning & Environmental Services Department Located at: 3788 McCray Street, Riverside, CA 92506.

Cheryl DeGano, Principal Environmental Analyst Stephanie N. Standerfer, Vice President Eliza Laws, Senior Environmental Analyst Autumn DeWoody, Associate Environmental Analyst Noemi Avila, Assistant Environmental Analyst Monica Tobias, Assistant Environmental Analyst

Jacqueline Gamboa, Assistant Environmental Analyst Julie Lazor, Assistant Environmental Analyst



Corporate Headquarters 3788 McCray Street Riverside, CA 92506 951.686.1070

Palm Desert Office 41-990 Cook St., Bldg. I - #801B Palm Desert, CA 92211 951.686.1070

Murrieta Office 41391 Kalmia Street #320 Murrieta, CA 92562 951.686.1070