Oleander Business Park Project
Draft Environmental Impact Report

September 14, 2020

appliedplanning inc

DRAFT ENVIRONMENTAL IMPACT REPORT

for the

Oleander Business Park Project

Prepared for:

Riverside County
Planning Department
4080 Lemon Street, 12th Floor
Riverside, CA 92501

Prepared by:

Applied Planning, Inc.
11762 De Palma Road
Suite 1-C 310
Corona, CA 92883

September 2020

Table of Contents

Section **Page**

1.0 Executive Summary 1-1

1.1 Introduction 1-1
1.2 Project Elements 1-2
1.3 Project Opening Year 1-13
1.4 Project Objectives 1-13
1.5 Discretionary Actions, Permits, Consultations 1-14
1.6 Initial Study 1-16
1.7 Impacts Not Found to be Potentially Significant 1-16
1.8 Areas of Concern or Controversy 1-26
1.9 EIR Topical Issues 1-27
1.10 Summary of Significant Project Impacts 1-28
1.11 Alternatives to the Project 1-29
1.12 Summary of Impacts and Mitigation Measures 1-34

2.0 Introduction 2-1

2.1 Overview 2-1
2.2 Authorization 2-2
2.3 Lead and Responsible Agencies 2-2
2.4 Project Applicant 2-3
2.5 The EIR Process 2-3
2.6 EIR Content and Format 2-5
2.7 Intended Use of this EIR 2-6
2.8 Documents Incorporated By Reference 2-7

Section **Page**

3.0 Project Description 3-1

3.1 Overview 3-1

3.2 Existing Land Uses 3-2

3.3 Land Use Designations 3-2

3.4 Project Elements 3-8

3.5 Project Opening Year 3-31

3.6 Project Objectives 3-31

3.7 Discretionary Approvals and Permits 3-32

4.0 Environmental Impact Analysis 4-1

4.1 Transportation 4.1-1

4.2 Air Quality 4.2-1

4.3 Greenhouse Gas Emissions 4.3-1

4.4 Noise 4.4-1

4.5 Hazards/Hazardous Materials 4.5-1

4.6 Geology and Soils 4.6-1

4.7 Hydrology and Water Quality 4.7-1

4.8 Utilities and Service Systems 4.8-1

4.9 Biological Resources 4.9-1

4.10 Cultural Resources/Tribal Cultural Resources 4.10-1

4.11 Energy 4.11-1

4.12 Wildfire 4.12-1

5.0 Other CEQA Considerations 5-1

5.1 Cumulative Impact Analysis 5-1

5.2 Alternatives Analysis 5-35

5.3 Growth-Inducing Impacts of the Proposed Action 5-72

5.4 Significant Environmental Effects 5-75

5.5 Significant Irreversible Environmental Changes 5-76

Section **Page**

6.0 Acronyms and Abbreviations 6-1

7.0 References 7-1

APPENDICES (Provided on accompanying CD-ROM)

Appendix A: Initial Study, NOP, and NOP Responses

Appendix B: Traffic Impact Analysis/VMT Analysis

Appendix C: Air Quality Impact Analyses

Appendix D: Greenhouse Gas Analysis

Appendix E: Noise Impact Analysis

Appendix F: Environmental Site Assessments

Appendix G: Geotechnical Investigation

Appendix H: Hydrology Report & WQMP

Appendix I: Water Supply Assessment

Appendix J: Biological Resources Assessments

Appendix K: Project Energy Estimates

Appendix L: AB 52 Consultation

List of Figures

Figure **Page**

3.1-1 Project Location 3-3
3.3-1 General Plan Land Use Designations 3-6
3.3-2 Zoning Designations 3-7
3.4-1 Site Plan Concept 3-10
3.4-2 Approximate Limits of Disturbance 3-11
3.4-3 Building A Elevations 3-13
3.4-4 Building B Elevations 3-14
3.4-5 Project Access and Circulation Improvements 3-15
3.4-6 Landscape Plan Concept 3-20
3.4-7 Lighting Plan 3-21
3.4-8 Water Plan Concept 3-24
3.4-9 Sewer Plan Concept 3-26
3.4-10 Stormwater Management System Concept 3-27
3.4-11 Dry Utilities Plan 3-29
4.1-1 MVAP Trails and Bikeway System Plan 4.1-12
4.2-1 SCAB O_3 Trend 4.2-17
4.2-2 SCAB 24-Hour Average Concentration PM_{10} Trend vs. Federal Standard 4.2-18
4.2-3 SCAB Annual Average Concentration PM_{10} Trend vs. Federal Standard 4.2-18
4.2-4 SCAB 24-Hour Average Concentration $PM_{2.5}$ Trend vs. Federal Standard 4.2-19
4.2-5 SCAB Annual Average Concentration $PM_{2.5}$ Trend vs. Federal Standard 4.2-19
4.2-6 SCAB 24-Hour Average Concentration CO Trend 4.2-21
4.2-7 SCAB 1-Hour Average Concentration NO_2 Trend vs. Federal Standard 4.2-22

Figure **Page**

4.2-8 SCAB 1-Hour Average Concentration NO_2 Trend vs. State Standard 4.2-22
4.2-9 California Toxic Air Contaminant Data Sites 4.2-24
4.2-10 Diesel Particulate Matter and Diesel Vehicle Miles Trends..... 4.2-25
4.2-11 Proximate Receptor Locations..... 4.2-50
4.2-12 Modeled MEIR and MEIW Locations 4.2-61
4.2-13 Construction-Source Sensitive Receptor Locations 4.2-64
4.4-1 Typical Noise Levels..... 4.4-3
4.4-2 Noise Measurement Locations..... 4.4-11
4.4-3 Sensitive Receiver Locations 4.4-22
4.4-4 Operational Noise Source Locations 4.4-30
4.5-1 MARB/IPA Compatibility Map..... 4.5-18
4.5-2 MARB/IPA Compatibility Criteria 4.5-19
4.7-1 Existing Hydrology Condition..... 4.7-6
4.7-2 Proposed Hydrology Condition 4.7-17
4.9-1 Burrowing Owl Use Area 4.9-16

List of Tables

Table **Page**

1.8-1 List of NOP Respondents and Summary of NOP Comments 1-27
1.10-1 Summary of Significant and Unavoidable Impacts 1-28
1.12-1 Summary of Impacts and Mitigation 1-35
3.3-1 Existing Land Use Designations 3-5
4.1-1 Project VMT/Employee 4.1-7
4.2-1 SCAB Attainment Status 4.2-14
4.2-2 Area Air Quality Monitoring Summary 2016-2018 ..... 4.2-14
4.2-3 Regional Thresholds 4.2-32
4.2-4 Project Construction Schedule 4.2-39
4.2-5 Summary of Construction Equipment Use by Activity 4.2-40
4.2-6 Maximum Daily Construction-Source Air Pollutant Emissions 4.2-40
4.2-7 Maximum Daily Operational-Source Air Pollutant Emissions Summary 4.2-44
4.2-8 Construction Equipment Operations and Disturbed Acreages 4.2-52
4.2-9 Localized Construction-Source Emissions Impacts Summary 4.2-52
4.2-10 Localized Operational-Source Emissions Impacts Summary 4.2-53
4.2-11 2003 Hot Spot Analysis Intersection Traffic Volumes 4.2-55
4.2-12 2003 Hot Spot Analysis CO Modeling Results 4.2-55
4.2-13 Residential Exposure Parameters and Assumptions 4.2-59
4.2-14 Worker Exposure Parameters and Assumptions 4.2-60
4.3-1 Global Warming Potentials and Atmospheric Lifetimes 4.3-4
4.3-2 Global GHG Emissions by Major GHG Source Countries-2017 ..... 4.3-9
4.3-3 Annual Project GHG Emissions 4.3-34
4.3-4 Implementation of CAP Update Screening Table Measures 4.3-37

Table **Page**

4.3-5 2008 Scoping Plan Consistency 4.3-39
4.3-6 2017 Scoping Plan Consistency 4.3-41
4.4-1 Ambient Noise Level Measurements 4.4-12
4.4-2 Significance Criteria Summary 4.4-18
4.4-3 Construction-Source Noise Levels 4.4-24
4.4-4 Existing Conditions, Traffic Noise Impacts Without and With Project 4.4-26
4.4-5 Opening Year, Traffic Noise Impacts Without and With Project 4.4-26
4.4-6 Project Operational Noise Levels 4.4-28
4.4-7 Daytime Noise Level Contributions 4.4-31
4.4-8 Nighttime Noise Level Contributions 4.4-31
4.4-9 Construction Vibration Levels 4.4-33
4.7-1 Permanent and Operational Source Control Measures 4.7-12
4.8-1 Anticipated and Projected Water Demand 4.8-9
4.10-1 Archaeological Finds Located Within the Project Site 4.10-8
4.11-1 State and Local Energy Efficiency/Energy Conservation Plan Consistency ... 4.11-6
4.11-2 Construction Energy Consumption Estimates 4.11-13
4.11-3 Transportation Energy Consumption Estimates 4.11-15
4.11-4 Project Annual Operational Energy Demand Summary 4.11-15
5.1-1 Cumulative Vehicular-Source Noise Impacts 5-24
5.2-1 Summary of Significant and Unavoidable Impacts 5-36
5.2-2 Project and No Project Alternative: Manufacturing Uses Development, Operational-Source Emissions Comparison 5-45
5.2-3 Project and Reduced Intensity Alternative, Operational-Source Comparison .. 5-46
5.2-4 Project and No Project Alternative: Manufacturing Uses Development, GHG Emissions Comparison 5-48
5.2-5 Project and Reduced Intensity Alternative, GHG Emissions Comparison 5-49
5.2-6 Comparative Attainment of Project Objectives 5-62
5.2-7 Summary of Potential Impacts, Alternatives Compared to Project 5-67
5.4-1 Summary of Significant and Unavoidable Impacts 5-75

1.0 EXECUTIVE SUMMARY

1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

Pursuant to the requirements of the California Environmental Quality Act (CEQA), this Draft Environmental Impact Report (DEIR or EIR) evaluates and discloses the potential environmental impacts resulting from construction and operation of the proposed Oleander Business Park Project (Project).

The Oleander Business Park Project (Project) proposes construction and operation of approximately 710,736 square feet of warehouse/manufacturing uses [1] within an approximately 93.85-acre site (gross), located within the Mead Valley area of Riverside County. As part of the Project, Parcel Map 5128 (Parcel Map Book [P.M.B.] 8/54) comprising 4 parcels, would be reconfigured via Riverside County Lot Line Adjustment procedures. Project Parcel 1 (approximately 20.90 acres) would be developed with approximately 363,367 square feet of warehouse/manufacturing uses. Project Parcel 2 (approximately 19.59 acres) would be developed with approximately 347,369 square feet of warehouse/manufacturing uses. Project Parcels 3 and 4, totaling approximately 53.36 acres (gross) would remain vacant. The Project is anticipated to be constructed and occupied by 2021 (the Project Opening Year). The Project is assumed to be operational 24 hours per day, 7 days per week. At the time this analysis was prepared, specific Project tenants have not yet been identified. Cold storage uses are not anticipated as part of the Project. Should future development proposals for the Project site differ substantively from the development concept analyzed herein, the Lead Agency may require additional environmental analyses.

1 For the purposes of the EIR analysis, 80% of the total building area is assumed to comprise warehouse uses, the remaining 20% is assumed to comprise manufacturing uses.

This EIR Section identifies Project background issues, provides an overview of the Project and its Objectives, and summarizes the potential environmental impacts of the proposal. Table 1.12-1, *Impacts and Mitigation Summary*, presented at the conclusion of this Section, lists these impacts and presents mitigation measures recommended to eliminate or reduce the effects of those impacts which have been determined to be potentially significant. For a full description of the Project, its impacts, recommended mitigation measures, and considered Alternatives, please refer to EIR Sections 3.0, *Project Description*, 4.0, *Environmental Analysis*, and 5.0, *Other CEQA Considerations* respectively.

1.2 PROJECT ELEMENTS

Primary elements comprising the Project are summarized below. Please refer also to the expanded characterization of Project facilities and operations presented at EIR Section 3.0, *Project Description*.

1.2.1 Site Preparation/Project Construction

The Project area would be grubbed, rough-graded, and fine-graded in preparation of building construction. Existing grades within the Project site would be modified to establish suitable building pads and to facilitate site drainage.

The Project preliminary grading concept and the analyses in this EIR assume a potential maximum 69,000 cubic yards of soil export. To the extent practical, soils and materials excavated during site preparation and construction activities would be temporarily stockpiled on-site and subsequently used for on-site perimeter berming/buffering areas. Materials and soils stockpiling specifications would conform to applicable County of Riverside Building & Safety requirements. Please refer also to: https://rctlma.org/building/Building-Permits/About-Grading.

Blasting will be required during site preparation to remove bedrock and create suitable building pads. Blasting within the Project site would employ small, highly-controlled explosive charges to fragment large rocks into smaller, crushable pieces. The blasting contractor would be required to obtain blasting permit(s) from the State, and to notify Riverside County Sheriff's Department within 24 hours of planned blasting events.

Further, blasting operations are required to satisfy the maximum "airblast"[2] and vibration levels identified by the U.S. Bureau of Mines (USBM) and Office of Surface Mining and Reclamation Enforcement (OSMRE).

Any debris generated during site preparation activities would be disposed of and/or recycled consistent with the County's Source Reduction and Recycling Element (SRRE).

1.2.2 Development Concept

The Project development concept is summarized below. All final Project designs and improvements would be required to conform to standards presented within Riverside County Ordinance No. 348 (County Land Use Ordinance), Article X: I-P Zone (Industrial Park), Section 10.4, *Development Standards*.

1.2.2.1 Site Plan Concept

The Project Site Plan Concept provides for the construction of two warehouse buildings of similar size. Parcel 1 in the southerly portion of the Project site would be developed with "Building A," comprising approximately 363,367 square feet. Parcel 2 in the northerly portion of the Project would be developed with "Building B," comprising approximately 347,369 square feet. Maximum building heights would be approximately 45 feet. Westerly Parcels 3 and 4 would remain vacant and undeveloped.

Employee parking areas would be provided along the northerly and southerly building frontages; truck parking stalls and truck loading dock areas would be provided along the rear (westerly) building frontages. Parking and loading dock areas would be effectively screened by walls and slopes. Landscaping/screening would be provided along all Project building frontages and the Project site perimeter.

[2] The noise produced by blasting activities is referred to as air overpressure, or an "airblast," which is generated when explosive energy in the form of gases escape from the detonating blast holes. Much like a point source, airblasts radiate outward in a spherical pattern and attenuate with each doubling of distance from the blast location, depending on the design of the blast and amount of containment.

Additional limited areas of off-site disturbance would result from construction of site-adjacent roadway improvements and construction of utilities connections to existing area-serving utilities systems. Site-adjacent Project roadway improvements and utilities connections improvements would occur within dedicated rights-of-way and/or assigned easements. Temporary encroachment permits/private agreements may be required from adjacent property owners.

1.2.2.2 Architectural Design Concepts

Buildings design concepts would reflect tilt-up concrete construction, with architectural enhancements and glazing techniques similar to other industrial buildings found within the Area Plan and western areas of the County.

1.2.3 Access and Circulation

Access and circulation improvements that would be constructed by the Project are presented in detail in the Project Traffic Impact Analysis (TIA, EIR Appendix B) and are summarized below. All Project access and circulation improvements would be designed and constructed consistent with applicable County standards.[3]

<u>Roadways</u>

Harley Knox Boulevard (E – W)

Harley Knox Boulevard would be extended westerly within the central portion of the Project site and would be constructed at its ultimate full-section width as a major highway (118-foot right-of-way), in compliance with applicable County standards and specifications. Access to/from Harley Knox Boulevard would be provided by two Project driveways connecting northerly to Parcel 2, and one Project driveway connecting southerly to Parcel 1.

[3] The EIR evaluates potential impacts that would result from the maximum scope of recommended improvements as detailed in the Project TIA. The ultimate scope of required Project traffic improvements may be less than that evaluated here, and would be determined in consultation with the Lead Agency prior to the issuance of development permits.

Nandina Avenue (E – W)

Nandina Avenue defines the northerly Project site boundary. As part of the Project, Nandina Avenue between the Project's western and eastern boundaries, would be constructed at its ultimate half-section width as secondary highway (100-foot right-of-way). The Project would also construct a minimum of one lane in the westbound direction in order to provide access to the Project site.

Oleander Avenue (E – W)

Oleander Avenue defines the southerly Project site boundary. As part of the Project, Oleander Avenue between the Project's western and eastern boundaries, would be constructed at its ultimate half-section width as an industrial collector (78-foot right-of-way). The Project would also construct a minimum of one lane in the eastbound direction in order to provide access to the Project site.

Decker Road (N – S)

Decker Road defines the easterly Project site boundary. As part of the Project, Decker Road between the Project's northern and southern boundaries would be constructed at its ultimate half-section width as a secondary highway (100-foot right-of-way). The Project would also construct a minimum of one lane in the northbound direction in order to provide access to the Project site.

<u>Intersections</u>

Intersection No. 1 - Driveway 1/Nandina Avenue

- Install a stop control on the northbound approach and a northbound shared left-right turn lane.
- Add an eastbound shared through-right turn lane.
- Add a westbound two-way left turn lane within the median.
- Add a westbound through lane.

Intersection No. 2 - Driveway 2/Oleander Avenue

- Install a stop control on the southbound approach and a southbound shared left-right turn lane.
- Add an eastbound two-way left turn lane within the median.
- Add an eastbound through lane.
- Add a westbound shared through-right turn lane.

Intersection No. 3 - Driveway 3/Oleander Avenue

- Install a stop control on the southbound approach and a southbound shared left-right turn lane.
- Add an eastbound two-way left turn lane within the median.
- Add an eastbound through lane.
- Add a westbound shared through-right turn lane.

Intersection No. 4 - Decker Road/Nandina Avenue

- Add a northbound left turn lane.
- Add an eastbound shared through-right turn lane.

Intersection No. 5 - Decker Road/Driveway 4/Harley Knox Boulevard

- Add a northbound left turn lane with a minimum of 100-feet of storage.
- Add a northbound shared through-right turn lane.
- Add a southbound through lane.
- Add a southbound shared through-right turn lane.
- Add an eastbound left turn lane with a minimum of 100-feet of storage.
- Add an eastbound shared through-right turn lane.
- Add a westbound through lane.

Intersection No. 6 - Decker Road/Oleander Avenue

- Add a southbound left turn lane with a minimum of 100-feet of storage.
- Add a southbound shared through-right turn lane.
- Add an eastbound left turn lane.
- Add an eastbound shared through-right turn lane.

1.2.3.1 Construction Traffic Management Plan

Temporary and short-term traffic detours and traffic disruptions could result during Project construction activities including implementation of access and circulation improvements noted above. Accordingly, the Project Applicant would be responsible for the preparation and submittal of a construction area traffic management plan (Plan) to be reviewed and approved by the County. Typical elements and information incorporated in the Plan would include but would not be limited to:

- **Name of on-site construction superintendent and contact phone number**.

- **Identification of Construction Contract Responsibilities** - For example, for excavation and grading activities, describe the approximate depth of excavation, and quantity of soil import/export (if any).

- **Identification and Description of Truck Routes** - to include the number of trucks and their staging location(s) (if any).

- **Identification and Description of Material Storage Locations** (if any).

- **Location and Description of Construction Trailer** (if any)**.**

- **Identification and Description of Traffic Controls** - Traffic controls shall be provided per the Manual of Uniform Traffic Control Devices (MUTCD) if the occupation or closure of any traffic lanes, parking lanes, parkways or any other public right-of-way is required. If the right-of-way occupation requires configurations or controls not identified in the MUTCD, a separate traffic control plan must be submitted to the County for review and approval. All right-of-way encroachments would require permitting through the County.

- **Identification and Description of Parking** - Estimate the number of workers and identify parking areas for their vehicles.

- **Identification and Description of Maintenance Measures** - Identify and describe measures taken to ensure that the work site and public right-of-way would be maintained (including dust control).

The Plan must be reviewed and approved by the County prior to the issuance of the grading permit. The Plan and its requirements would also be required to be provided to all contractors as one component of building plan/contract document packages.

1.2.4 Landscaping

The Project would incorporate perimeter and interior landscaping and streetscape elements, acting to generally enhance the Project's visual qualities and screen potentially intrusive views. Pursuant to County Ordinance No. 348, *I-P Zone Development Standards*, a minimum of 15% of the site shall be landscaped. Project landscape plans would be subject to County review and approval.

1.2.5 Lighting

All Project lighting would be designed and implemented consistent with applicable County and Airport Land Use Commission (ALUC) requirements, and in a manner that precludes potential adverse effects of light overspill. The Project Site is located within Zone B of the Mt. Palomar Nighttime Lighting Policy Area. All projects within this Zone are required to adhere to the requirements of County Ordinance No. 655, *Regulating Light Pollution*. The Project would also be required to conform to County Ordinance No. 915, *Regulating Outdoor Lighting*. Project lighting plans would be subject to County review and approval.

1.2.6 Signs

Project signs would be required to conform to County Ordinance No. 348, Article XIX, *Advertising Regulations*. Project signs, to include sign content, sign design and sign locations would be subject to County review and approval.

1.2.7 Parking

The Project Site Plan Concept provides 245 passenger car parking stalls adjacent to Building A; and 224 passenger car parking stalls adjacent to Building B. Pursuant to County Ordinance No. 348, Section 18.12. *Off-Street Vehicle Parking* . . . [a]ll development projects that require fifty (50) or more parking spaces shall designate three (3) spaces for electrical vehicles, and designate one (1) additional space for electrical vehicles for each additional fifty (50) parking spaces. By Ordinance, the Project would therefore be required to provide a minimum of 3 spaces for the first 50 spaces + 1 space for 195/50 spaces at Building A = 7 EV spaces at Building A; and 3 spaces for the first 50 spaces + 1 space for 174/50 spaces at Building B = 7 EV spaces at Building B. Per the current Project Site Plan Concept, a total of 24 Electric Vehicle (EV) parking stalls will be provided: Building A (12 stalls), and Building B (12 stalls). In addition to passenger car parking areas, 60 truck trailer stalls would be provided adjacent to Building A; and 51 truck trailer stalls would be provided adjacent to Building B.

Additionally, pursuant to CALGreen Section 5.106.5.2, *Designated Parking for Clean Air Vehicles*, Table 5.106.5.2, the Project would be required to provide designated parking for any combination of low-emitting, fuel efficient and carpool/van pool vehicles totaling a minimum of 8% of the Project total vehicular parking. In this latter regard, based on the current site plan concept, the Project would be required to provide 0.08 x 245 spaces (20 spaces) for low-emitting, fuel efficient and carpool/van pool vehicles at Building A; and provide 0.08 x 224 spaces (18 spaces) for low-emitting, fuel efficient and carpool/van pool vehicles at Building B.

All Project parking areas, parking assignments, and design of parking areas would be required to conform to requirements and criteria presented at County Ordinance No. 348, Section 18.12. *Off-Street Vehicle Parking*. All Project parking plans would be subject to County review and approval.

1.2.8 Utilities

Existing public utility systems, including water and sanitary sewer systems would be modified or extended to serve the Project facilities. Such modifications may include, but

are not limited to new service connections, localized improvement and/or realignment of existing service/distribution lines. Utilities systems available to the Project are summarized below. All Project utilities improvements and utilities connections would be subject to County and purveyor review and approval.

1.2.8.1 Water Supply and Delivery

Water service to the Project would be provided by the Eastern Municipal Water District (EMWD). The Project would connect to existing EMWD water lines located in adjacent rights-of-way.

EMWD has provided a conditional "Will-Serve" letter indicating availability to provide water and sewer service to the Project. Please refer to EMWD correspondence: Subject: *SAN 53 - Will Serve - APN: 295-310-012, -013, -014, and 015*, March 26, 2019, provided at EIR Appendix I. Provision of water service by EMWD is contingent on the Applicant's compliance with EMWD rules and regulations. Additional EMWD requirements for water service may include plan check review and approval, facility construction, inspection, jurisdictional annexation, and payment of financial participation charges. A Water Supply Assessment (WSA) has been prepared for the Project and is provided at EIR Appendix I. The Project WSA substantiates that EMWD will be able to provide adequate water supplies to meet the potable water demand of the Project as part of EMWD's existing and future demands.

1.2.8.2 Wastewater Conveyance and Treatment

The Project site is located at the interface of EMWD and WMWD Wastewater Service Areas. Both EMWD and WMWD sewer mainlines are located in adjacent Nandina Avenue, along the Project site northerly boundary. Because both service provider options are available to the Project, wastewater conveyance and treatment services for the Project may be provided by EMWD and/or WMWD. [4]

[4] EMWD has provided a conditional "Will-Serve" letter indicating availability to provide water and sewer service to the Project. Should the Project ultimately request connection to WMWD wastewater services, a Will-Serve letter from that agency would be required prior to the issuance of building permits. The Project would be required to comply with WMWD requirements for wastewater service.

The Project would construct wastewater service lines connecting to existing EMWD/WMWD sewer mainlines. Existing EMWD/WMWD sewer mainlines may be realigned or otherwise modified as part of the Project. All proposed connections to sewer lines, and proposed sewer realignments and modifications would conform to purveyor standards and requirements, and would be subject to review and approval by the affected purveyor(s).

It is anticipated that wastewater generated by the Project would be conveyed to and treated at the EMWD Perris Valley Regional Water Reclamation Facility (PVRWRF) and/or the WWMD Western Water Recycling Facility (WWRF).

1.2.8.3 Stormwater Management System

The Project stormwater management system would provide for collection, treatment, and controlled release of developed stormwaters. The proposed stormwater management system would direct stormwaters easterly consistent with existing drainage patterns. All Project stormwater management system components would be designed, constructed, operated, and maintained consistent with criteria and standards presented in *Riverside County Stormwater Quality Best Management Practice Design Handbook* (Riverside County Flood Control and Water Conservation District) July 21, 2006 (and updates).

Stormwater runoff would be treated consistent with provisions of a Project-specific Water Quality Management Plan (WQMP). The Project WQMP would be required to conform with Santa Ana Regional Water Quality Control Board (SARWQCB) criteria and performance standards for projects located within the Santa Ana Watershed Region of Riverside County. See also: rcflood.org/NPDES/SantaAnaWS.aspx.

The Project would also implement construction stormwater management improvements and practices consistent with mandated Storm Water Pollution Prevention Plan (SWPPP) requirements as outlined under the California *General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities* (General Permit) Order No. 2009-0009-DWQ, and amendments. See also: waterboards.ca.gov/constpermits.shtml.

1.2.8.4 Dry Utilities Services/Infrastructure

Dry utilities comprise services/infrastructure other than water, sewer and storm drainage. Dry utilities services systems and service purveyors available to the Project include:

- Natural gas (Southern California Gas Company, SoCalGas);
- Electricity (Southern California Edison, SCE); and
- Telecommunications (various private services).

The Project would connect to existing dry utilities services and infrastructure systems located within adjacent rights-of-way. All modification of, and connection to, existing services would be accomplished consistent with County and purveyor requirements.

To allow for, and facilitate Project construction activities, provision of temporary dry utilities services improvements may also be required. The scope of such temporary improvements are considered to be consistent with, and reflected within the total scope of development proposed by the Project. Similarly, impacts resulting from the provision of temporary services would not be substantively different from, or greater than, impacts resulting from development of the Project in total.

1.2.9 Energy Efficiency/Sustainability

The Project would comply with or would surpass standards established under the California Code Title 24, Part 6 (the California Energy Code) and California Green Building Standards Code (CALGreen; CCR, Title 24, Part 11). CALGreen standards promote progressive design elements that have positive environmental impacts while encouraging sustainable construction practices. Project energy efficiency/sustainability design features include on-site renewable energy production providing for a portion of the Project electricity demands. The Project would also comply with applicable provisions of the *County of Riverside Climate Action Plan Update*, November 2019 (CAP Update).

1.3 PROJECT OPENING YEAR

The Project in total would be developed in a manner responsive to market conditions and in concert with availability of necessary infrastructure and services. For the purposes of this analysis, the Project Opening Year is defined as 2021.

1.4 PROJECT OBJECTIVES

The primary goal of the Project is to develop high quality warehouse/manufacturing uses accommodating a variety of prospective tenants. Complementary Project Objectives include the following:

- Implement the County General Plan (General Plan) through development that is consistent with the General Plan Land Use Element and applicable General Plan Goals, Objectives, Policies and Programs;

- Implement the Mead Valley Area Plan (Area Plan) through development that is consistent with the Area Plan land uses and development concepts, and in total supports the Area Plan Vision;

- Provide adequate roadway and wet and dry utility infrastructure to serve the Project;

- Implement warehouse/manufacturing uses that are compatible with adjacent land uses;

- Provide an attractive, efficient and safe environment for warehouse/manufacturing uses that is cognizant of natural and man-made conditions;

- Accommodate warehouse/manufacturing uses responsive to current and anticipated market demands;

- Make efficient use of the undeveloped subject property by maximizing its buildout potential for employment-generating warehouse/manufacturing uses, while protecting natural features;

- Implement warehouse/manufacturing uses providing additional construction employment opportunities;

- Implement warehouse/manufacturing uses supporting additional long-term employment opportunities;

- Provide warehouse/manufacturing uses near existing roadways and freeways and thereby reduce VMT, traffic congestion, and air emissions;

- Attract new businesses and jobs and thereby foster economic growth.

1.5 PROJECT DISCRETIONARY ACTIONS, PERMITS, CONSULTATIONS

Discretionary actions, permits and related consultation(s) necessary to approve and implement the Project include, but are not limited to, the following.

1.5.1 Discretionary Actions

CEQA Guidelines Section 15124 states in pertinent part that if "a public agency must make more than one decision on a project, all its decisions subject to CEQA should be listed . . ." Requested decisions, or discretionary actions, necessary to realize the Project would include the following:

- Certification of the Oleander Business Park Project EIR;
- Approval of a Lot Line Adjustment;
- Site Plan Approval; and
- Approval of Infrastructure Improvement Plans, including but not limited to roads, sewer, water, stormwater management system, and dry utilities plans.

1.5.2 Other Consultation and Permits

CEQA Guidelines Section 15124 also states that environmental documentation should, to the extent known, list other permits or approvals required to implement the Project. Based on the current Project design concept, anticipated permits necessary to realize the proposal will likely include, but are not limited to, the following:

- Tribal Resources consultation with requesting Tribes as provided for under AB 52 (Gatto, 2014) Native Americans: California Environmental Quality Act;

- Permitting pursuant to requirements of the Santa Ana Regional Water Quality Control Board and Riverside County Ordinance No. 754 *Establishing Stormwater/Urban Runoff Management and Discharge Controls*;

- Approval and permitting for construction of Project stormwater management system improvements by the Riverside County Flood Control and Water Conservation District (RCFC & WCD);

- Airport Land Use Compatibility Plan compatibility determination by the Riverside County Airport Land Use Commission;

- Approval and permitting for construction of Project water and sanitary sewer system improvements by EMWD;

- Permitting that may be required by/through the South Coast Air Quality Management District (SCAQMD) for certain equipment or land uses that may be implemented within the Project area;

- Various County of Riverside construction, grading, and encroachment permits allowing implementation of the Project facilities; and

- Permitting from various serving utilities purveyors.

1.6 INITIAL STUDY

The County, through the Initial Study process, has determined that the Project has the potential to cause or result in significant environmental impacts, and warranted further analysis, public review, and disclosure through the preparation of an EIR. The Initial Study (IS) and associated EIR Notice of Preparation (NOP) were forwarded to the California Office of Planning and Research, State Clearinghouse (SCH), and circulated for public review and comment. The State Clearinghouse established the public comment period for the NOP/IS as June 6 through July 5, 2019. The assigned State Clearinghouse reference for the Project is SCH No. 2019060002. The Initial Study, NOP, and NOP Responses are presented at EIR Appendix A.

1.7 IMPACTS NOT FOUND TO BE POTENTIALLY SIGNIFICANT

The EIR Initial Study substantiates that certain environmental impacts resulting from the Project would not be potentially significant. Consistent with *CEQA Guidelines* Section 15143, *Emphasis,* issues substantiated through the Initial Study process to be less-than-significant and unlikely to occur need not be discussed further in the EIR. Accordingly, the specific issues listed below are not substantively discussed within the body of this EIR. All other *CEQA Guidelines* environmental topics are discussed in the body text of this EIR. Please refer also to the EIR Initial Study presented at EIR Appendix A. Issues substantiated through the Initial Study process to be less-than-significant and unlikely to occur include the following:

<u>Aesthetics</u>

Scenic Resources

- Potential to have a substantial effect upon a scenic highway corridor within which it is located.

- Potential to substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view.

Mt. Palomar Observatory

- Potential to interfere with the nighttime use of the Mt. Palomar Observatory, as protected through Riverside County Ordinance No. 655.

Other Lighting Issues

- Potential to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

- Potential to expose residential property to unacceptable light levels.

Agriculture and Forest Resources

Agriculture

- Potential to convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

- Potential to conflict with existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract or land within a Riverside County Agricultural Preserve.

- Potential to cause development of non-agricultural uses within 300 feet of agriculturally zoned property (Ordinance No. 625 "Right-to-Farm").

- Potential to involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

Forest

- Potential to conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by

Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Govt. Code section 51104(g)).

- Potential to result in the loss of forest land or conversion of forest land to non-forest use.

- Potential to involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use.

Air Quality

Air Quality Impacts

- Potential to involve the construction of a sensitive receptor located within one mile of an existing substantial point source emitter.

- Potential to create objectionable odors affecting a substantial number of people.

Cultural Resources

Archaeological Resources

- Potential to disturb any human remains, including those interred outside of formal cemeteries.

Geology and Soils

Alquist-Priolo Earthquake Fault Zone or County Fault Hazard Zones

- Potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death.

- Potential to be subject to rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.

Landslide Risk

- Potential to 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, collapse, or rockfall hazards.

Other Geologic Hazards

- Potential to be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard.

Slopes

- Potential to change topography or ground surface relief features.

- Potential to result in grading that affects or negates subsurface sewage disposal systems.

Soils

- Potential to result in substantial soil erosion or the loss of topsoil.

- Potential to have soils incapable of adequately supporting use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

Erosion

- Potential to change deposition, siltation, or erosion that may modify the channel of a river or stream or the bed of a lake.

- Potential to result in any increase in water erosion either on or off site.

Wind Erosion and Blowsand from the Project either on or off site

- Potential to be impacted by or result in an increase in wind erosion and blowsand, either on or off site.

Hazards and Hazardous Materials

Hazards and Hazardous Materials

- Potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

- Potential to 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.

- Potential to impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan.

- Potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

- Potential to 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.

Airports

- Potential to result in a safety hazard for people residing or working in the Project area.

Hazardous Fire Area

- Potential to expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Hydrology and Water Quality

Water Quality Impacts

- Potential to substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

- Potential to place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

- Potential to place within a 100-year flood hazard area structures which would impede or redirect flood flows.

Floodplains

- Potential to expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam (Dam Inundation Area).

Land Use and Planning

Land Use

- Potential to result in a substantial alteration of the present or planned land use of an area.

- Potential to affect land use within a city sphere of influence and/or within adjacent city or county boundaries.

Planning

- Potential to be inconsistent with the site's existing or proposed zoning.

- Potential to be incompatible with existing surrounding zoning.

- Potential to be incompatible with existing and planned surrounding land uses.

- Potential to be inconsistent with the land use designations and policies of the General Plan (including those of any applicable Specific Plan).

- Potential to disrupt or divide the physical arrangement of an established community (including a low-income or minority community).

Mineral Resources

Mineral Resources

- Potential to result in loss of availability of a known mineral resource that would be of value to the region and to the residents of the state.

- Potential to result in loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

- Potential to be an incompatible land use located adjacent to a state classified or designated area or existing surface mine.

- Potential to expose people or property to hazards from proposed, existing or abandoned quarries or mines.

Noise

Airport Noise

- Potential to expose people residing or working in the Project area to excessive noise levels from public airport or public use airport operations.

- Potential to expose people residing or working in the Project area to excessive noise levels from private airstrip operations.

Railroad Noise

- Potential to expose people residing or working in the Project area to excessive noise levels from rail/railroad operations.

Highway Noise

- Potential to expose people residing or working in the Project area to excessive noise levels from highway operations.

Other Noise

- Potential to expose people residing or working in the Project area to excessive noise levels from other noise sources.

Population and Housing

Housing

- Potential to displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

- Potential to create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County's median income.

- Potential to displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

- Potential to affect a County Redevelopment Project Area.

- Potential to cumulatively exceed official regional or local population projections.

- Potential to induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

Public Services

Fire Services

- Potential to result in substantial adverse physical impacts associated with the provision of the new or physically altered fire protection facilities.

Sheriff Services

- Potential to result in substantial adverse physical impacts associated with the provision of the new or physically altered sheriff services facilities.

Schools

- Potential to result in substantial adverse physical impacts associated with the provision of the new or physically altered school services facilities.

Libraries

- Potential to result in substantial adverse physical impacts associated with the provision of the new or physically altered library services facilities.

Health Services

- Potential to result in substantial adverse physical impacts associated with the provision of the new or physically altered health services facilities.

Recreation

Parks and Recreation

- Potential to include or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

- Potential to increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

- Potential to be located within a Community Service Area (CSA) or recreation and park district with a Community Parks and Recreation Plan (Quimby fees).

Recreational Trails

- Potential to interfere with the use of any existing recreational trails, or conflict with any planned future recreational trails.

Transportation

Circulation

- Potential to cause an effect upon circulation during the Project's construction.

- Potential to result in inadequate emergency access or access to nearby uses.

- Potential to conflict with adopted policies, plans or programs regarding public transit, bikeways or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities.

Bike Trails

- Potential to interfere with the use of any existing bike trails, or conflict with any planned future bike trails.

Utilities and Service Systems

Solid Waste

- Potential to generate waste that would exceed the capacity of the serving landfill(s).

- Potential to conflict with federal, state, and local statutes and regulations related to solid wastes including the CIWMP (County Integrated Waste Management Plan).

Utilities

Potential to impact the following facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects.

- Electricity;
- Natural gas;
- Communications systems;
- Storm water drainage;
- Street lighting;
- Maintenance of public facilities, including roads; or
- Other governmental services.

1.8 AREAS OF CONCERN OR CONTROVERSY

Section 15123 of the *CEQA Guidelines* requires that the EIR summary identify areas of potential concern or controversy known to the lead agency, including issues raised by other agencies and the public. Issues of concern were identified by the Lead Agency, through responses to the Project Initial Study/Notice of Preparation (NOP), and other communications addressing the Project and the Project EIR.

Responses to the NOP are presented in EIR Appendix A. Table 1.8-1 lists NOP respondent agencies, organizations, and individuals. A corresponding summary of respondent comments is presented, indicated by *italicized text.* Responses to comments, together with correlating EIR references are indicated in subsequent statements. Unless otherwise noted, all respondent comments are addressed within the body of the EIR.

Table 1.8-1
List of NOP/AB52 Respondents and Summary of Comments/Responses

Respondent	Summary of Comments
State Agencies	
Office of Planning and Research-State Clearinghouse (SCH)	*SCH lists Responsible and Trustee Agencies receiving the NOP. SCH assigns the SCH No. 2019060002 to the Project environmental documents. SCH establishes the review and comment period for the NOP as June 4 through July 5, 2019.* EIR Appendix A includes a copy of the Project NOP on file with SCH and NOP Responses.
California Air Resources Board (CARB)	*CARB identifies potential air quality impact concerns including potential health risks associated with air pollutants generated during Project construction and operations.* Potential air quality impacts of the Project, including potential health risks associated with air pollutant emissions generated during Project construction and Project operations are addressed at EIR Section 4.2, *Air Quality*. As matter of clarification for the commentor, the Project does not anticipate cold storage uses.
State of California Native American Heritage Commission (NAHC)	*NAHC outlines AB 52 and SB 18 consultation requirements. NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of the Project.* The County has initiated tribal resources consultation as required under AB 52. Please refer to the discussion of potential tribal cultural resources impacts presented at EIR Section 4.10, *Cultural Resources/Tribal Cultural Resources*. The Project does not propose or involve the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space. The Project is therefore not subject to SB 18 consultation requirements.

1.9 EIR TOPICAL ISSUES

Based on the Initial Study analysis, and comments received pursuant to circulation of the NOP, the EIR analyses have been focused on the following topics:

- Air Quality;
- Biological Resources;
- Cultural Resources/Tribal Cultural Resources;
- Energy;
- Geology and Soils;
- Global Climate Change/Greenhouse Gas Emissions;
- Energy;
- Hazards/Hazardous Materials;
- Hydrology and Water Quality;
- Noise;

- Transportation;
- Utilities and Service Systems; and
- Wildfire.

Additionally, EIR Section 5.0, *Other CEQA Considerations*, presents discussions of other mandatory CEQA topics, including:

- Cumulative Impact Analysis;
- Alternatives Analysis;
- Growth-Inducing Impacts of the Proposed Action;
- Significant Environmental Effects; and
- Significant and Irreversible Environmental Changes.

1.10 SUMMARY OF SIGNIFICANT PROJECT IMPACTS

Implementation of the Project, as proposed, would result in certain impacts which are determined to be significant and unavoidable. These impacts are discussed in detail in the body of the EIR text under their associated topical headings, and are summarized at Table 1.10-1.

Table 1.10-1
Summary of Significant and Unavoidable Impacts

Environmental Topic	Comments
Air Quality	**NOx Regional Threshold Exceedance** Project operational-source emissions of nitrogen oxides (NO_x) would exceed applicable South Coast Air Quality Management District (SCAQMD) regional thresholds. This is a Project-level and cumulatively significant impact. **AQMP Consistency** Project operational-source emissions would exceed SCAQMD NOx regional significance thresholds. Project operational-source NO_X emissions exceedances may delay or obstruct goals and strategies articulated in the AQMP for the SCAB. The Project would therefore be inconsistent with applicable AQMP. This is a Project-level and cumulatively significant impact. **Contributions to Non-Attainment Conditions** The Project is located within ozone and PM_{10}/$PM_{2.5}$ non-attainment areas (NO_x is a precursor to ozone, PM_{10}, and $PM_{2.5}$). Project operational-source NO_x emissions exceedances would therefore result in a cumulatively considerable net increase in criteria pollutants (ozone, PM_{10}, and $PM_{2.5}$) for which the Project region is non-attainment. These are cumulatively significant air quality impacts.

Table 1.10-1
Summary of Significant and Unavoidable Impacts

Environmental Topic	Comments
GHG Emissions	Quantified Project-source GHG emissions would exceed 3,000 MTCO2e/year; and the Project cannot feasibly achieve the CAP Update screening-level threshold of 3,000 MTCO2e/year. On this basis, the Project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Impacts in this regard are therefore considered to be individually and cumulatively significant and unavoidable.

All other potential environmental effects of the Project are determined to be less-than-significant as substantiated within this EIR and accompanying Initial Study, or are reduced below levels of significance with application of mitigation measures identified herein. A summary of all Project impacts and proposed mitigation measures is presented at EIR Section 1.12, *Summary of Impacts and Mitigation Measures*.

1.11 ALTERNATIVES TO THE PROJECT

Consistent with provisions of the *CEQA Guidelines*, the EIR Alternatives Analysis (EIR Section 5.2) presents and evaluates alternatives to the Project that would lessen its significant environmental effects while allowing for attainment of the basic Project Objectives. The rationale underlying the selection of alternatives is presented together with a summary description of each alternative. Merits of the alternatives compared with the Project are described and evaluated. Alternatives to the Project considered in detail within this analysis include:

- No Project Alternatives (No Build Scenario, and Manufacturing Uses Development Scenario);
- Reduced Intensity Alternative.

Alternatives considered and rejected include:

- Alternative Sites.

The above-listed Alternatives are summarized below, and are described in greater detail at Section 5.2.2, *Description of Alternatives*.

1.11.1 No Project Alternative

1.11.1.1 Overview

The *CEQA Guidelines* specifically require that an EIR include evaluation of a No Project Alternative. The No Project Alternative should make a reasoned assessment as to future disposition of the subject site should the Project under consideration not be developed. In this latter regard, the *CEQA Guidelines* state in pertinent part:

> "If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the "no project" alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this "no project" consequence should be discussed. In certain instances, the no project alternative means "no build" wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment." (*CEQA Guidelines*, Section 15126.6 (e)(3)(B)).

Within this analysis, two No Project Scenarios are considered – "No Build" and "Manufacturing Uses Development Scenario."

No Project Alternative: No Build Scenario

The No Project Alternative: No Build Scenario assumes the site remains in its current undeveloped condition. If a No Build Scenario were maintained, its comparative environmental impacts would replicate the existing conditions discussions for each of the environmental topics evaluated in this EIR; and comparative impacts of the Project would be as presented under each of the EIR environmental topics.

No Project Alternative: Manufacturing Uses Development Scenario

The No Project Alternative: Manufacturing Uses Development Scenario assumes development of the subject site with a building area equal to that of the Project (710,736 total square feet). The No Project Alternative: Manufacturing Uses Development Scenario would however comprise manufacturing uses only, rather than the mix of 80% warehouse uses/20% manufacturing uses assumed under the Project.

1.11.2 Reduced Intensity Alternative

1.11.2.1 Overview

The Project would result in operational-source regional NOx threshold exceedances, associated cumulative contributions to Basin non-attainment conditions, and AQMP inconsistency impacts. The Reduced Intensity Alternative considered in this EIR is directed at avoidance of the Project's significant operational-source NOx emissions impacts. The Reduced Intensity Alternative would also diminish the scope of Project impacts in general.

1.11.2.2 Evaluated Reduced Intensity Alternative

The Reduced Intensity Alternative considers a development scenario that would avoid the Project's operational-source NOx emissions regional threshold exceedances. Under the Project, maximum daily operational-source NOx emissions would total approximately 112.36 lbs./day. The predominance (approximately 93% by weight) of the Project operational-source NOx emissions are generated by mobile sources (Project traffic). The applicable SCAQMD NOx regional threshold is 55 lbs./day. In order to avoid the NOx regional threshold exceedance occurring under the Project, operational-source NOx emissions would need to be reduced to less than 55 lbs./day, or an approximate 52% reduction in the Project operational-source NOx emissions. For the purposes of this analysis, and to allow for a margin of error, the Reduced Intensity Alternative assumes a 60% reduction in Project scope. Project operational-source NOx emissions would be reduced roughly proportionally to approximately 45 lbs./day, and would not exceed the applicable SCAQMD NOx regional threshold (55 lbs./day).

Under this Alternative, it is assumed that uses similar to the Project would be implemented but at a 60% reduction in scope. When compared to the Project scope (710,736 square feet), the Reduced Intensity Alternative would realize approximately 284,294 square feet of warehouse/manufacturing uses. Like the Project, it is assumed that the warehouse/manufacturing uses would be apportioned between 2 buildings of approximately equal size (2 buildings @ approximately 142,147 sf each).

In addition to an avoidance of the Project's significant operational-source NOx emissions impacts, the Reduced Intensity Alternative would generally reduce the extent of other environmental impacts otherwise resulting from the Project.

1.11.3 Alternatives Considered and Rejected

1.11.3.1 Alternative Sites Considered and Rejected

As stated in the *CEQA Guidelines* §15126.6 (f)(1)(2)(A), the "key question and first step in [the] analysis [of alternative locations] is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR." *CEQA Guidelines* §15126.6 (f) (1) also provides that when considering the feasibility of potential alternative sites, the factors that may be taken into account include: "site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent). None of these factors establishes a fixed limit on the scope of reasonable alternatives."

As discussed in the body of the Draft EIR and summarized previously in Table 1.10-1, the Project will result in the following significant and unavoidable impacts:

- Operational-source NOx emissions exceeding SCAQMD regional thresholds, and related nonattainment impacts; and
- GHG emissions exceeding the CAP Update 3,000 $MTCO_2E$ screening level threshold, thereby resulting in significant environmental impacts.

All other potential Project impacts would be either less-than-significant, or less-than-significant after mitigation.

Significant NOx Emissions Impacts Not Substantially Reduced at an Alternative Site
Relocation to an Alternative Site would not likely achieve any measurable reduction in the Project's operational-source air quality impacts. Specifically, Project operational-source NOx emissions would exceed the applicable SCAQMD regional threshold. The Project operational-source NOx exceedance is a regional air quality impact. Relocation of the Project anywhere within the South Coast Air Basin would not alter or diminish the significance of this impact.

Significant GHG Emissions Impacts Not Substantially Reduced at an Alternative Site
GHG emissions impacts are by definition cumulative and global in their effects. Relocation of the Project would not alter or diminish the significance of its GHG emissions impacts.

Based on the preceding considerations, analysis of an Alternative Site was not further considered.

1.11.4 Environmentally Superior Alternative

For the purposes of CEQA, the EIR Alternatives Analysis has identified the Reduced Intensity Alternative as the Environmentally Superior Alternative. Please refer also to EIR Section 5.2 for the complete Alternatives Analysis.

1.12 SUMMARY OF IMPACTS AND MITIGATION MEASURES

Table 1.12-1 summarizes potential impacts resulting from implementation and operations of the Project. The impacts identified at Table 1.12-1 correspond with environmental topics and impacts discussed at EIR Section 4.0, *Environmental Impact Analysis*. Table 1.12-1 also lists measures proposed to mitigate potentially significant environmental impacts of the Project, and indicates the level of significance after application of proposed mitigation.

© 2020 Applied Planning, Inc.

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
4.1 Transportation			
Potential to conflict with or be inconsistent with *CEQA Guidelines* section 15064.3, subdivision resulting in potentially significant Vehicle Miles Traveled (VMT) impacts.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to alter waterborne, rail, or air traffic patterns.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to substantially increase hazards due to a design feature or incompatible uses.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to cause an effect upon, or a need for new or altered maintenance of roads.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
4.2 Air Quality			
Potential to conflict with or obstruct implementation of the applicable air quality plan.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
Potential to violate any air quality standard or contribute substantially to an existing or projected air quality violation (see below)			
Regional Impacts			
• Construction-Source Air Pollutant Emissions	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
• Operational-Source Air Pollutant Emissions	Potentially Significant (NOx emissions only)	*4.2.1 Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum, each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than five (5) minutes once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged; and 3) telephone numbers of the building facilities manager and the CARB to report violations. Prior to the issuance of an occupancy permit, the County shall conduct a site inspection to ensure that the signs are in place.*	***Significant and Unavoidable*** (NOx emissions only) Mitigation Measures 4.2.1 through 4.2.4 would act to reduce Project operational-source NOX emissions. Additionally, Transportation Demand Management (TDM) measures implemented as mitigation for transportation Vehicle Miles Traveled (VMT) impacts would act to generally reduce vehicle-source emissions, including NOx emissions. CalEEMod does not allow for quantification of emissions reductions that could be potentially achieved through implementation of Mitigation Measures 4.2.1 through 4.2.4. Additionally, the efficacy of TDMs and any resulting emissions reductions would be dependent on as yet-unknown building tenants and final site plan designs. Accordingly, emissions reductions resulting from implementing Mitigation

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		4.2.2 Prior to tenant occupancy, the Project Applicant or successor in interest shall provide documentation to the County demonstrating that occupants/tenants have been provided documentation on funding opportunities, such as the Carl Moyer Program, that provide incentives for using cleaner-than-required engines and equipment. *4.2.3 As agreed to by the Project Applicant and Lead Agency, final designs of the Project buildings shall include electrical infrastructure sufficiently sized to accommodate potential installation of additional auto and truck EV charging stations.* *4.2.4 As agreed to by the Applicant and Lead Agency, final Project designs shall provide for installation of conduits in tractor trailer parking areas, for the purpose of accommodating the installation of EV truck charging stations.*	Measures 4.2.1 through 4.2.4 and proposed TDMs are not quantified within this analysis. For the purposes of this analysis, unmitigated and mitigated operational-source NOx emissions are considered substantively equal. Moreover, it is important to recognize that approximately 93 percent of the Project operational-source NOx emissions (by weight) derive from mobile-source tailpipe emissions. Regulation and mitigation of tailpipe emissions is the responsibility of CARB and EPA. The Lead Agency and/or Applicant cannot autonomously regulate or mitigate tailpipe emissions. Based on the preceding, even with application of Mitigation Measures 4.2.1 through 4.2.4 and implementation of proposed TDMs, Project operational-source NOx emissions impacts would exceed applicable SCAQMD regional thresholds. Individually and cumulatively, Project operational-source NOx emissions would result in significant and unavoidable air quality impacts. Significant NOx emissions impacts at the Project level are also cumulatively significant.

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
Localized Impacts			
• Construction-Source Air Pollutant Emissions	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
• Operational-Source Air Pollutant Emissions	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to result in or create CO Hot Spots.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to result in or create TAC - source or other emissions health risks.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard, including releasing emissions which exceed quantitative thresholds for ozone precursors.	Potentially Cumulatively Significant	Please Refer to Mitigation Measures 4.2.1 through 4.2.4.	***Significant and Unavoidable*** Mitigation Measures 4.2.1 through 4.2.4 would reduce Project-source air pollutant emissions, including NOx emissions, to the extent feasible. The Project would also comply with all applicable SCAQMD Rules and would be required to comply with County of Riverside development standards, California Title 24 energy efficiency performance standards, and the pollutant emissions mitigation measures presented herein. No further feasible measures are available that would substantively mitigate the Project's operational-source NOx emissions. On this basis, even with the application of mitigation, Project operations would result in cumulatively considerable

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
			net increase of in the non-attainment pollutants NOx, PM_{10} and $PM_{2.5}$. Project impacts in this regard are cumulatively considerable and the impacts are cumulatively significant and unavoidable.
Potential to expose sensitive receptors which are located within one mile of the Project site to project substantial point source emissions.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
4.3 Greenhouse Gases			
Potential to generate direct or indirect GHG emissions that would result in a significant impact on the environment**.**	Potentially Significant	*4.3.1 The Project shall implement Screening Table Measures providing for a minimum 100 points per the County Screening Tables. The Project would be consistent with the CAP Update's requirement to achieve at least 100 points The County shall verify incorporation of the identified Screening Table Measures within the Project building plans and site designs prior to the issuance of building permit(s) and/or site plans (as applicable). The County shall verify implementation of the identified Screening Table Measures prior to the issuance of Certificate(s) of Occupancy.*	***Significant and Unavoidable*** The implemented Screening Table Measures and compliance with CAP Update Measure R2-CE1 would achieve a minimum of 100 Screening Table Points, and would thereby ensure that the Project would achieve GHG emissions levels and GHG emissions reductions targets consistent with those identified in the County CAP Update. Notwithstanding, implementation of the CAP Screening Table Measures per Mitigation Measures 4.3.1, 4.3.2 does not ensure that quantified Project GHG emissions would not exceed the CAP Update screening level threshold of 3,000 MTCO2e.

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		4.3.2 The Project shall comply with CAP Update Measure R2-CE1. CAP Update Measure R2-CE1 requires that the Project provide onsite renewable energy production generation comprising at least 20% of the Project energy demand. The County shall verify implementation of CAP Update Measure R2-CE1 within the Project building plans and site designs prior to the issuance of building permit(s) and/or site plans (as applicable). The County shall verify implementation of CAP Update Measure R2-CE1 prior to the issuance of Certificate(s) of Occupancy.	The Project cannot feasibly achieve no net increase in GHG emissions, nor can the applicable CAP Update screening-level threshold (3,000 MTCO2e/year) be achieved. In this regard, the majority (approximately 75%) of the Project GHG emissions would be generated by Project vehicular sources. Responsibility and authority for regulation of vehicular-source emissions resides with the State of California (CARB, et al.). Neither the Applicant nor the Lead Agency can effect or mandate substantial reductions in vehicular-source GHG emissions, much less reductions that would achieve no net increase condition or achieve the CAP Update screening-level 3,000 MTCO2e/year threshold. In effect, all Project traffic would need to be eliminated or be "zero GHG emissions sources" in order to achieve the CAP Update threshold. There are no feasible means to or alternatives to eliminate all Project traffic, or to ensure that Project traffic would be zero GHG emissions sources. In terms of its practical application, this would constitute a "no build" condition. On this basis, even with implementation of Mitigation Measures 4.3.1, 4.3.2, the Project could generate direct or indirect GHG

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
			emissions that would result in a significant impact on the environment.
Potential to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	Potentially Significant	See Mitigation Measures 4.3.1, 4.3.2.	Less-Than-Significant
4.4 Noise			
Potential for Project construction activities and associated noise to result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential for Project construction activities and associated noise to result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential for Project vehicular-source noise to result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential for Project vehicular-source noise to result in a substantial	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.			
Potential for Project operational-source noise to result in exposure of persons to noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential for operational-source noise to result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to Project construction or operations to result in exposure persons to, or generation of, excessive ground-borne vibration or ground-borne noise.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
4.5 Hazards and Hazardous Materials			
Potential to require review by the Airport Land Use Commission.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to result in an airport-related safety hazard for people residing or working in the project area.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
4.6 Geology and Soils			
Potential to be subject to seismic-related ground failure, including liquefaction.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
Potential to be subject to strong seismic ground shaking.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to 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 ground subsidence.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to create cut or fill slopes greater than 2:1 or higher than 10 feet.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable. The Project would construct slopes greater than 10 feet in height. The Project Geotechnical Investigation includes recommendations to ensure the stability of newly constructed slopes. As a standard condition of Project approval, the Project would be required to comply with the site-specific recommendations contained in the final Project Geotechnical Investigation, including recommendations related to site preparation, soil compaction, and manufactured slope design that would minimize potential hazards associated with manufactured slopes.
Potential to be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2019), creating substantial risks to life or property.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
4.7 Hydrology and Water Quality			
Potential to Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to violate any water quality standards or waste discharge requirements; or otherwise substantially degrade water quality.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to create or contribute runoff water that would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to include new or retrofitted stormwater Treatment Control Best Management Practices (BMPs) (e.g., water quality treatment basins, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g., increased vectors or odors).	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.			
Potential to change absorption rates or the rate and amount of surface runoff.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to change the amount of surface water in any water body.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
4.8 Utility and Service Systems			
Potential to require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, the construction of which would cause significant environmental effects.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to result in insufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to result in a determination by the wastewater treatment provider that	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
serves or may service the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.			
Potential to conflict with any adopted energy conservation plans.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
4.9 Biological Resources			
Potential to conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan; Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species; or have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status.	Potentially Significant (Special Status Species)	*4.9.1 Limits of the Project site shall be clearly marked by stakes or other means to ensure that off-site areas are not disturbed by Project construction activities.* *4.9.2 A biological monitor shall be on-site during all ground disturbance activities, and shall halt any such activities if, in his or her professional opinion, such activities will result in the take of a protected species.* *4.9.3 General Avoidance/Protection of Burrowing Owls: No more than 72 hours prior*	Less-Than-Significant

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		to any site disturbances, a pre-construction survey for the burrowing owl shall be conducted. If absence of this species is confirmed, Project work can proceed. *4.9.4 Protection of Observed Owl(s). One burrowing owl was observed during focused April 2020 springtime surveys. This owl was observed at the location indicated at EIR Figure 4.9-1. If this owl is still present at the time construction activities are initiated along Harley Knox Boulevard, a sound barrier/wall shall be installed along the edge of the work area along Harley Knox Boulevard. The sound barrier/wall shall be a minimum of 10 feet in height, and a minimum of 200 feet in length. The barrier/wall shall be located adjacent to the Harley Knox Boulevard right-of-way southerly edge and shall be roughly centered opposite the primary burrow (B1, as indicated at EIR Figure 4.9-1). The barrier/wall shall be composed of hay bales, plywood or similar materials or combinations of materials. The sound barrier/wall shall be installed prior to start of construction and remain in place until construction is completed in the vicinity of the owl. Should the owl relocate closer to Decker Road, or another project location, a sound*	

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		barrier/wall shall be installed adjacent to the potentially affected location. The owl shall be monitored during construction activity to ensure no impacts occur to the owl. *4.9.5 Avoidance of Nesting Migratory Birds: If possible, all vegetation removal activities shall be scheduled from August 1 to February 1, which is outside the general avian nesting season. This would ensure that no active nests would be disturbed and that removal could proceed rapidly. If vegetation is to be cleared during the nesting season, all suitable habitat will be thoroughly surveyed within 72 hours prior to clearing for the presence of nesting birds by a qualified biologist (Project Biologist). The Project Biologist shall be approved by the County and retained by the Applicant. The survey results shall be submitted by the Project Applicant to the County Planning Department. If any active nests are detected, the area shall be flagged and mapped on the construction plans along with a minimum 300-foot buffer, with the final buffer distance to be determined by the Project Biologist. The buffer area shall be avoided until, as determined by the Project Biologist, the nesting cycle is complete or it is concluded that the nest has failed. In addition, the Project*	

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		Biologist shall be present on the site to monitor the vegetation removal to ensure that any nests, which were not detected during the initial survey, are not disturbed.	
Potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to 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.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
4.10 Cultural Resources/Tribal Cultural Resources			
Potential to alter or destroy an historic site; or cause a substantial adverse change in the significance of a historical	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
resource as defined in California Code of Regulations, Section 15064.5.			
Potential to alter or destroy an archaeological site; or cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations, Section 15064.5 or restrict existing religious or sacred uses within the potential impact area.	Potentially Significant	***4.10.1 Prior To Grading Permit Issuance: CULTURAL SENSITIVITY TRAINING*** *The Project Archaeologist and a representative designated by the Tribe shall attend the pre-grading meeting with the contractors to provide Cultural Sensitivity Training for all Construction Personnel. Training will include a brief review of the cultural sensitivity of the Project and the surrounding area; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event unanticipated cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. This is a mandatory training and all construction personnel must attend prior to beginning work on the Project site. A sign-in sheet for attendees of this training shall be included in the Phase IV Monitoring Report.*	Less-Than-Significant

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		4.10.2 Prior To Grading Permit Issuance: FEATURE RELOCATION *Site(s) 33-011076, 33-011075, 33-017077, 33-017075, 33-017076 and portions of 33-017098, 33-017078, 33-017080 cannot be avoided through Project redesign. Prior to grading permit issuance, the Project Supervisor and Project Archaeologist shall meet onsite to determine the strategy for relocating the milling features to a permanent open space area predetermined and designated on a confidential map. Before construction activities are allowed to start and using professional archaeological methods, any visible artifacts shall be recovered and recorded, photo documentation of each feature in situ shall occur. The current Department of Parks and Recreation forms for the sites shall be updated, detailing which features were relocated, the process through which this was done, and updated maps using sub meter GIS technology to document the new location of each feature. The relocation information shall be included in the Phase IV Monitoring Report.*	

© 2020 Applied Planning, Inc.

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		4.10.3 Prior To Grading Permit Issuance: NATIVE AMERICAN MONITOR *Prior to the issuance of grading permits, the developer/permit applicant shall enter into an agreement with the consulting tribe(s) for a Native American Monitor. The Native American Monitor(s) shall be on-site during all initial ground disturbing activities and excavation of each portion of the Project site including clearing, grubbing, tree removals, grading and trenching. In conjunction with the Archaeological Monitor(s), the Native American Monitor(s) shall have the authority to temporarily divert, redirect or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources. The developer/permit applicant shall submit a fully executed copy of the agreement to the County Archaeologist to ensure compliance with this condition of approval. Upon verification, the Archaeologist shall clear this condition. This agreement shall not modify any condition of approval or mitigation measure.*	

© 2020 Applied Planning, Inc.

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		4.10.4 Prior To Grading Permit Issuance: PROJECT ARCHAEOLOGIST *Prior to issuance of grading permits, the applicant/developer shall provide evidence to the County of Riverside Planning Department that a County certified professional archaeologist (Project Archaeologist) has been contracted to implement a Cultural Resource Monitoring Program (CRMP). A CRMP shall be developed that addresses the details of all activities and provides procedures that must be followed in order to reduce the impacts to cultural and historic resources to a level that is less than significant as well as address potential impacts to undiscovered buried archaeological resources associated with this Project. A fully executed copy of the contract and a wet-signed copy of the Monitoring Plan shall be provided to the County Archaeologist to ensure compliance with this condition of approval.* *Working directly under the Project Archaeologist, an adequate number of qualified Archaeological Monitors shall be present to ensure that all earth moving*	

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		activities are observed and shall be on-site during all grading activities for areas to be monitored including off-site improvements. Inspections will vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The frequency and location of inspections will be determined by the Project Archaeologist. ***4.10.5 Prior to Ground Disturbing activities: TEMPORARY FENCING*** *Prior to ground disturbance, temporary fencing shall be required for the protection of cultural sites 33-005368, 33-005367, 33-005373, 33-017081, 33-017179, 33-005380, 33-017099 and portions of 33-017098, 33-017078, 33-017080 and 33-028891. Prior to commencement of grading or brushing, the Project Archaeologist shall identify the site boundaries and determine an adequate buffer for protection of the site(s). Upon approval of buffers, the applicant shall direct the installation of fencing under the supervision of the project archaeologist. The fencing can be removed only after grading operations have been completed.*	

© 2020 Applied Planning, Inc.

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		4.10.6 Prior To Grading Final Inspection: ARTIFACT DISPOSITION *Prior to Grading Permit Final Inspection, the landowner(s) shall relinquish ownership of all tribal cultural resources that are unearthed on the Project property during any ground-disturbing activities, including previous investigations and/or Phase III data recovery.* • ***Historic Resources*** *- all historic archaeological materials recovered during the archaeological investigations (this includes collections made during an earlier project, such as testing of archaeological sites that took place years ago), shall be curated at the Western Science Center, a Riverside County curation facility that meets State Resources Department Office of Historic Preservation Guidelines for the Curation of Archaeological Resources ensuring access and use pursuant to the Guidelines.* • ***Prehistoric Resources*** *- One of the following treatments shall be applied.*	

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		a. Preservation-In-Place of the cultural resources, if feasible. Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources. *b. Reburial of the resources on the Project property. The measures for reburial shall include, at least, the following: Measures to protect the reburial area from any future impacts. Reburial shall not occur until all required cataloguing, analysis and studies have been completed on the cultural resources, with an exception that sacred items, burial goods and Native American human remains are excluded. Any reburial processes shall be culturally appropriate. Listing of contents and location of the reburial shall be included in the confidential Phase IV Report. The Phase IV Report shall be filed with the County under a confidential cover and not subject to a Public Records Request.* *c. If reburial is not agreed upon by the Consulting Tribes then the resources shall be curated at a culturally appropriate manner at the Western Science Center, a*	

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		Riverside County curation facility that meets State Resources Department Office of Historic Preservation Guidelines for the Curation of Archaeological Resources ensuring access and use pursuant to the Guidelines. The collection and associated records shall be transferred, including title, and are to be accompanied by payment of the fees necessary for permanent curation. Evidence of curation in the form of a letter from the curation facility stating that subject archaeological materials have been received and that all fees have been paid, shall be provided by the landowner to the County. There shall be no destructive or invasive testing on sacred items, burial goods and Native American human remains. ***4.10.7 Prior To Grading Final Inspection: PHASE IV MONITORING REPORT*** *Prior to Grading Permit Final Inspection, a Phase IV Cultural Resources Monitoring Report shall be submitted that complies with the Riverside County Planning Department's requirements for such reports for all ground disturbing activities associated with this grading permit. The*	

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
		report shall follow the County of Riverside Planning Department Cultural Resources (Archaeological) Investigations Standard Scopes of Work posted on the TLMA website. The report shall include results of any feature relocation or residue analysis required as well as evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting and evidence that any artifacts have been treated in accordance to procedures stipulated in the Cultural Resources Management Plan.	
Potential to restrict existing religious or sacred uses within the potential impact area.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Potential to cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074.	Potentially Significant	*Please refer to Mitigation Measures 4.10.1 through 4.10.7.*	Less-Than-Significant
4.11 Energy			
Potential to result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable

Table 1.12-1
Summary of Impacts and Mitigation

General Note: *To facilitate coordination and effective implementation of mitigation measures, the mitigation measures provided herein shall appear on all grading plans, construction specifications, and bid documents. Incorporation of required notations shall be verified by the County prior to issuance of first development permit.*

Impact	Level of Significance Without Mitigation	Mitigation Measures	Level of Significance With Mitigation/Remarks
consumption of energy resources, during project construction or operation.			
Potential to conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
4.12 Wildfire			
Substantially impair an adopted emergency response plan or emergency evacuation plan.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable
Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.	Less-Than-Significant	No Mitigation Measures Are Required	Not Applicable

2.0 INTRODUCTION

2.0 INTRODUCTION

2.1 OVERVIEW

This Draft Environmental Impact Report (Draft EIR, DEIR, EIR) evaluates and discloses potential environmental impacts of the proposed Oleander Business Park Project (Project). The Project proposes construction and operation of approximately 710,736 square feet of warehouse/manufacturing uses[1] within an approximately 93.85-acre site (gross), located within the Mead Valley area of Riverside County.

As part of the Project, Parcel Map 5128 (Parcel Map Book [P.M.B.] 8/54) comprising 4 parcels, would be reconfigured via Riverside County Lot Line Adjustment procedures. Project Parcel 1 (approximately 20.9 acres) would be developed with approximately 363,367 square feet of warehouse/manufacturing uses. Project Parcel 2 (approximately 19.59 acres) would be developed with approximately 347,369 square feet of warehouse/manufacturing uses. Project Parcels 3 and 4, totaling approximately 53.36 acres would remain vacant. The Project is anticipated to be constructed and occupied by 2021 (the Project Opening Year). The Project is assumed to be operational 24 hours per day, 7 days per week. At the time this analysis was prepared, specific Project tenants have not yet been identified. Cold storage uses are not proposed as part of the Project. Should future development proposals for the Project site differ substantively from the development concept analyzed herein, the Lead Agency would require additional environmental analyses. The Project is further described at Draft EIR Section 3.0, *Project Description*.

An EIR is an informational document intended to apprise decision-makers and the general public of potentially significant environmental impacts of a project. An EIR also

[1] For the purposes of the EIR analysis, 80% of the total building area is assumed to comprise warehouse uses, the remaining 20% is assumed to comprise manufacturing uses.

proposes mitigation to preclude or minimize significant impacts, and describes reasonable alternatives to the Project that may also reduce or avoid significant impacts. Having the authority to take action on the Project, the County of Riverside will consider the information in this EIR in their evaluation of the proposal. Findings and conclusions of the EIR do not control the County's discretion to approve, deny, or modify the Project, but instead are presented as information to aid the decision-making process.

2.2 AUTHORIZATION

This EIR has been prepared by the County of Riverside pursuant to *Guidelines for the Implementation of the California Environmental Quality Act (Guidelines)*, (§§ 15000–15387, California Code of Regulations). The proposed Oleander Business Park is a "project," as defined at § 15378 of the *Guidelines*. The *Guidelines* stipulate that an EIR must be prepared for any project that may have a significant impact on the environment. The County has determined that the Project may have one or more significant impacts on the environment and, therefore, the preparation of an EIR is required.

2.3 LEAD AND RESPONSIBLE AGENCIES

CEQA defines a "lead agency" as the public agency which has the principal responsibility for carrying out or approving a Project which may have a significant effect upon the environment. Other agencies, e.g., the California Department of Transportation (Caltrans), the South Coast Air Quality Management District (SCAQMD) or the Regional Water Quality Control Board (RWQCB), which also have some authority or responsibility to issue permits for Project implementation, are designated as "responsible agencies." The lead agency and responsible agencies must consider the information contained in the EIR prior to acting upon or approving the Project. The County of Riverside is the Lead Agency for the Project. Contact information for the Lead Agency is presented below.

Lead Agency: Riverside County Planning Department
4080 Lemon Street, 12th Floor
Riverside, CA 92501
Ph: (951) 955-6060

Contact: Tim Wheeler, Urban Regional Planner

2.4 PROJECT APPLICANT

Contact information for the Project Applicant is presented below.

Applicant: Sares Regis Group
3501 Jamboree Road, Suite 3000
Newport Beach, CA 92660
Ph: (949) 756-5959

Contact: Patrick Russell, Senior Vice President, Commercial Development

2.5 THE EIR PROCESS

When a public agency determines that there is substantial evidence that a Project may have a significant effect on the environment, the agency must prepare an EIR before a decision is made to approve or deny the Project. The purpose of the EIR is to disclose a project's potential environmental impacts and recommend measures to reduce or avoid significant impacts. The basic content of an EIR includes: a description of the project under consideration and its objectives; a description of the existing environmental conditions; a discussion of the potentially significant environmental effects of the project; recommended measures for reducing these effects; and identification and evaluation of feasible alternatives to the project which may also reduce potentially significant impacts of the proposal.

Typically, EIRs consist of two documents: a Draft EIR, distributed by the lead agency for review and comment by the general public and any interested governmental agencies; and a Final EIR, which consists of responses to comments received on, together with any necessary modifications to, the Draft EIR. After the Draft EIR has been circulated for review and the Final EIR has been prepared, the EIR must be certified by the lead agency as having complied with CEQA and considered by the agency's decision-making body before any action can be taken on a project.

When a public agency receives a complete project application or decides to undertake a project of its own, it first determines if the project is subject to environmental review under CEQA and, if it is, the agency then typically prepares an Initial Study (IS) to

determine if the project under consideration has the potential to cause significant adverse environmental effects. The IS serves as a tool to help the agency determine if an EIR is required, and if so, the focal issues to be examined in the EIR. The lead agency may skip the Initial Study process if it is evident that a project could result in significant environmental effects and that an EIR will be required.

The EIR process is initiated by the distribution of a Notice of Preparation (NOP). Together with the Initial Study (if prepared), the NOP is sent to agencies and interested individuals as notice of commencement of the EIR process, and to solicit their suggestions for appropriate EIR issues and topical analyses. The completed Draft EIR is then circulated to responsible agencies, other affected or interested agencies, and interested members of the public for review and comment. The review period for a Draft EIR is typically 45 days. To provide for appropriate consideration and inclusion in the Final EIR, all comments and concerns regarding the Draft EIR should be received by the lead agency during this 45-day period.

Responses to comments received on the Draft EIR are prepared by the lead agency and included in the Final EIR. The Final EIR may also contain additional information about the project's potential impacts and minor corrections or modifications to the Draft EIR. The Final EIR must be certified by the lead agency's decision-making body before, or in conjunction with, any action to approve a project.

CEQA requires that the EIR address only significant adverse impacts. The *CEQA Guidelines* suggest thresholds or standards which define the significance of various types of impacts. The *CEQA Guidelines* also state that the significance of impacts should be considered in relation to their severity and probability of occurrence. However, ultimately, the determination of the significance of impacts is at the discretion of the lead agency. The identification of significant impacts in the EIR does not prevent an agency from approving a project. A project may be approved if the lead agency determines that impacts cannot be feasibly mitigated below a level of significance and if the agency determines that there are important overriding considerations, such as social and economic benefits, which are sufficient to justify approval of the considered project.

2.6 EIR CONTENT AND FORMAT

This Draft EIR is organized into seven Chapters or Sections, each addressing a separate aspect of the required content of an EIR as described in the *Guidelines*. A summary of the Project's impacts and recommended mitigation measures is provided at Chapter 1.0. An introduction and general overview of the environmental process and the format of this EIR are presented in this Chapter 2.0. Chapter 3.0 contains a complete description of the Project, including its location, objectives, and physical and operational characteristics. The complete and detailed environmental impact analysis is presented at Chapter 4.0. The topical issues mandated by CEQA dealing with cumulative impacts, alternatives, long-term implications of the Project, and energy conservation are found at Chapter 5.0. Chapter 6.0 lists and defines the acronyms and abbreviations contained in this document. Chapter 7.0 lists the information sources and persons consulted during the environmental analysis process, and presents a list of the persons who prepared the Draft EIR. The Initial Study and responses to the NOP, with supporting technical studies, are appended to the body of the EIR document.

Chapter 4.0, *Environmental Impact Analysis*, is the focal component of the Draft EIR. The environmental impact analysis has been organized into a series of sections, each addressing an environmental topic or area of concern identified through the Initial Study process (e.g., Land Use and Planning, Transportation, Air Quality, Noise, etc.). To assist the reader in understanding the organization and basis of the analysis, the sections covering each individual environmental topic are typically divided into the following subsections:

- **Reader's Abstract:** An introductory reader's abstract, summarizing content and findings, is provided at the beginning of each topical section.

- **Introduction:** The introduction summarizes the content of the section and references other important studies and reports, such as technical studies appended to the EIR.

- **Setting:** This subsection describes baseline environmental conditions which may be subject to change as a result of implementation of the Project. Separate descriptions of existing environmental conditions are provided for each environmental topic.

- **Existing Policies and Regulations:** Various relevant policies, regulations, and programs related to the environmental topic are briefly described. Often, these existing policies and regulations serve to reduce or avoid potential environmental impacts.

- **Standards (Thresholds) of Significance:** Before potential impacts are evaluated, the standards which will serve as the basis for judging significance are presented.

- **Potential Impacts and Mitigation Measures:** This subsection states and explains potential impacts caused by the Project. Based on the standards of significance, impacts are categorized as either potentially significant or less-than-significant. If the impacts are considered to be potentially significant, mitigation measures are proposed to reduce the impacts. At the conclusion of each discussion for a potentially significant impact, a determination is made as to whether the impact can be reduced to a less-than-significant level with the application of proposed mitigation measures. Impacts that cannot be reduced to levels that are less-than-significant are identified as "significant and unavoidable."

The summary presented at Chapter 1.0 provides a comprehensive overview of the Project's impacts. For a more detailed description of Project impacts, it is recommended that the reader review the Project description (Chapter 3.0), and then read the sections on the topics of interest in the environmental impact analysis (Chapter 4.0).

2.7 INTENDED USE OF THIS EIR

This EIR addresses the potential environmental effects of the implementation and operation of the proposed Oleander Business Park Project. The County of Riverside (County) is the Lead Agency for the purposes of CEQA because it has the principal

responsibility and authority for deciding whether or not to approve the Project, and how it will be implemented. As the Lead Agency, the County is also responsible for preparing environmental documentation for the Project in compliance with CEQA.

The Lead Agency will employ this EIR in its evaluation of potential environmental impacts resulting from, or associated with, approval and implementation of the Project, to include potential effects of the Project's component elements. This EIR will also be used by various Responsible Agencies, e.g., Air Quality Management District(s), California Department of Transportation, Regional Water Quality Control Board(s), *et al*.; as well as utilities and service providers when such entities issue permits necessary to carry out the project. For example, if this EIR and/or its Mitigation Measures require encroachment permits from Caltrans, this EIR will serve as the environmental assessment for such improvements. (Please refer to California Code of Regulations, sections 15050 and 15162.)

In employing this EIR, the County and other agencies need recognize that Project plans and development concepts identified herein are just that, plans and concepts which are subject to refinement as the Project is further defined. Recognizing the potential for these future minor alterations to the Project, this EIR in all instances evaluates likely maximum impact scenarios that would account for these minor alterations. These refinements and/or minor revisions to development proposals do not typically warrant modified or revised environmental documentation. Notwithstanding, at the discretion and direction of the County, substantive modifications to the Project described herein may warrant additional environmental evaluation.

2.8 DOCUMENTS INCORPORATED BY REFERENCE

Section 15150 of the *Guidelines* permits and encourages an environmental document to incorporate, by reference, other documents that provide relevant information. The documents summarized below are incorporated by reference, and the pertinent material is summarized throughout this EIR, where that information is relevant to the analysis of potential impacts of the Project. All documents incorporated by reference are available for review at, or can be obtained through, the County of Riverside Planning Department.

Technical studies cited below were specifically developed in conjunction with the Project, and are appended to the body of the Draft EIR.

2.8.1 County of Riverside General Plan (General Plan) and General Plan EIR

The General Plan establishes Goals and Policies and provides guidance for future development of the County. The General Plan provides the guidance necessary for successful implementation of General Plan Policies. The General Plan EIR provides a comprehensive analysis of potential environmental impacts that would result from implementation of the General Plan. The General Plan and General Plan EIR provide context and baseline information for analyses presented in this EIR.

The General Plan was developed consistent with State of California General Plan Guidelines and contains the following elements: Land Use, Circulation, Multipurpose Open Space, Safety, Noise, Housing, Air Quality, Healthy Communities, and Administration. All proposed development projects within the County are evaluated for consistency with the intent and purpose of the applicable General Plan land use designation(s) and related General Plan Policies.

2.8.2 County of Riverside Land Use Ordinance

County Ordinance No. 348 (Land Use Ordinance) implements the General Plan Land Use Plan in a manner that promotes compatible land use relationships and minimizes potential land use conflicts. The County Land Use Ordinance establishes various Zoning Districts and intent of each District, identifies a range of uses that are permitted or conditionally permitted within each District, and articulates procedures and development standards that regulate land uses and development within each District. The Project would be designed and implemented consistent with applicable County Land Use Ordinance standards and requirements. The County Land Use Ordinance can be accessed at: https://planning.rctlma.org/.

2.8.3 Mead Valley Area Plan

The Project site is located within the Mead Valley Area Plan (MVAP, Area Plan). The MVAP provides focused policies and land use plans, including various localized Overlays, Policy Areas, and Specific Plans are found in the individual Area Plans. The MVAP provides context and baseline information for analyses presented in this EIR.

2.8.4 Western Riverside County Multiple Species Habitat Conservation Plan

The Project site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The MSHCP is a comprehensive, multi-jurisdictional habitat conservation plan that focuses on the conservation of species and their associated habitats. The MSHCP provides context and baseline information for analyses presented in this EIR. The EIR biological resources analyses comply with applicable provisions of the MSHCP.

2.8.5 Riverside County Airport Land Use Compatibility Plan for March Air Reserve Base/Inland Port Airport

California law mandates preparation and adoption of airport land use compatibility plans (ALUCPs) for each public-use and military airport in the state (California Public Utilities Code (PUC) §21675). ALUCPs act 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 airports to the extent that these areas are not already devoted to incompatible uses" (PUC §21670(a)(2)).

The Riverside County Airport Land Use Compatibility Plan for March Air Reserve Base/Inland Port Airport (MARB/IPA ALUCP) acts to ensure mutual compatibility of the MARB/IPA with surrounding land uses, thereby reducing potential airport/aircraft related hazards. The ALUCP provides context and baseline information for analyses presented in this EIR. The Project would not conflict with applicable provisions of the ALUCP.

2.8.6 Riverside County Climate Action Plan Update (November 2019)

The County of Riverside Climate Action Plan Update, November 2019 (CAP Update) establishes GHG emission reduction programs and regulations that correlate with and support State GHG emissions reduction goals and strategies. The CAP Update includes reduction targets for year 2030 and year 2050. These reduction targets require the County to reduce emissions by at least 525,511 MT CO2e below the Adjusted Business As Usual (ABAU)[2] scenario by 2030 and at least 2,982,948 MT CO2e below the ABAU scenario by 2050 (CAP Update, p. 7-1). The Project would be designed, implemented, and operated consistent with applicable provisions of the CAP Update.

2.8.7 Project Technical Studies/EIR Appendices

Following are summary descriptions of documents and supporting technical studies which are appended to the main body of the Draft EIR. Working titles of these documents generically refer to the Project and its physical attributes, and may not necessarily reflect the currently assigned "Oleander Business Park" development title.

2.8.7.1 Initial Study, NOP, and NOP Responses - EIR Appendix A

The EIR Initial Study (IS), Notice of Preparation (NOP) and responses received pursuant to distribution of the IS/NOP are presented at EIR Appendix A. Based on the Initial Study and responses to the NOP, this EIR addresses the following environmental topics:

- Air Quality;
- Biological Resources;
- Cultural Resources/Tribal Cultural Resources;
- Energy;
- Geology and Soils;
- Global Climate Change/Greenhouse Gas Emissions;
- Hazards/Hazardous Materials;
- Hydrology and Water Quality;

[2] Adjusted Business As Usual (ABAU) Scenario reflects GHG emissions reductions achieved through anticipated future State actions (CAP Update, p. 2-1).

- Noise;
- Transportation;
- Utilities and Service Systems; and
- Wildfire.

2.8.7.2 Traffic Impact Analysis (TIA)/Vehicle Miles Travelled (VMT) Assessment - EIR Appendix B

The detailed evaluation of Project-related traffic/transportation impacts is documented in the *Oleander Business Park Traffic Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) August 16, 2019 (TIA). Project-related traffic issues have been evaluated within the TIA in the context of the California Environmental Quality Act (CEQA) and as directed by Riverside County. Additionally, detailed analysis of the Project's potential VMT impacts is presented in *Oleander Business Park Vehicle Miles Travelled (VMT) Assessment* (Urban Crossroads, Inc.) August 25, 2020.

2.8.7.3 Air Quality Impact Analyses - EIR Appendix C

Air quality impact analyses prepared for the Project include: *Oleander Business Park Air Quality Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) December 13, 2019; *Oleander Business Park Mobile Source Health Risk Assessment, County of Riverside* (Urban Crossroads, Inc.) December 13, 2019; and [Oleander Business Park] *Construction Health Risk Assessment Memorandum* (Urban Crossroads, Inc.) December 13, 2019.

2.8.7.4 Greenhouse Gas Analysis - EIR Appendix D

Detailed analysis of the Project's potential Greenhouse Gas and Global Climate Change impacts are presented in *Oleander Business Park Greenhouse Gas Analysis, County of Riverside* (Urban Crossroads, Inc.) August 21, 2020.

2.8.7.5 Noise Impact Analysis - EIR Appendix E

Potential noise impacts of the Project, including construction-source and operational-source noise impacts are assessed within *Oleander Business Park Noise Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) August 17, 2020.

2.8.7.6 Environmental Site Assessment - EIR Appendix F

An assessment of potential hazards associated with historic use of the Project site; and the potential for hazardous materials to currently exist within or proximate to the Project site is provided in: *Phase I Environmental Site Assessment, 100-acre Vacant Land, SWC of Decker Road and Nandina Avenue, Riverside County, California* (Ardent Environmental Group, Inc.) January 7, 2019.

2.8.7.7 Geotechnical Investigation - EIR Appendix G

An assessment of the soils and geological conditions affecting the Project site and vicinity properties is presented in: *Geotechnical Investigation, Mead Valley Business Park, SWC Nandina Avenue and Decker Road, Unincorporated Riverside County (Perris Area), California* (Southern California Geotechnical) June 13, 2019.

2.8.7.8 Stormwater Management - EIR Appendix H

Drainage and stormwater runoff water quality considerations are evaluated and addressed in: *Preliminary Hydrology Report for Sares-Regis Industrial Development, County of Riverside, California* (Michael Baker International) July 2019; and *Project Specific Water Quality Management Plan, Oleander Business Park* (Michael Baker International) March 25, 2019.

2.8.7.9 Project Water Supply Assessment (WSA), EMWD Will-Serve Letter - EIR Appendix I

The Project WSA (*Water Supply Assessment Report, Mead Valley Project* (EMWD) July 11, 2019) evaluates Project water supply and reliability under near-term and long-range scenarios; and under normal, dry and extended drought conditions. EMWD has provided a conditional "Will-Serve" letter indicating availability to provide water and sewer service to the Project. Please refer to EMWD correspondence: Subject: *SAN 53 - Will Serve - APN: 295-310-012, -013, -014, and 015*, March 26, 2019.

2.8.7.10 Biological Resources Assessments - EIR Appendix J

Potential impacts to biological resources that could occur within developed portions of the Project site, as well as potential impacts that could occur within adjacent off-site areas are assessed in: *Biological Report for the Oleander Business Park Project Site* (Harmsworth Associates) November 2019; *Burrowing Owl Survey Report for the Oleander Business Park Project Site* (Harmsworth Associates) April 2020; *Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis for the Oleander Business Park Project* (Harmsworth Associates) November 2019; and *Jurisdictional Survey and MSHCP Riparian/Riverine/Vernal Pools Evaluation* (Ecological Sciences, Inc.) December 17, 2019.

2.8.7.11 Project Energy Estimates - EIR Appendix K

Estimated energy consumption estimates of Project construction and operations are summarized and presented in the *Oleander Business Park Energy Tables* (Urban Crossroads, Inc.) December 16, 2019.

2.8.7.12 Cultural Resources Assessments/AB 52 Consultation

Potential impacts to cultural resources were assessed in the following studies: *Phase I Archaeological Assessment, Assessor's Parcel Nos. 295-310-012 TO -015, Tentative Parcel Map 36034, Sares-Regis Project, Mead Valley Area, Riverside County, California* (CRM TECH) May 19, 2008; *Phase II Archaeological Testing and Evaluation Program, Tentative Parcel Map No. 36034, Sares-Regis Project, Mead Valley Area, Riverside County, California* (CRM TECH) December 5, 2008; *Paleontological Resources Assessment Report, Assessor's Parcel Nos. 295-310-012 TO -015, Tentative Parcel Map 36034, Sares-Regis Project, Mead Valley Area, Riverside County, California* (CRM TECH) May 19, 2008; and *Update and Addendum to Phase I and Phase II Cultural Resource Studies, Oleander Business Park Project (Formerly Sares-Regis Project; TTM 36034) Mead Valley Area, Riverside County, California, Plot Plan No. 190011; CRM TECH Contract No. 3468* (CRM TECH) December 6, 2019.

In order to protect the location of sensitive cultural resources identified as part of the Project Cultural Resources Investigations, and consistent with disclosure restrictions of Section 6254 of the Government Code, the above reports have not been included within

this EIR. Upon request, copies of the above reports are available to qualified individuals through the County of Riverside Planning Department.

The County has complied with notification requirements and has initiated consultation, as required under AB 52. Formal notification was provided to potentially affected tribes on May 17, 2019. AB 52 Correspondence is provided at EIR Appendix L.

3.0 PROJECT DESCRIPTION

3.0 PROJECT DESCRIPTION

3.1 OVERVIEW

The Oleander Business Park Project (Project) proposes construction and operation of approximately 710,736 square feet of warehouse/manufacturing uses[1] within an approximately 93.85-acre site (gross), located within the Mead Valley area of Riverside County. As part of the Project, Parcel Map 5128 (Parcel Map Book [P.M.B.] 8/54) comprising 4 parcels, would be reconfigured via Riverside County Lot Line Adjustment procedures. Project Parcel 1 (approximately 20.90 acres) would be developed with approximately 363,367 square feet of warehouse/manufacturing uses. Project Parcel 2 (approximately 19.59 acres) would be developed with approximately 347,369 square feet of warehouse/manufacturing uses. Project Parcels 3 and 4, totaling approximately 53.36 acres would remain vacant. The Project is anticipated to be constructed and occupied by 2021 (the Project Opening Year). The Project is assumed to be operational 24 hours per day, 7 days per week. At the time this analysis was prepared, specific Project tenants have not yet been identified. Cold storage uses are not anticipated as part of the Project.

This EIR evaluates likely maximum impacts associated with all Project actions and operations including, but not limited to, construction of the Project buildings and supporting on-site facilities and amenities; construction and operation of supporting roadways; construction and operation of supporting utilities and service systems; and construction and operation of supporting infrastructure distribution and conveyance lines. Should future development proposals for the Project site differ substantively from the development concept analyzed herein, the Lead Agency may require additional environmental analyses.

[1] For the purposes of the EIR analysis, 80% of the total building area is assumed to comprise warehouse uses, the remaining 20% is assumed to comprise manufacturing uses.

The Project site is located within the Mead Valley area of the County of Riverside. More specifically, the Project site is located west of Decker Road, between Nandina Avenue and Oleander Avenue. Interstate 215 (I-215) exists in a north – south orientation approximately one-half mile easterly of the Project site. The Project site location is presented at Figure 3.1-1.

3.2 EXISTING LAND USES

The Project site comprises vacant, undeveloped property. To the north, south, and west of the Project site, properties are also vacant and undeveloped. Easterly of the Project site, across Decker Road, are warehouse/distribution center uses and vacant land. Existing land uses are also presented at Figure 3.1-1.

Notable physical features within the Project site include slopes and rock formations that are predominant in Project site Parcels 3 and 4. Slopes within these areas range from 12h: 1v (8 percent slope) to 2h: 1v (50 percent slope). These slopes evidence granitic outcrops of approximately 5 – 30 feet in height. In combination, these slopes and rock formations act to define the westerly limits of development that would occur under the Project.

3.3 EXISTING LAND USE DESIGNATIONS

3.3.1 County General Plan and Mead Valley Area Plan Land Use Designations

The County of Riverside General Plan (General Plan) and associated Area Plans guide land use and planning throughout the County of Riverside (County). The General Plan establishes policies and land use plans applicable to all unincorporated County areas. The subordinate Area Plans establish focused policies and land use plans responding to specific aspects and attributes of localized County regions.

Countywide land use policies and land use plans are presented at General Plan Chapter 3 *Land Use Element*. More focused policies and land use plans, including various localized Overlays, Policy Areas, and Specific Plans are found in the individual Area Plans. The Project site is located within the Mead Valley Area Plan (MVAP, Area Plan).

N

NOT TO SCALE

Source: Google Earth; Applied Planning, Inc.

Project Site Boundary

Area of Development (Approximate)

applied planning inc

Figure 3.1-1
Project Location/Vicinity Land Uses

The existing General Plan Land Use designation and MVAP Land Use designation of the Project site is "Business Park" (BP). More specifically, per the General Plan and MVAP, the Business Park Land Use allows for employee-intensive uses, including research and development, technology centers, corporate and support office uses, clean industry and supporting retail uses. Allowed building intensity ranges from 0.25 to 0.6 FAR. The intent of the Business Park Land Use designation is to provide flexible opportunities for industrial uses and building types, ranging from a campus-like, multiple building setting to a single big box warehouse. Additionally, it is intended that the uses can include manufacturing, distribution, storage, and even support some commercial. The Project warehouse/manufacturing uses are encompassed within the range of uses provided for under the Business Park Land Use designation. The Project building intensity for Parcel 1 would be approximately 0.40 FAR. The Project building intensity for Parcel 2 would be approximately 0.41 FAR. The Project does not propose or require amendment of the County General Plan, amendment of the MVAP, or amendment of any MVAP Overlay, Policy Area, or Specific Plan. County General Plan documents including the General Plan Land Use Element and Mead Valley Area Plan can be accessed at: https://planning.rctlma.org/Zoning-Information/General-Plan.

3.3.2 Zoning Designation

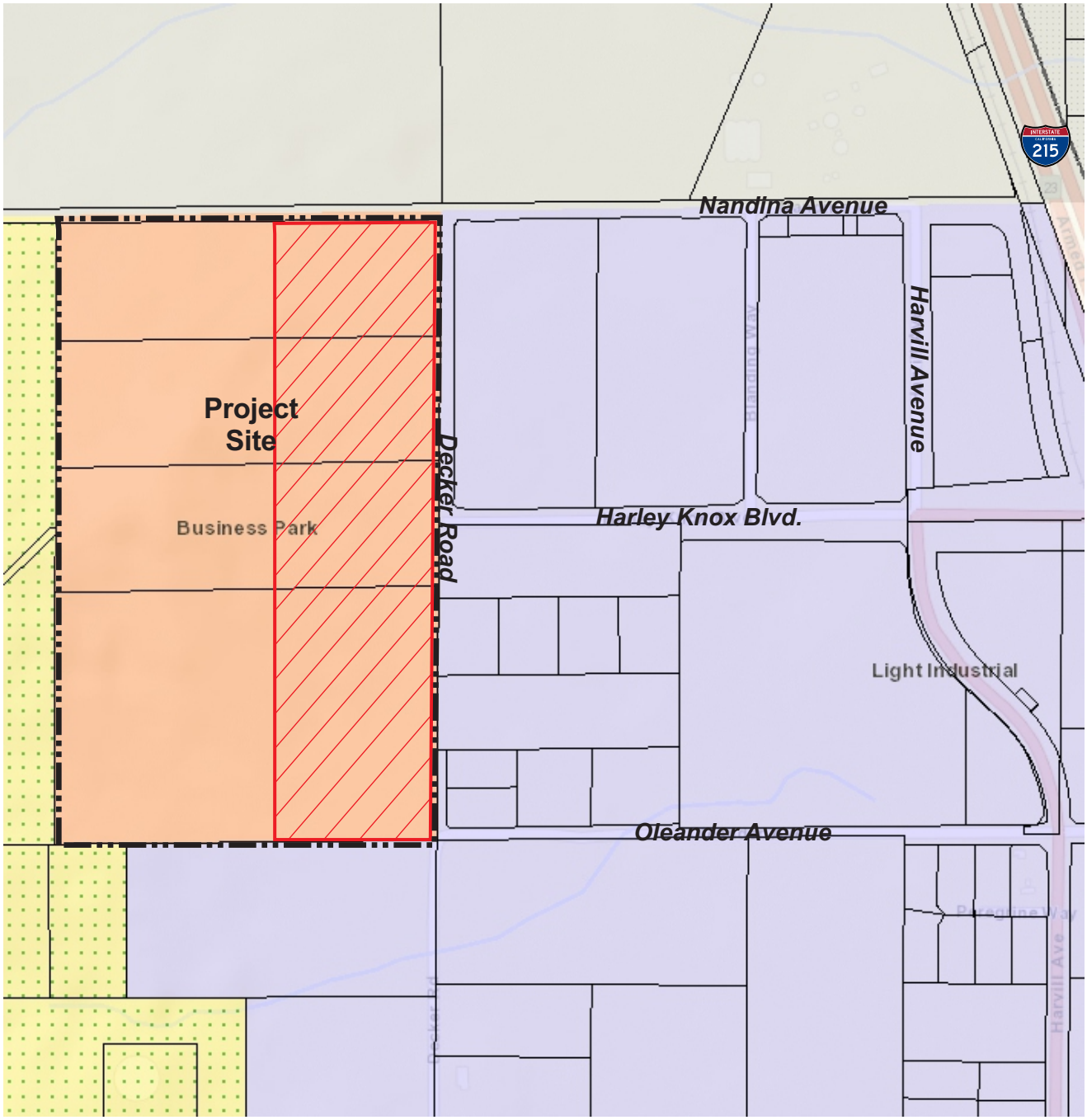
County Ordinance No. 348 (Land Use Ordinance) implements the General Plan Land Use Plan in a manner that promotes compatible land use relationships and minimizes potential land use conflicts. The Land Use Ordinance establishes various Zoning Districts and intent of each District; identifies a range of uses that are permitted or conditionally permitted within each District; and articulates procedures and development standards that regulate land uses and development within each District. Zoning Designation of the Project site is Industrial Park (I-P). Subject to approval of an Industrial Park Plot Plan, the I-P Zone permits warehouse/manufacturing uses such as those proposed by the Project (see: Ordinance No. 348, Article X, I-P *Zone [Industrial Park]*, Section 10.1., *Permitted Uses*). Approval of a Plot Plan is one of the Project's requested Discretionary Actions. The Project does not propose or require amendment of the Project site Zoning Designation. The County Land Use Ordinance can be accessed at: https://www.countyofriverside.us.

General Plan Land Use Designations; Area Plan Land Use Designations, including applicable Overlay, Policy Area, or Specific Plan Designations; and Zoning Designations of the Project site and adjacent properties are summarized at Table 3.3-1. Existing General Plan Land Use and Zoning Designations are illustrated at Figures 3.3-1 and Figure 3.3-2, respectively.

Table 3.3-1
Existing Land Use Designations

	General Plan Land Use Designation	**MVAP Land Use Designation** (Overlay, Policy Area, Specific Plan Designation[s])	**Zoning Designation**
Project Site	**Business Park**	**Business Park** (Overlay: N/A; Policy Area(s): March Joint Air Reserve Influence Area; Mt. Palomar Nighttime Lighting Policy Area; Specific Plan: N/A)	**Industrial Park**
North	**Public Facilities**	**Public Facilities** (Overlay: N/A; Policy Area(s): March Joint Air Reserve Influence; Area; Mt. Palomar Nighttime Lighting Policy Area; Specific Plan: N/A)	**Rural Residential**
South	**Light Industrial/ Rural Community-Very Low-Density Residential**	**Light Industrial/ Rural Community-Very Low-Density Residential** (Overlay: N/A; Policy Area(s): March Joint Air Reserve Influence Area; Mt. Palomar Nighttime Lighting Policy Area; Specific Plan: SP 341- Majestic Freeway Business Center Specific Plan)	**Industrial Park/ Light Agriculture**
East	**Light Industrial**	**Light Industrial** (Overlay: N/A; Policy Area(s): March Joint Air Reserve Influence Area; Mt. Palomar Nighttime Lighting Policy Area; Specific Plan: SP 341- Majestic Freeway Business Center Specific Plan)	**Industrial Park**
West	**Rural Community-Very Low-Density Residential**	**Rural Community-Very Low-Density Residential** (Overlay: N/A; Policy Area(s): March Joint Air Reserve Influence Area; Mt. Palomar Nighttime Lighting Policy Area; Specific Plan: N/A)	**Light Agriculture**

Sources: County of Riverside General Plan; Mead Valley Area Plan

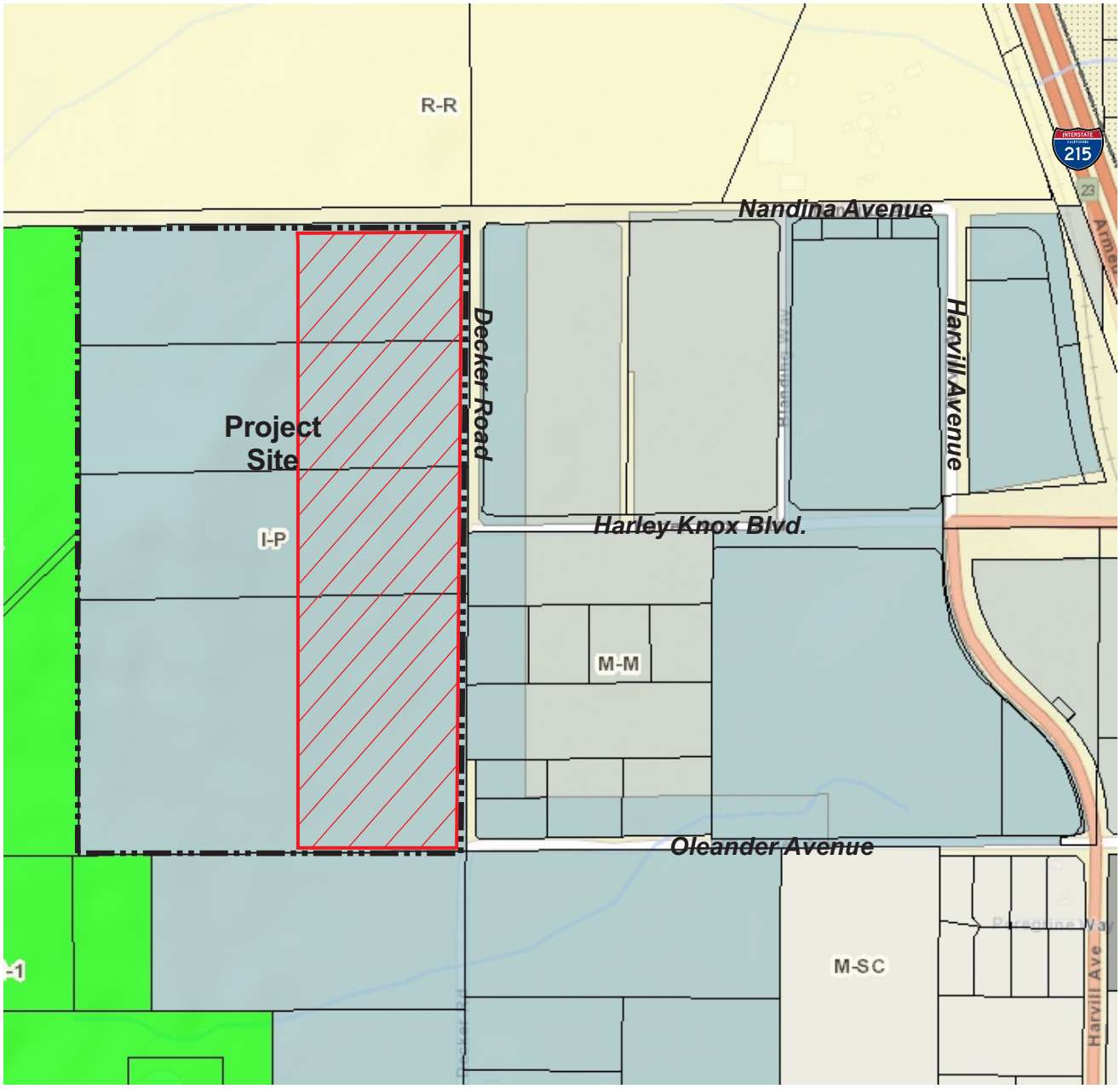


Project Site Boundary
Area of Development (Approximate)
Business Park
Light Industrial
Rural Community - Very Low Density Residential
Public Facilities

N
NOT TO SCALE

Source: Google Earth; Applied Planning, Inc.

Figure 3.3-1
General Plan Land Use Designations



Project Site Boundary

Area of Development (Approximate)

Industrial Park

Rural Residential

Manufacturing - Medium

Light Agriculture

N

NOT TO SCALE

Source: Google Earth; Applied Planning, Inc.

applied planning inc

Figure 3.3-2
Zoning Designations

3.4 PROJECT ELEMENTS

3.4.1 Site Preparation/Project Construction

The Project area would be grubbed, rough-graded, and fine-graded in preparation of building construction. Existing grades within the Project site would be modified to establish suitable building pads and to facilitate site drainage.

The Project preliminary grading concept and the analyses in this EIR assume a potential maximum 69,000 cubic yards of soil export. To the extent practical, soils and materials excavated during site preparation and construction activities would be temporarily stockpiled on-site and subsequently used for on-site perimeter berming/buffering areas.

Materials and soils stockpiling specifications would conform to applicable County of Riverside Building & Safety requirements. Please refer also to: https://rctlma.org/building/Building-Permits/About-Grading.

Blasting will be required during site preparation to remove bedrock and create suitable building pads. Blasting within the Project site would employ small, highly-controlled explosive charges to fragment large rocks into smaller, crushable pieces. The blasting contractor would be required to obtain blasting permit(s) from the State, and to notify Riverside County Sheriff's Department within 24 hours of planned blasting events. Further, blasting operations are required to satisfy the maximum "airblast" and vibration levels identified by the U.S. Bureau of Mines (USBM) and Office of Surface Mining and Reclamation Enforcement (OSMRE).

Any debris generated during site preparation activities would be disposed of and/or recycled consistent with the County's Source Reduction and Recycling Element (SRRE).

3.4.2 Development Concept

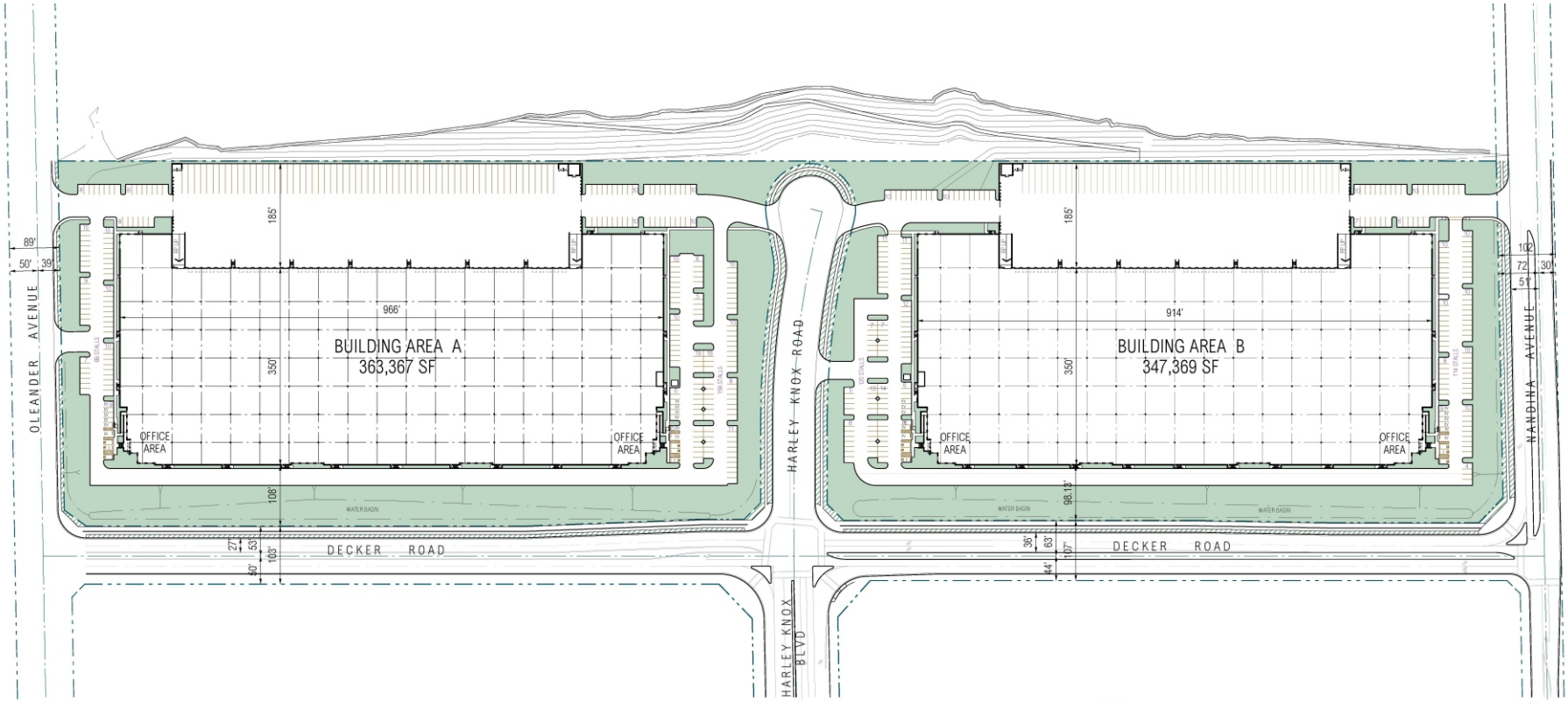
The Project development concept is summarized below. All final Project designs and improvements would be required to conform to standards presented at Riverside County Ordinance No. 348, Article X: I-P Zone (Industrial Park), Section 10.4, *Development Standards*.

3.4.2.1 Site Plan Concept

The Project Site Plan Concept, Figure 3.4-1, provides for the construction of two warehouse buildings of similar size. Parcel 1 in the southerly portion of the Project site would be developed with "Building A," comprising approximately 363,367 square feet. Parcel 2 in the northerly portion of the Project would be developed with "Building B," comprising approximately 347,369 square feet. Maximum building heights would be approximately 45 feet. Westerly Parcels 3 and 4 would remain vacant and undeveloped.

Employee parking areas would be provided along the northerly and southerly building frontages; truck parking stalls and truck loading dock areas would be provided along the rear (westerly) building frontages. Landscaping/screening would be provided along all Project building frontages and the Project site perimeter.

Additional limited areas of off-site disturbance would result from construction of site-adjacent roadway improvements and construction of utilities connections to existing area-serving utilities systems. Site-adjacent Project roadway improvements and utilities connections improvements would occur within dedicated rights-of-way and/or assigned easements. Temporary encroachment permits/private agreements may be required from adjacent property owners. Approximate limits of Project development are indicated at Figure 3.4-2.



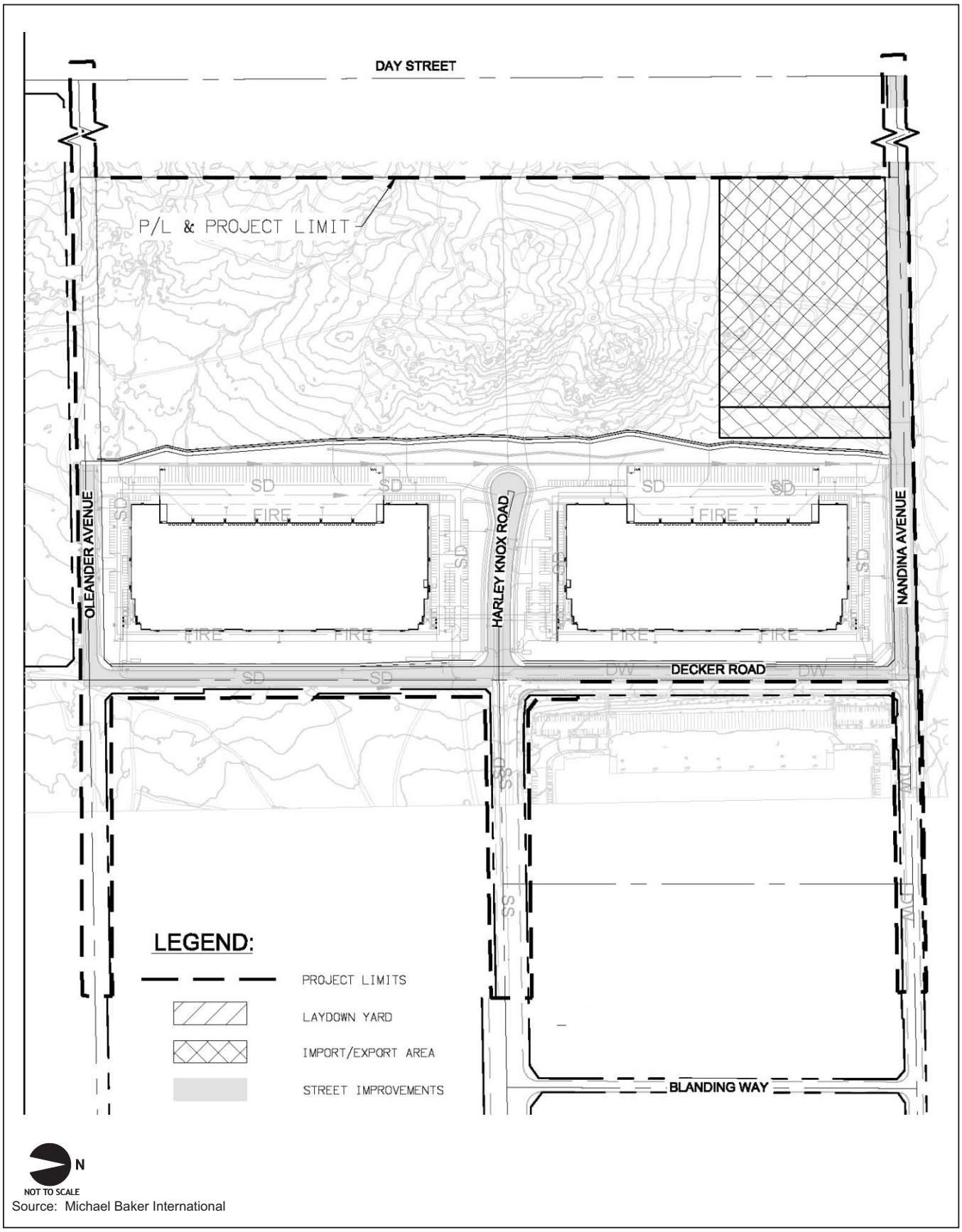
N

NOT TO SCALE

Source: RGA Office of Architectural Design

appliedplanning inc

Figure 3.4-1
Site Plan Concept



Source: Michael Baker International

Figure 3.4-2
Approximate Limits of Disturbance

3.4.2.2 Architectural Design Concepts

Architectural concepts for the Project Building A and Building B are presented at Figures 3.4-3 and 3.4-4, respectively. Building concepts reflect tilt-up concrete construction, with architectural enhancements and glazing techniques similar to other industrial buildings found throughout western Riverside County.

3.4.2.3 Access and Circulation

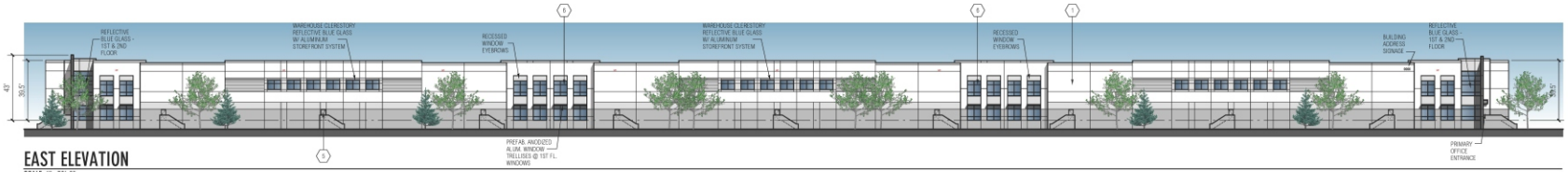
Access and circulation improvements that would be constructed by the Project are summarized below and are illustrated at Figure 3.4-5. All Project access and circulation improvements would be designed and constructed consistent with applicable County standards.[2]

Roadways

Harley Knox Boulevard (E – W)

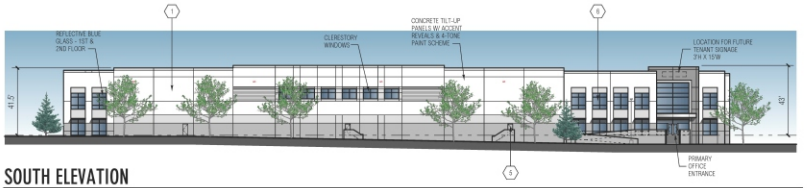
Harley Knox Boulevard would be extended westerly within the central portion of the Project site and would be constructed at its ultimate full-section width as a major highway (118-foot right-of-way), in compliance with applicable County standards and specifications. Access to/from Harley Knox Boulevard would be provided by two Project driveways connecting northerly to Parcel 2, and one Project driveway connecting southerly to Parcel 1.

[2] The EIR evaluates potential impacts that would result from the maximum scope of recommended improvements as detailed in the Project TIA. The ultimate scope of required Project traffic improvements may be less than that evaluated here, and would be determined in consultation with the Lead Agency prior to the issuance of development permits.



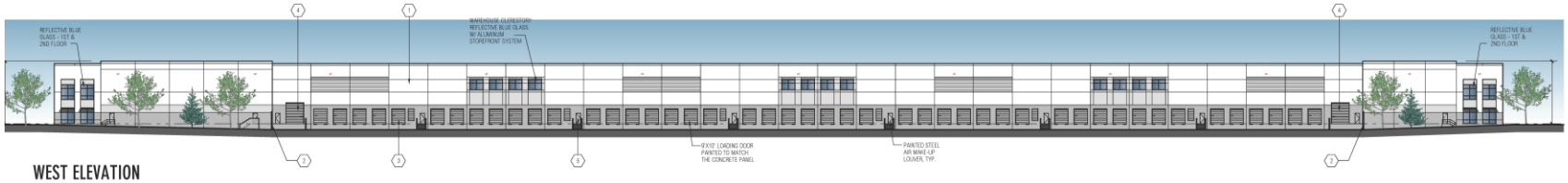
EAST ELEVATION

SCALE: 1"=50'-0"



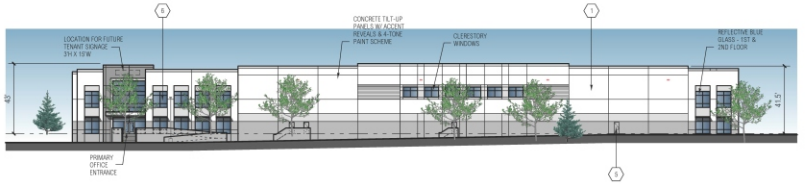
SOUTH ELEVATION

SCALE: 1"=50'-0"



WEST ELEVATION

SCALE: 1"=50'-0"



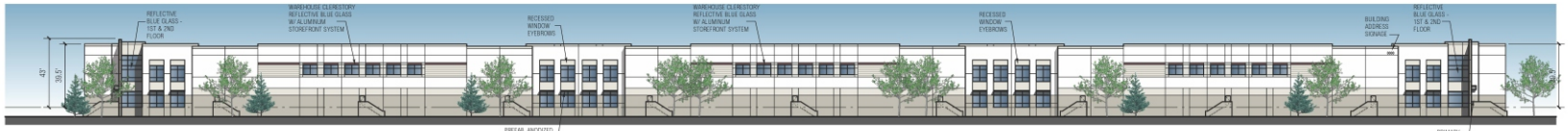
NORTH ELEVATION

SCALE: 1"=50'-0"

Source: RGA Office of Architectural Design

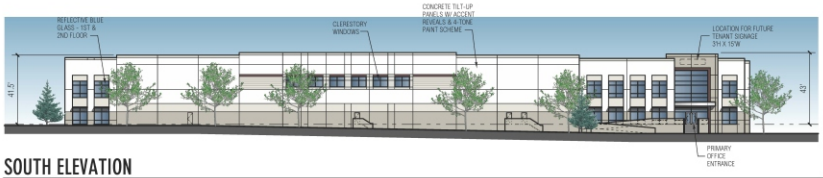
appliedplanning inc

Figure 3.4-3
Building A Elevations



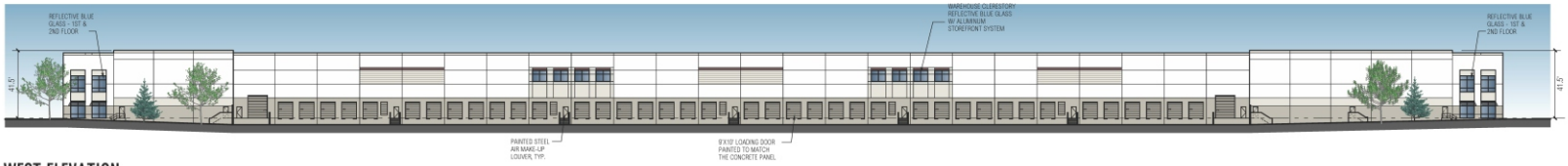
EAST ELEVATION

SCALE: 1"=50'-0"



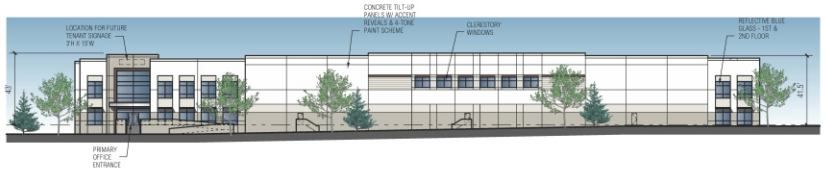
SOUTH ELEVATION

SCALE: 1"=50'-0"



WEST ELEVATION

SCALE: 1"=50'-0"



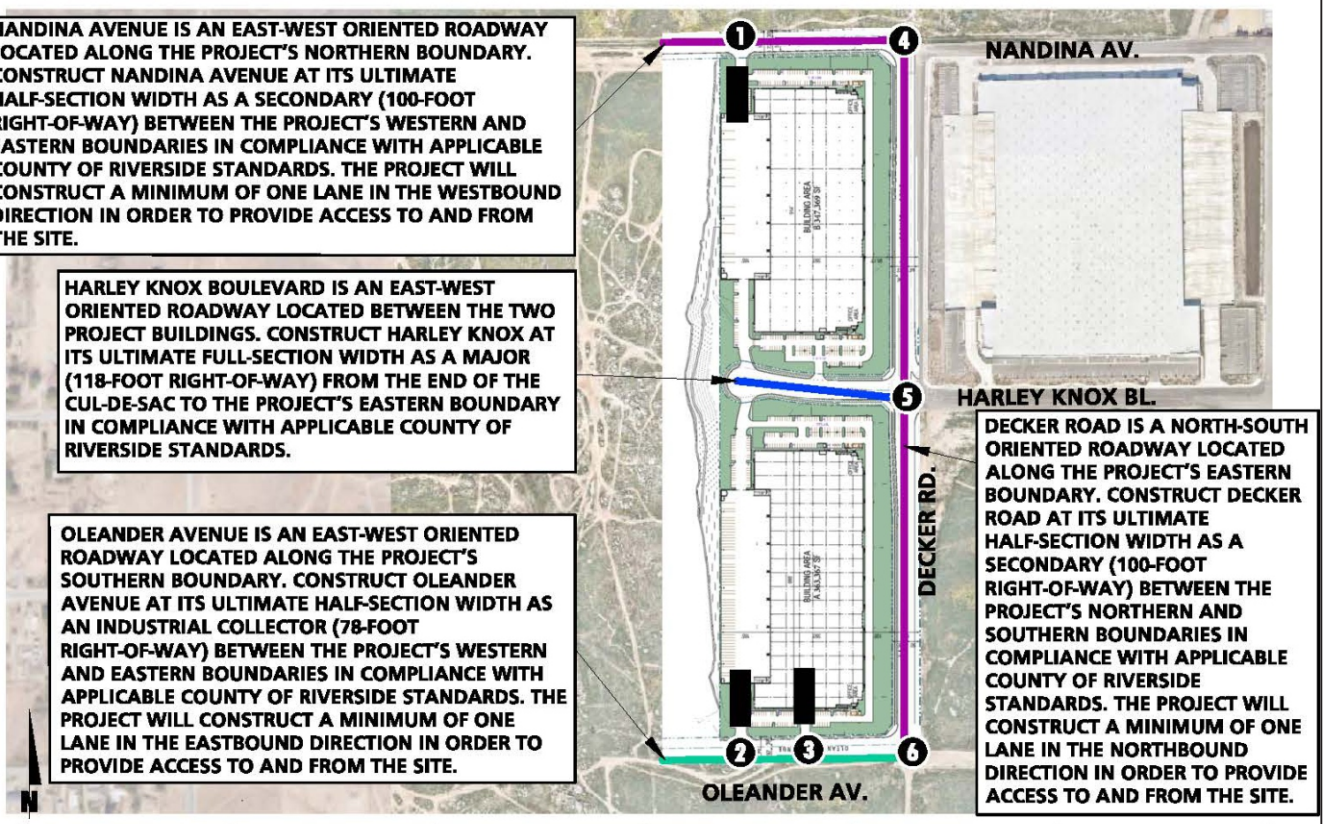
NORTH ELEVATION

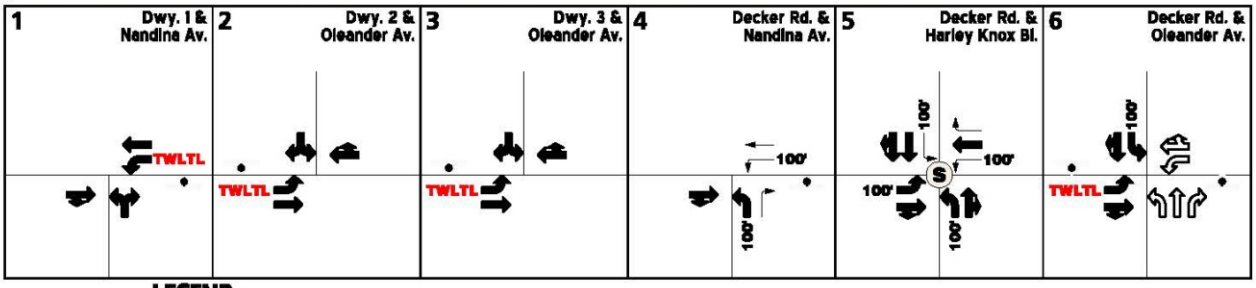
SCALE: 1"=50'-0"

Source: RGA Office of Architectural Design

appliedplanning inc

Figure 3.4-4
Building B Elevations





LEGEND:

- S = ALL WAY STOP
- • = STOP SIGN
- ← = EXISTING LANE
- ⬅ = PROJECT IMPROVEMENT
- ⇦ = IMPROVEMENT BY OTHERS
- 100' = MINIMUM STORAGE LENGTH
- TWLTL = TWO WAY LEFT TURN LANE
- TWLTL = TWO WAY LEFT TURN LANE IMPROVEMENT
- = MAJOR (118' R-O-W)
- = SECONDARY (100' R-O-W)
- = INDUSTRIAL COLLECTOR (78' R-O-W)

ON-SITE TRAFFIC SIGNING AND STRIPING SHOULD BE IMPLEMENTED IN CONJUNCTION WITH DETAILED CONSTRUCTION PLANS FOR THE PROJECT SITE.

SIGHT DISTANCE AT EACH PROJECT ACCESS POINT SHOULD BE REVIEWED WITH RESPECT TO STANDARD CALTRANS AND CITY OF SAN BERNADINO SIGHT DISTANCE STANDARDS AT THE TIME OF PREPARATION OF FINAL GRADING, LANDSCAPE AND STREET IMPROVEMENT PLANS.

N

NOT TO SCALE

Source: Urban Crossroads, Inc.

Figure 3.4-5
Project Access and Circulation Improvements

appliedplanning inc

Nandina Avenue (E – W)

Nandina Avenue defines the northerly Project site boundary. As part of the Project, Nandina Avenue between the Project's western and eastern boundaries, would be constructed at its ultimate half-section width as secondary highway (100-foot right-of-way). The Project would also construct a minimum of one lane in the westbound direction in order to provide access to the Project site.

Oleander Avenue (E – W)

Oleander Avenue defines the southerly Project site boundary. As part of the Project, Oleander Avenue between the Project's western and eastern boundaries, would be constructed at its ultimate half-section width as an industrial collector (78-foot right-of-way). The Project would also construct a minimum of one lane in the eastbound direction in order to provide access to the Project site.

Decker Road (N – S)

Decker Road defines the easterly Project site boundary. As part of the Project, Decker Road between the Project's northern and southern boundaries would be constructed at its ultimate half-section width as a secondary highway (100-foot right-of-way). The Project would also construct a minimum of one lane in the northbound direction in order to provide access to the Project site.

<u>Intersections</u>

Intersection No. 1 - Driveway 1/Nandina Avenue

- Install a stop control on the northbound approach and a northbound shared left-right turn lane.
- Add an eastbound shared through-right turn lane.
- Add a westbound two-way left turn lane within the median.
- Add a westbound through lane.

Intersection No. 2 - Driveway 2/Oleander Avenue

- Install a stop control on the southbound approach and a southbound shared left-right turn lane.
- Add an eastbound two-way left turn lane within the median.
- Add an eastbound through lane.
- Add a westbound shared through-right turn lane.

Intersection No. 3 - Driveway 3/Oleander Avenue

- Install a stop control on the southbound approach and a southbound shared left-right turn lane.
- Add an eastbound two-way left turn lane within the median.
- Add an eastbound through lane.
- Add a westbound shared through-right turn lane.

Intersection No. 4 - Decker Road/Nandina Avenue

- Add a northbound left turn lane.
- Add an eastbound shared through-right turn lane.

Intersection No. 5 - Decker Road/Driveway 4/Harley Knox Boulevard

- Add a northbound left turn lane with a minimum of 100-feet of storage.
- Add a northbound shared through-right turn lane.
- Add a southbound through lane.
- Add a southbound shared through-right turn lane.
- Add an eastbound left turn lane with a minimum of 100-feet of storage.
- Add an eastbound shared through-right turn lane.
- Add a westbound through lane.

Intersection No. 6 - Decker Road/Oleander Avenue

- Add a southbound left turn lane with a minimum of 100-feet of storage.
- Add a southbound shared through-right turn lane.
- Add an eastbound left turn lane.
- Add an eastbound shared through-right turn lane.

3.4.2.4 Construction Traffic Management Plan

Temporary and short-term traffic detours and traffic disruptions could result during Project construction activities including implementation of access and circulation improvements noted above. Accordingly, the Project Applicant would be responsible for the preparation and submittal of a construction area traffic management plan (Plan) to be reviewed and approved by the County. Typical elements and information incorporated in the Plan would include but would not be limited to:

- **Name of on-site construction superintendent and contact phone number**.

- **Identification of Construction Contract Responsibilities** - For example, for excavation and grading activities, describe the approximate depth of excavation, and quantity of soil import/export (if any).

- **Identification and Description of Truck Routes** - to include the number of trucks and their staging location(s) (if any).

- **Identification and Description of Material Storage Locations** (if any).

- **Location and Description of Construction Trailer** (if any).

- **Identification and Description of Traffic Controls** - Traffic controls shall be provided per the Manual of Uniform Traffic Control Devices (MUTCD) if the occupation or closure of any traffic lanes, parking lanes, parkways or any other public right-of-way is required. If the right-of-way occupation requires configurations or controls not identified in the MUTCD, a separate traffic control plan must be submitted to the County for review and approval. All right-of-way encroachments would require permitting through the County.

- **Identification and Description of Parking** - Estimate the number of workers and identify parking areas for their vehicles.

- **Identification and Description of Maintenance Measures** - Identify and describe measures taken to ensure that the work site and public right-of-way would be maintained (including dust control).

The Plan must be reviewed and approved by the County prior to the issuance of the grading permit. The Plan and its requirements would also be required to be provided to all contractors as one component of building plan/contract document packages.

3.4.3 Landscaping

The Project Landscape Concept is presented at Figure 3.4-6. The Project would incorporate perimeter and interior landscaping and streetscape elements, acting to generally enhance the Project's visual qualities and screen potentially intrusive views. Pursuant to County Ordinance No. 348, *I-P Zone Development Standards*, a minimum of 15 percent of the developed Project site shall be landscaped. Project landscape plans would be subject to County review and approval.

3.4.4 Lighting

The Project Site Lighting Concept/Photometric Plan is provided at Figure 3.4-7. All Project lighting would be designed and implemented consistent with applicable County and Airport Land Use Commission (ALUC) requirements, and in a manner that precludes potential adverse effects of light overspill. The Project Site is located within Zone B of the Mt. Palomar Nighttime Lighting Policy Area. All projects within this Zone are required to adhere to the requirements of Riverside County Ordinance No. 655, *Regulating Light Pollution*. The Project would also be required to conform to County Ordinance No. 915, *Regulating Outdoor Lighting*. Project lighting plans would be subject to County review and approval.

3.4.5 Signs

Project signs would be required to conform to County Ordinance No. 348, Article XIX, *Advertising Regulations*. Project signs, to include sign content, sign design and sign locations would be subject to County review and approval.

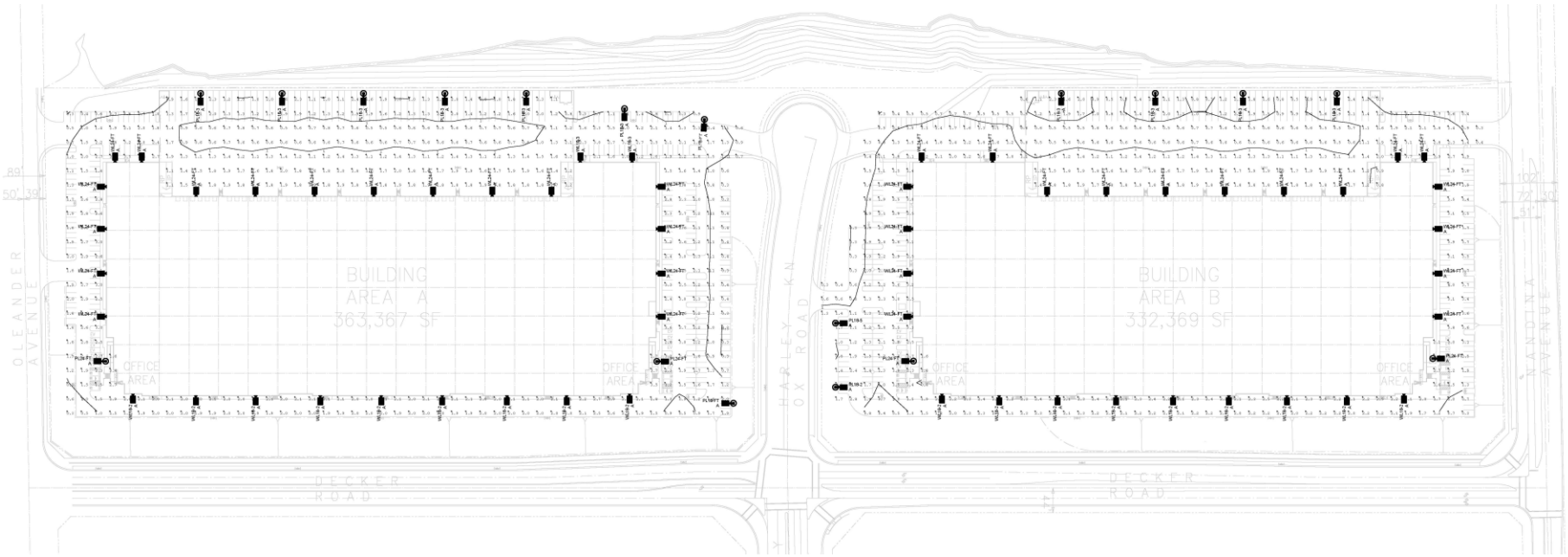
N

NOT TO SCALE

Source: RGA Office of Architectural Design

applied planning inc

Figure 3.4-6
Landscape Plan Concept



FIXTURE LEGEND

SYMBOL	DESCRIPTION	BUG RATING	ZONAL LUMENS	COMPLIES WITH TITLE 24 130.2(b)	COMPLIES WITH CAL GREEN 5.106.8
PL18-2	TYPE 2 18,000 LUMEN 2,700K (LSI SLICE SLM-LED-18L-SIL-2-27-70CRI) LED CUT-OFF ON 25' SQR STL POLE WITH 2'-6" HIGH CONC BASE IN AUTO PARKING & 4' HIGH CONC BASE IN TRUCK YARD*	B3-UO-G3	<150w THEREFORE N/A	YES	YES
PL18-3	TYPE 3 18,000 LUMEN 2,700K (LSI SLICE SLM-LED-18L-SIL-3-27-70CRI) LED CUT-OFF ON 25' SQR STL POLE WITH 2'-6" HIGH CONC BASE IN AUTO PARKING & 4' HIGH CONC BASE IN TRUCK YARD*	B3-UO-G3	<150w THEREFORE N/A	YES	YES
PL18-FT	TYPE FT 18,000 LUMEN 2,700K (LSI SLICE SLM-LED-18L-SIL-FT-27-70CRI) LED CUT-OFF ON 25' SQR STL POLE WITH 2'-6" HIGH CONC BASE IN AUTO PARKING & 4' HIGH CONC BASE IN TRUCK YARD*	B3-UO-G3	<150w THEREFORE N/A	YES	YES
PL24-FT	TYPE FT 24,000 LUMEN 2,700K (LSI SLICE SLM-LED-24L-SIL-FT-27-70CRI) LED CUT-OFF ON 25' SQR STL POLE WITH 3' HIGH CONC BASE	B3-UO-G3	FH=7483.9, FVH=407.5, BH=1315.5, BVH=40.6, UH=0	YES	YES
WL18-2	TYPE 2 18,000 LUMEN 2,700K (LSI SLICE SLM-LED-18L-SIL-2-27-70CRI) LED CUT-OFF AT 33' AFF WITH NO UPTILT	B3-UO-G3	<150w THEREFORE N/A	YES	YES
WL18-3	TYPE 3 18,000 LUMEN 2,700K (LSI SLICE SLM-LED-18L-SIL-3-27-70CRI) LED CUT-OFF AT 33' AFF WITH NO UPTILT	B3-UO-G3	<150w THEREFORE N/A	YES	YES
WL24-FT	TYPE FT 24,000 LUMEN 2,700K (LSI SLICE SLM-LED-24L-SIL-FT-27-70CRI) LED CUT-OFF AT 33' AFF WITH NO UPTILT	B3-UO-G3	FH=7483.9, FVH=407.5, BH=1315.5, BVH=40.6, UH=0	YES	YES

* - SEE ARCHITECTURAL PLANS FOR ACTUAL POLE BASE HEIGHTS

N

NOT TO SCALE

Source: Gregg Electric Inc.

appliedplanning inc

Figure 3.4-7
Lighting Plan

3.4.6 Parking

The Project Site Plan Concept provides 245 passenger car parking stalls adjacent to Building A; and 224 passenger car parking stalls adjacent to Building B. Pursuant to County Ordinance No. 348, Section 18.12. *Off-Street Vehicle Parking* . . . [a]ll development projects that require fifty (50) or more parking spaces shall designate three (3) spaces for electrical vehicles, and designate one (1) additional space for electrical vehicles for each additional fifty (50) parking spaces. By Ordinance, the Project would therefore be required to provide a minimum of 3 spaces for the first 50 spaces + 1 space for 195/50 spaces at Building A = 7 EV spaces at Building A; and 3 spaces for the first 50 spaces + 1 space for 174/50 spaces at Building B = 7 EV spaces at Building B. Per the current Project Site Plan Concept, a total of 24 Electric Vehicle (EV) parking stalls will be provided: Building A (12 stalls), and Building B (12 stalls). In addition to passenger car parking areas, 60 truck trailer stalls would be provided adjacent to Building A; and 51 truck trailer stalls would be provided adjacent to Building B.

Additionally, pursuant to CALGreen Section 5.106.5.2, *Designated Parking for Clean Air Vehicles*, Table 5.106.5.2, the Project would be required to provide designated parking for any combination of low-emitting, fuel efficient and carpool/van pool vehicles totaling a minimum of 8% of the Project total vehicular parking. In this latter regard, based on the current site plan concept, the Project would be required to provide 0.08 x 245 spaces (20 spaces) for low-emitting, fuel efficient and carpool/van pool vehicles at Building A; and provide 0.08 x 224 spaces (18 spaces) for low-emitting, fuel efficient and carpool/van pool vehicles at Building B.

All Project parking areas, parking assignments, and design of parking areas would be required to conform to requirements and criteria presented at County Ordinance No. 348, Section 18.12. *Off-Street Vehicle Parking*. All Project parking plans would be subject to County review and approval.

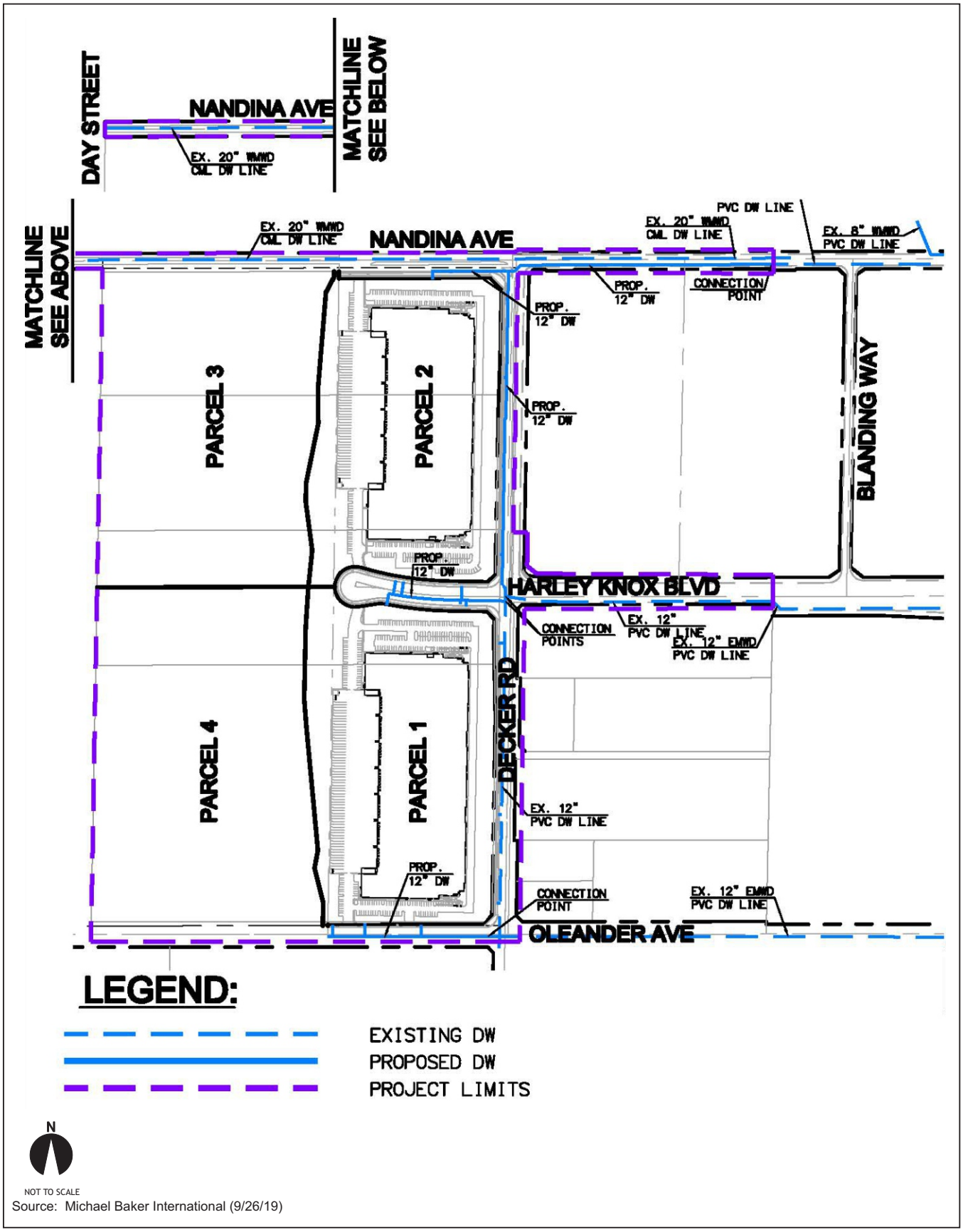
3.4.7 Utilities

Existing public utility systems, including water and sanitary sewer systems would be modified or extended to serve the Project facilities. Such modifications may include, but are not limited to, new service connections, localized improvement and/or realignment of existing service/distribution lines. Utilities systems available to the Project site and proposed connections to, and improvement/modification of utilities systems are summarized below. All Project utilities improvements and utilities connections would be subject to County and purveyor review and approval.

3.4.7.1 Water Supply and Delivery

Water service to the Project would be provided by the Eastern Municipal Water District (EMWD). Water system lines available to the Project are schematically indicated at Figure 3.4-8, *Water Plan Concept*. The Project would construct 12-inch water lines within existing rights-of-way to connect to the existing 12-inch water lines located in Decker Road, Harley Knox Boulevard, and Oleander Avenue; and to the existing 12-inch water line located within Nandina Avenue.

EMWD has provided a conditional "Will-Serve" letter indicating availability of water supplies and water service to the Project. Please refer to EMWD correspondence: Subject: *SAN 53 - Will Serve - APN: 295-310-012, -013, -014, and 015*, March 26, 2019, provided at Appendix I). Provision of water service by EMWD is contingent on the Applicant's compliance with EMWD rules and regulations. Additional EMWD requirements for water service may include plan check review and approval, facility construction, inspection, jurisdictional annexation, and payment of financial participation charges. A Water Supply Assessment (WSA) has been prepared for the proposed Project, the results of which are summarized at EIR Section 4.8, *Utilities and Service Systems*. The Project WSA is provided at EIR Appendix I.



Source: Michael Baker International (9/26/19)

Figure 3.4-8
Water Plan Concept

3.4.7.2 Wastewater Conveyance and Treatment

The Project site is located at the interface of EMWD and WMWD Wastewater Service Areas. Both EMWD and WMWD sewer mainlines are located in adjacent Nandina Avenue, along the Project site northerly boundary. Because both service provider options are available to the Project, wastewater conveyance and treatment services for the Project may be provided by EMWD and/or WMWD.[3]

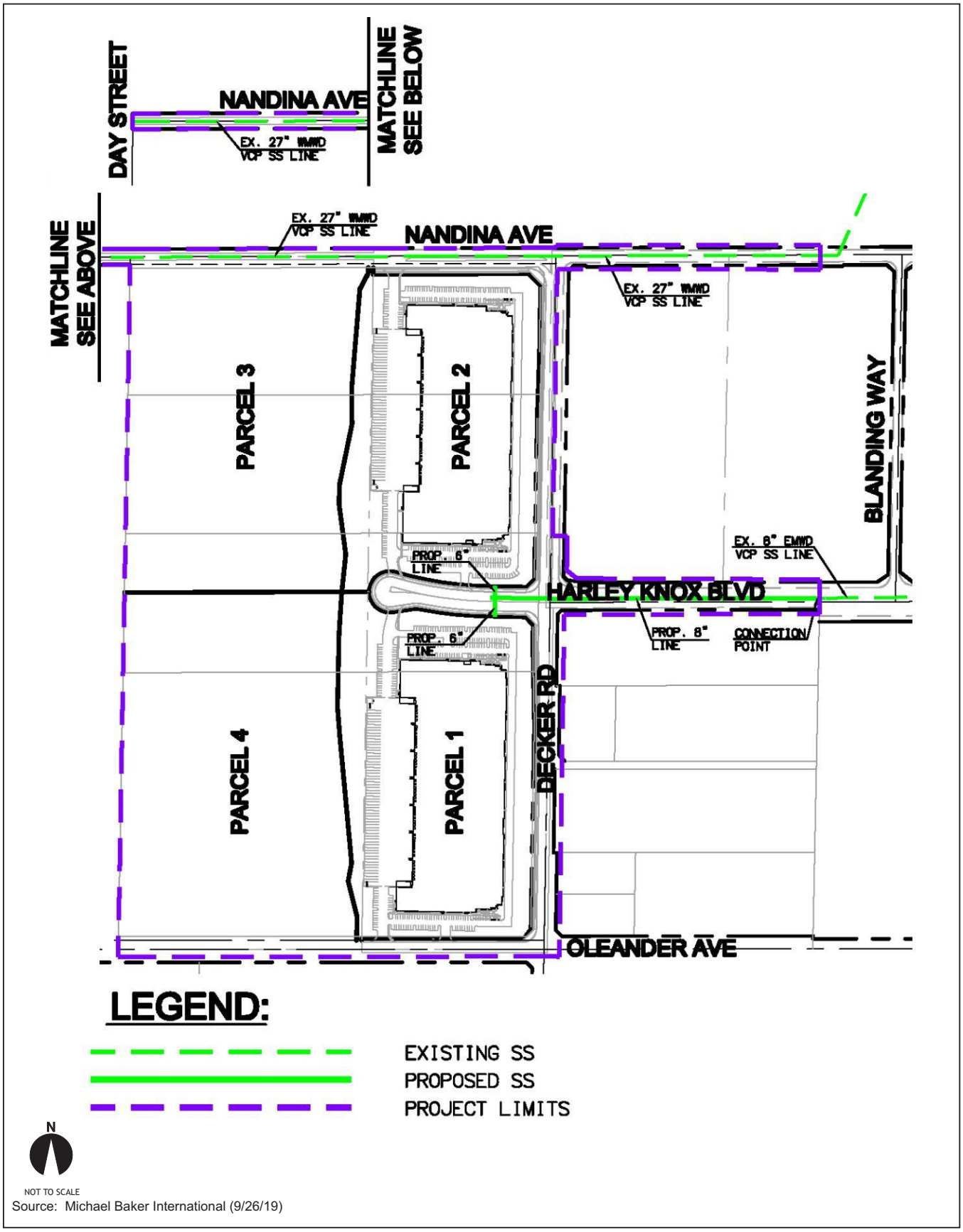
The Project would construct wastewater service lines connecting to existing EMWD/WMWD sewer mainlines. Existing EMWD/WMWD sewer mainlines may be realigned or otherwise modified as part of the Project. All proposed connections to sewer lines, and proposed sewer realignments and modifications would conform to purveyor standards and requirements, and would be subject to review and approval by the affected purveyor(s).

It is anticipated that wastewater generated by the Project would be conveyed to and treated at the EMWD Perris Valley Regional Water Reclamation Facility (PVRWRF) and/or the WWMD Western Water Recycling Facility (WWRF). The Project Sanitary Sewer Plan Concept is presented at Figure 3.4-9.

3.4.7.3 Stormwater Management System

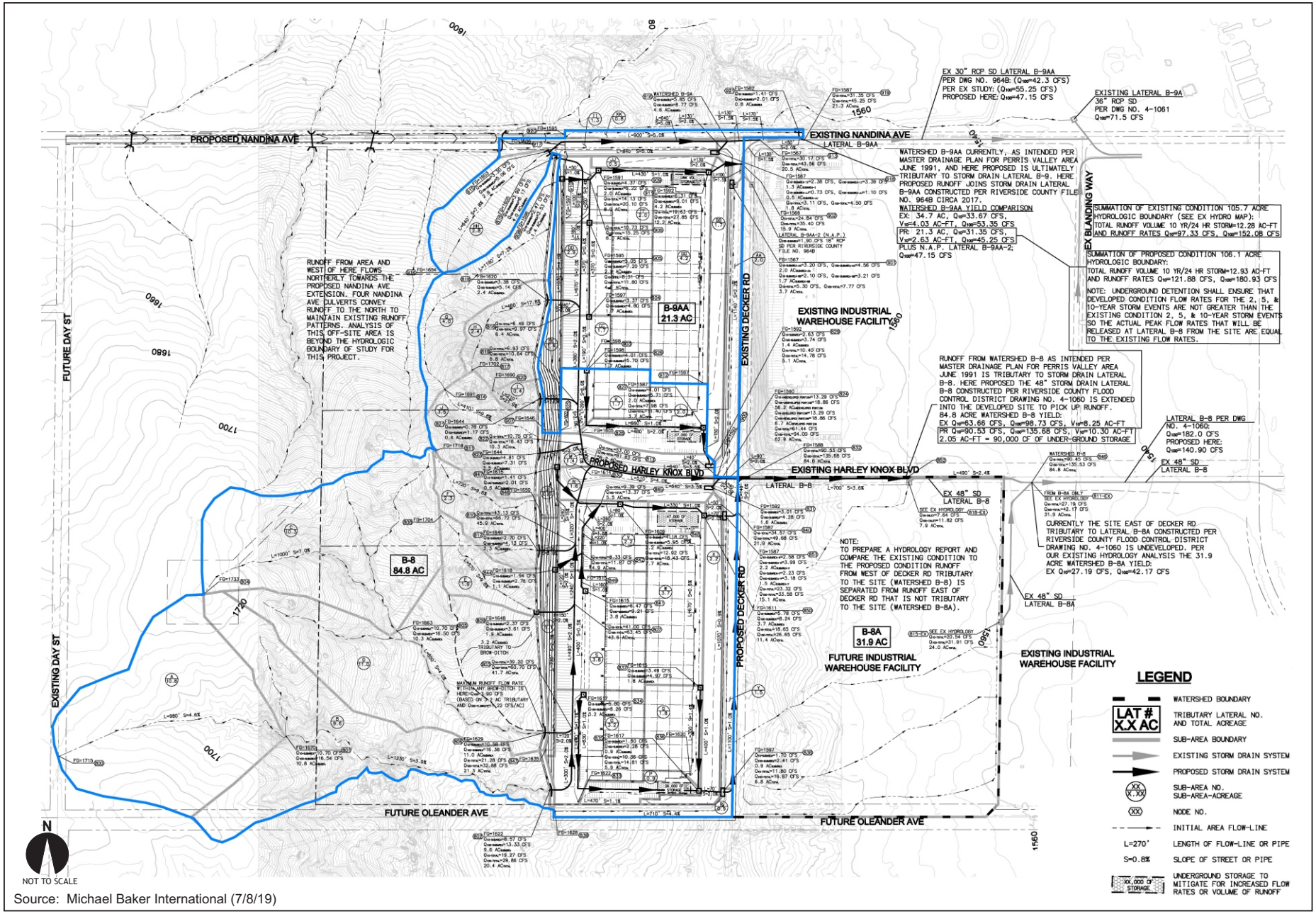
The Project Stormwater Management System Concept is presented at Figure 3.4-10. The Project stormwater management system would provide for collection, treatment, and controlled release of developed stormwaters. The proposed stormwater management system would direct stormwaters easterly consistent with existing drainage patterns. All Project stormwater management system components would be designed, constructed, operated, and maintained consistent with criteria and standards presented in *Riverside County Stormwater Quality Best Management Practice Design Handbook* (Riverside County Flood Control and Water Conservation District) July 21, 2006 (and updates).

[3] EMWD has provided a conditional "Will-Serve" letter indicating availability to provide water and sewer service to the Project. Should the Project ultimately request connection to WMWD wastewater services, a Will-Serve letter from that agency would be required prior to the issuance of building permits. The Project would be required to comply with WMWD requirements for wastewater service.



Source: Michael Baker International (9/26/19)

Figure 3.4-9
Sewer Plan Concept



Source: Michael Baker International (7/8/19)

applied planning inc

Figure 3.4-10
Stormwater Management System Concept

Stormwater runoff would be treated consistent with provisions of a Project-specific Water Quality Management Plan (WQMP). The Project WQMP would be required to conform with Santa Ana Regional Water Quality Control Board (SARWQCB) criteria and performance standards for projects located within the Santa Ana Watershed Region of Riverside County. See also: rcflood.org/NPDES/SantaAnaWS.aspx.

The Project would also implement construction stormwater management improvements and practices consistent with mandated Storm Water Pollution Prevention Plan (SWPPP) requirements as outlined under the California *General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities* (General Permit) Order No. 2009-0009-DWQ, and amendments. See also: waterboards.ca.gov/constpermits.shtml.

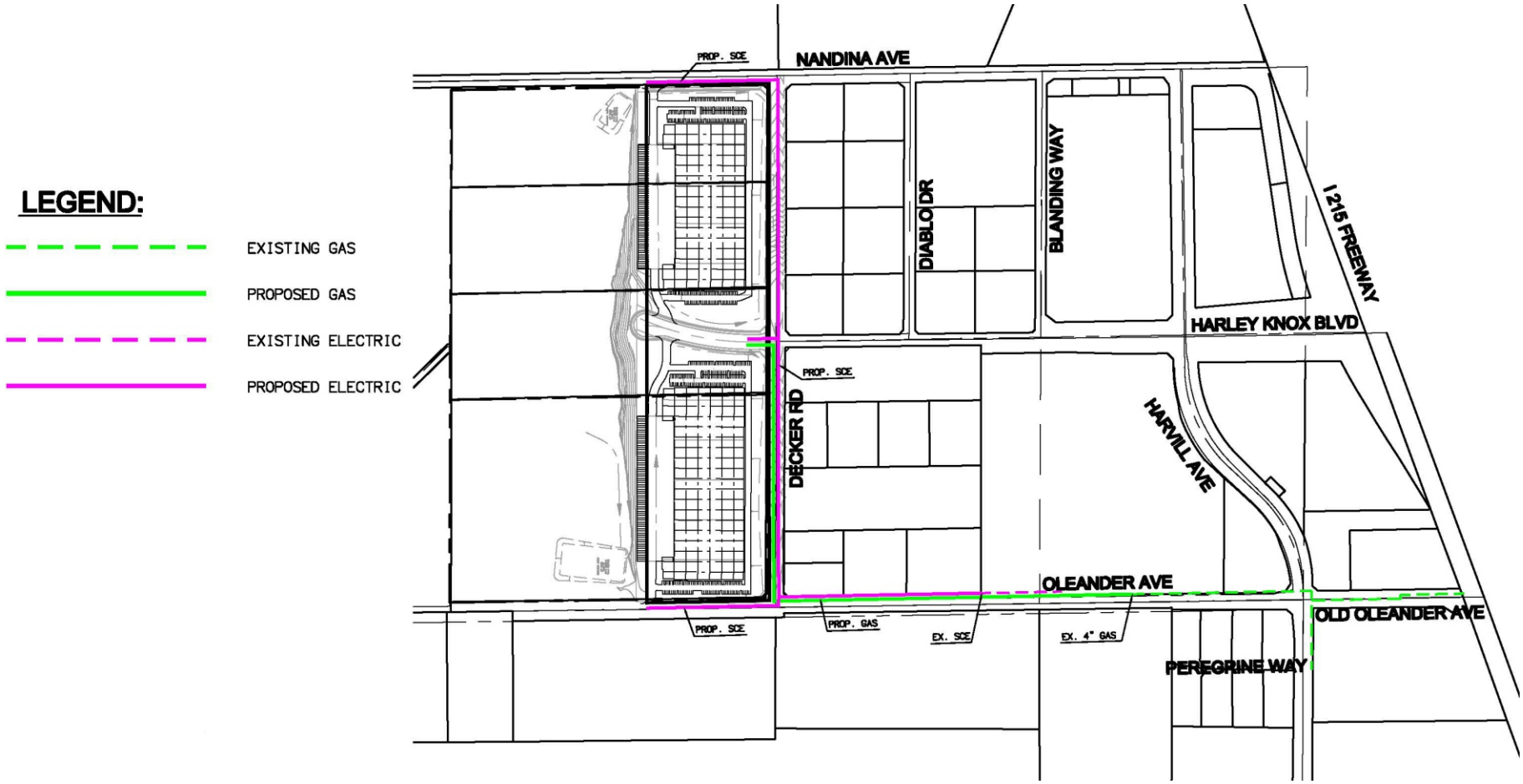
3.4.7.4 Dry Utilities Services/Infrastructure

Dry utilities comprise services/infrastructure other than water, sewer and storm drainage. Dry utilities services systems and service purveyors available to the Project include:

- Natural gas (Southern California Gas Company, SoCalGas);
- Electricity (Southern California Edison, SCE); and
- Telecommunications (various private services).

The Project Dry Utilities Services Plan Concept is presented at Figure 3.4-11. The Project would connect to existing dry utilities services and infrastructure systems located within adjacent rights-of-way. All modification of, and connection to, existing services would be accomplished consistent with County and purveyor requirements.

To allow for, and facilitate Project construction activities, provision of temporary dry utilities services improvements may also be required. The scope of such temporary improvements are considered to be consistent with, and reflected within the total scope of development proposed by the Project. Similarly, impacts resulting from the provision of temporary services would not be substantively different from, or greater than, impacts resulting from development of the Project in total.



N

NOT TO SCALE

Source: Michael Baker International

appliedplanning inc

Figure 3.4-11
Dry Utilities Plan

3.4.8 Energy Efficiency/Sustainability

The Project would comply with or would surpass standards established under the California Code Title 24, Part 6 (the California Energy Code) and California Green Building Standards Code (CALGreen; CCR, Title 24, Part 11). CALGreen standards promote progressive design elements that have positive environmental impacts while encouraging sustainable construction practices. Project energy efficiency/sustainability design features include on-site renewable energy production providing for a portion of the Project electricity demands. The Project would also comply with applicable provisions of the County of Riverside Climate Action Plan Update, November 2019 (CAP Update).

3.4.9 Good Neighbor Policy for Logistics and Warehouse/Distribution Uses

The Project would be subject to provisions of the County of Riverside "Good Neighbor" Policy for Logistics and Warehouse Distribution Centers. See: Board of Supervisors Policy F-3 (Policy); https://www.rivcocob.org/wp-content/uploads/2020/01/Good-Neighbor-Policy-F-3-Final-Adopted.pdf.

The purpose of this Policy is to provide framework for the development and operations of logistics and warehouse projects larger than 250,000 s.f. in size in a manner that would lessen their impact on surrounding communities. This Policy provides development and operational criteria that can be implemented to supplement project-level mitigation measures.

The proposed Oleander Business Park Project would be required to comply with applicable provisions of the Good Neighbor Policy as implemented through the Project Conditions of Approval. The analysis provided here does not take credit for any reduction in environmental impacts that may be achieved under the Good Neighbor Policy. The EIR thereby establishes a likely maximum impact scenario.

3.5 PROJECT OPENING YEAR

The Project in total would be developed in a manner responsive to market conditions and in concert with availability of necessary infrastructure and services. For the purposes of this analysis, the Project Opening Year is defined as 2021.

3.6 PROJECT OBJECTIVES

The primary goal of the Project is to develop high quality warehouse/manufacturing uses accommodating a variety of prospective tenants. Complementary Project Objectives include the following:

- Implement the County General Plan (General Plan) through development that is consistent with the General Plan Land Use Element and applicable General Plan Goals, Objectives, Policies and Programs;

- Implement the Mead Valley Area Plan (Area Plan) through development that is consistent with the Area Plan land uses and development concepts, and in total supports the Area Plan Vision;

- Provide adequate roadway and wet and dry utility infrastructure to serve the Project;

- Implement warehouse/manufacturing uses that are compatible with adjacent land uses;

- Provide an attractive, efficient and safe environment for warehouse/manufacturing uses that is cognizant of natural and man-made conditions;

- Accommodate warehouse/manufacturing uses responsive to current and anticipated market demands;

- Make efficient use of the undeveloped subject property by maximizing its buildout potential for employment-generating warehouse/manufacturing uses, while protecting natural features;

- Implement warehouse/manufacturing uses providing additional construction employment opportunities;

- Implement warehouse/manufacturing uses supporting additional long-term employment opportunities;

- Provide warehouse/manufacturing uses near existing roadways and freeways and thereby reduce VMT, traffic congestion, and air emissions;

- Attract new businesses and jobs and thereby foster economic growth.

3.7 DISCRETIONARY APPROVALS AND PERMITS

Discretionary actions, permits, and related consultation(s) necessary to approve and implement the Project include, but are not limited to, the following.

3.7.1 Discretionary Actions

CEQA Guidelines Section 15124 states in pertinent part that if "a public agency must make more than one decision on a project, all its decisions subject to CEQA should be listed . . . " Requested decisions, or discretionary actions, necessary to realize the Project would include the following:

- Certification of the Oleander Business Park Project EIR;
- Approval of a Lot Line Adjustment;
- Site Plan/Plot Plan Approval; and
- Approval of Infrastructure Improvement Plans, including but not limited to roads, sewer, water, storm water management system, and dry utilities plans.

3.7.2 Other Consultation and Permits

CEQA Guidelines Section 15124 also states that environmental documentation should, to the extent known, list other permits or approvals required to implement the Project. Based on the current Project design concept, anticipated permits necessary to realize the proposal will likely include, but are not limited to, the following:

- Tribal Resources consultation with requesting Tribes as provided for under AB 52 (Gatto, 2014) Native Americans: California Environmental Quality Act;

- Permitting pursuant to requirements of the Santa Ana Regional Water Quality Control Board and Riverside County Ordinance No. 754 *Establishing Stormwater/Urban Runoff Management and Discharge Controls*;

- Approval and permitting for construction of Project stormwater management system improvements by the Riverside County Flood Control and Water Conservation District (RCFC & WCD);

- Airport Land Use Compatibility Plan compatibility determination by the Riverside County Airport Land Use Commission;

- Approval and permitting for construction of Project water and sanitary sewer system improvements by EMWD;

- Permitting that may be required by/through the South Coast Air Quality Management District (SCAQMD) for certain equipment or land uses that may be implemented within the Project area;

- Various County of Riverside construction, grading, and encroachment permits allowing implementation of the Project facilities; and

- Permitting from various serving utilities purveyors.

4.0 ENVIRONMENTAL IMPACT ANALYSIS

4.0 ENVIRONMENTAL IMPACT ANALYSIS

This chapter of the EIR analyzes and describes the potential environmental impacts associated with the adoption and implementation of the Oleander Business Park Project (Project). The environmental impact analysis has been organized into a series of sections, each addressing a separate environmental topic. Environmental topics addressed in this EIR are presented in the following sections:

Section	Topic
4.1	Transportation
4.2	Air Quality
4.3	Greenhouse Gas Emissions
4.4	Noise
4.5	Hazards/Hazardous Materials
4.6	Geology and Soils
4.7	Hydrology and Water Quality
4.8	Utilities and Service Systems
4.9	Biological Resources
4.10	Cultural Resources/Tribal Cultural Resources
4.11	Energy
4.12	Wildfire

Within each of the above topical Sections, the discussion is typically divided into subsections which: summarize the findings of the section; present the framework for the discussion by listing the sources of information used in the section; describe the "setting" or existing environmental conditions; identify regulations and policies, which through their observance typically resolve many potential environmental concerns; identify thresholds of significance applicable to potential environmental effects of the

Project; describe the significance of Project-related environmental effects in the context of applicable significance thresholds; and for impacts which are potentially significant or significant, recommend mitigation measures to eliminate or reduce their effects. In this latter regard, it is recognized that the intent of the California Environmental Quality Act (CEQA) is to focus on significant, or potentially significant adverse effects of the Project, and therefore, mitigation is proposed only for potential impacts of this magnitude.

As noted above, before potential impacts are evaluated, the standards or thresholds which will serve as the basis for judging the relative significance of impacts are presented. Often thresholds serve as a general guide or gauge for determining an impact's potential relative significance, rather than defining its absolute effects. Subsequent to identification of relevant significance thresholds, potential Project-related effects and impacts are identified and explained. If an impact is considered to be potentially significant, mitigation measures are proposed to avoid the impact, or reduce its effects to the extent feasible. In determining the potential significance of impacts, the adequacy of existing policies and regulations in addressing each impact is taken into consideration. At the conclusion of each discussion for a potentially significant impact, a determination is made as to whether the impact can be reduced to a less-than-significant level with the application of mitigation measures.

In the environmental analysis, the following terms are used to describe the potential effects of the Project:

- **Less-Than-Significant Impacts**: Minor changes or effects on the environment caused by the Project which do not meet or exceed the criteria, standards, or thresholds established to gauge significance are considered to be less-than-significant impacts. Less-than-significant impacts do not require mitigation. In some cases, these impacts may appear to be potentially significant. However, existing public policies, regulations, and procedures adequately address these potential effects, thereby reducing them to a less-than-significant level, without the need for additional mitigation.

- **Potentially Significant Impacts**: Potentially significant impacts are defined as a substantial, or potentially substantial, adverse change in the environment. The CEQA Guidelines and various responsible agencies provide guidance for determining the significance of impacts. However, the determination of impact significance is ultimately based on the judgment of the lead agency. Similarly, the establishment of any criteria to be used in evaluating the significance of impacts is the responsibility of the lead agency. Wherever possible, mitigation is proposed in the EIR to avoid or reduce the magnitude of potentially significant impacts.

- **Significant Impacts**: Impacts identified in the EIR which cannot be mitigated below thresholds of significance through the application of feasible mitigation measures are categorized as "significant."

- **Cumulative Impacts**: A discussion of cumulative impacts is provided in Section 5.0 of this environmental analysis. Cumulative impacts refer to the impacts of the Project as they are combined or interact with anticipated impacts of other vicinity projects and physical effects of projected ambient regional growth.

4.1 TRANSPORTATION

4.1 TRANSPORTATION

Abstract

This discussion of potential transportation impacts is organized under the following headings:

- *Vehicle Miles Traveled Analysis; and*
- *Other Transportation Topics.*

A summary of the analysis and findings under these topical headings is presented below.

The County specifically recognizes that vehicle delay (Level of Service, LOS) deficiencies are no longer environmental impacts under CEQA.[1] *Although not specifically relevant to an analysis of CEQA transportation impacts, County General Plan Circulation Element Policy C 2.2 requires LOS analysis for new development projects. To this end, a Traffic Impact Analysis (TIA) has been prepared for the Project (see:* Oleander Business Park Traffic Impact Analysis, County of Riverside *[Urban Crossroads, Inc.] August 16, 2019, EIR Appendix B). For County use and informational purposes, the TIA identifies Study Area LOS deficiencies and recommends improvements to address any identified deficient conditions. Project trip generation estimates developed as part of the Project TIA are employed in the VMT analysis presented in this Section, and the trip generation estimates also employed in related analyses (e.g., vehicular-source emissions air quality impacts, vehicular-source noise impacts) presented elsewhere in this EIR.*

[1] *CEQA Guidelines* Section 15064.3, effective January 1, 2019, "describes specific considerations for evaluating a project's transportation impacts" and provides that, except for roadway capacity projects, "a project's effect on automobile delay (or LOS) shall not constitute a significant environmental impact." (*CEQA Guidelines*, § 15064.3, subd. (a).)

Vehicle Miles Traveled (VMT) Assessment

CEQA Guidelines *Section 15064.3 (statute effective July 1, 2020) requires analysis of the Project's potential vehicle miles traveled (VMT) impacts. Detailed analysis of the Project's potential VMT impacts is presented in* Oleander Business Park Vehicle Miles Travelled (VMT) Assessment (Urban Crossroads, Inc.) August 25, 2020 *(Project VMT Assessment). Findings and conclusions of the Project VMT Assessment are summarized in this Section and the Project VMT Assessment in total is presented at EIR Appendix B.*

The Project VMT Assessment estimates the Project VMT per employee and compares Project VMT per employee to the applicable County VMT per employee threshold. Project VMT per employee that would exceed the County VMT per employee threshold would be considered a potentially significant VMT impact. As substantiated herein, Project VMT per employee is estimated at 14.02 VMT per employee and would not exceed the applicable County VMT per employee threshold of 14.24 VMT per employee. On this basis, Project VMT impacts would be individually and cumulatively less-than-significant. As also substantiated herein, the Project would not result in potentially significant VMT inducement impacts.

Other Transportation Topics

Consistent with 2020 CEQA Guidelines *Appendix G Transportation subjects as implemented by the County, other transportation topics evaluated in this Section include the following:*

- *Potential to conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;*

- *Potential to result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;*

- *Potential to alter waterborne, rail or air traffic;*

- *Potential to substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); and*

- *Potential to cause an effect upon, or a need for new or altered maintenance of roads.*

The analysis presented here substantiates that Project impacts under the preceding "Other Transportation Topics" would be less-than-significant.

Impacts Previously Substantiated not to be Potentially Significant
Additionally, as discussed in the EIR Initial Study (EIR Appendix A), under the transportation topics listed below, the Project would have no impact, or impacts would be less-than-significant. On this basis, the following topics are not further discussed here:

- *Potential to cause an effect upon circulation during the project's construction; and*

- *Potential to result in inadequate emergency access or access to nearby us.*

4.1.1 VMT ASSESSMENT

4.1.11.1 Background

Transportation impact analyses prepared by the County have historically been based level of service (LOS) and similar vehicle delay/congestion metrics. The LOS analytic model provides a reasonable assessment of vehicle congestion and driving conditions that may result from a given development project. LOS analyses do not however evaluate the range and magnitude of other environmental effects attributable to development traffic, including fuel consumption, criteria air pollutant emissions, and greenhouse gas emissions. In response to these latter concerns and to comprehensively evaluate environmental impacts of development traffic, the *CEQA Guidelines* (amended December 2019) include new Section 15064.3 addressing transportation impacts. In summary *CEQA Guidelines* Section 15064.3 establishes Vehicle Miles Traveled (VMT) as the appropriate metric for evaluation of project transportation impacts.

Consistent with *CEQA Guidelines* Section 15064.3 requirements, an analysis of the Project's potential VMT impacts is presented below. Please refer also to *Oleander Business*

Park Vehicle Miles Travelled (VMT) Assessment (Urban Crossroads, Inc.) August 25, 2020 (Project VMT Assessment) presented at EIR Appendix B.

The Project VMT Assessment substantiates the potential for the Project to conflict with or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b). For ease of reference, *CEQA Guidelines* Section 15064.3, subdivision (b) is presented below.

> **§ 15064.3. Determining the Significance of Transportation Impacts.**
> (b) Criteria for Analyzing Transportation Impacts.
>
> (1) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.
>
> (2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.
>
> (3) Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the

availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.

(4) Methodology. A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.

4.1.2.2 Methodology

As provided for under *CEQA Guidelines* Section 15064.3 (b) (4) "[a] lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure." Appropriate means to develop and implement VMT assessment methodologies are expressed in the Governor's Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (December of 2018) (Technical Advisory). Consistent with guidance presented in the Technical Advisory, the County of Riverside has implemented draft VMT analysis methodologies in the County *Transportation Analysis Preparation Guide* (Updated 2020) (County Guidelines).

The Project VMT analysis presented here conforms to the VMT methodology established under the County Guidelines. Further detail regarding the Project VMT Assessment methodology is provided below.

Project Screening

Consistent with County Guidelines, projects that meet certain screening thresholds based on their location and project type may be presumed to result in a less than significant transportation impact. Consistent with the screening criteria recommended in OPR's Technical Advisory, the County of Riverside will utilize the following project screening thresholds that may be applicable to the Project:

- Transit Priority Area (TPA) Screening
- Map-Based Screening
- Project Type Screening

A land use project need qualify under only one of the above screening criteria to result in a less than significant impact. Development proposals that do not qualify under one the above-listed screening criteria are required to prepare a project level VMT analysis. The Project considered herein does not qualify under the any of the County's VMT screening criteria (Project VMT Analysis, pp. 2, 3). Accordingly, a Project-level VMT analysis has been prepared.

Project VMT

Project VMT was calculated employing the sub-regional Riverside Transportation Analysis Model (RIVTAM). RIVTAM is a useful tool to estimate VMT as it considers interaction between different land uses based on socio-economic data such as population, households, and employment. RIVTAM is a travel forecasting model that represents a sub-area (Riverside County) of the Southern California Association of Governments (SCAG) regional traffic model. RIVTAM was designed to provide a greater level of detail and sensitivity in the Riverside County area as compared to the regional SCAG model. County Guidelines identifies RIVTAM as the appropriate tool for conducting VMT modeling for land use projects within the County of Riverside (Project generated VMT has been calculated using the most current version of RIVTAM. Adjustments in socio-economic data (SED) (i.e., employment) for the Project has been made to a separate TAZ within the model to reflect the Project's warehouse land use. A separate TAZ has been utilized to isolate vehicle trips to/from the Project (Project VMT Analysis, pp. 3, 4). Project-generated home-

based work VMT was then calculated following the VMT calculation procedures identified in Appendix H of the County Guidelines and includes home-based work trips that are both internal and external to the RIVTAM model boundaries. On this basis, Project home-based work VMT = 9,674 (Project VMT Assessment, p. 4).

Alternative transportation modes and facilities (e.g., bus service, bicycle routes, pedestrian paths) are generally available within the Study Area and could potentially reduce the Project VMT. However, the VMT reducing potentials of alternative travel modes were not considered in the Project VMT Assessment. Project VMT estimates considered in this analysis therefore represent the likely maximum Project VMT impact conditions.

Project Employees

Project tenants are not yet known, and the number of jobs that the Project would generate cannot therefore be precisely determined. For purposes of this analysis, employment estimates were calculated using data and average employment factors presented in the County General Plan (General Plan). The General Plan estimates that industrial land uses, such as the Project, would employ one worker for every 1,030 SF of building area (Riverside County General Plan, Appendix E-2, Table E-5). See: https://planning.rctlma.org/. On this basis, the Project's 710,736 square feet of warehouse/manufacturing uses would generate an estimated 690 jobs.

Project VMT per Employee

Reflecting the preceding VMT and Employee estimates, Project VMT per employee estimates are summarized at Table 4.1-1.

Table 4.1-1
Project VMT per employee

	Project
Home-based Work VMT	9,674
Employment	690
VMT per employee	14.02

Source: Oleander Business Park Vehicle Miles Travelled (VMT) Analysis (Urban Crossroads, Inc.) August 25, 2020.

VMT Threshold of Significance

The County Guidelines identifies a threshold of 14.24 VMT per employee for office and industrial uses such as that proposed by the Project. If the Project VMT per employee exceeds the County threshold of 14.24 VMT per employee, the potential for the Project to conflict with or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b) would be potentially significant.

Project VMT Impact

As summarized at previous Table 4.1-1, Project VMT per employee is 14.02. Project VMT per employee would therefore not exceed the County Guidelines threshold of 14.24 VMT per employee. On this basis the potential for the Project to conflict with or be inconsistent with *CEQA Guidelines* Section 15064.3, subdivision (b) is less-than-significant.

Level of Significance: Less-Than-Significant.

Cumulative VMT Impacts

As summarized in the Technical Advisory "a project that falls below an efficiency-based threshold that is aligned with long-term environmental goals and relevant plans would have no cumulative impact distinct from the project impact."[2] Since the Project VMT per employee impact is less than significant, and the Project is consistent with the County of Riverside Land Use Element, the Project's cumulative effect on VMT is also presumed to be less-than-significant.

Level of Significance: Less-Than-Significant.

Induced VMT Assessment

Use of VMT as an environmental impact metric for transportation projects is discretionary under the Section 15064.3 (b) (2) of the *CEQA Guidelines* as presented below:

[2] Technical Advisory, p.6.

> *(2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.*

The Technical Advisory states that building new roadways, adding roadway capacity in congested areas, or adding roadway capacity to areas where congestion is expected in the future, typically induces additional vehicle travel. The addition of through lanes on existing or new highways, including general purpose lanes, HOV lanes, peak period lanes, auxiliary lanes, or lanes through grade-separated interchanges as project types that would likely lead to a measurable and substantial increase in induced vehicle travel. Further, the Technical Advisory acknowledges that the addition of capacity on local or collector streets provided the project also substantially improves conditions for pedestrians, cyclists, and, if applicable, transit, would not likely lead to a substantial or measurable increase in vehicle travel, and therefore generally should not require an induced travel analysis.

The Project is proposing to construct site adjacent roadways including sidewalk and bicycle lanes consistent with the Riverside County General Plan. The construction of these site adjacent roadway facilities consistent with the General Plan is not likely to significantly alter regional or interregional travel. The potential for the Project to result in or contribute substantial adverse induced VMT impacts is therefore considered less-than-significant.

Level of Significance: Less-Than-Significant.

4.1.3 OTHER TRANSPORTATION TOPICS

Other transportation topics evaluated below include:

- *Potential to conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;*
- *Potential to result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;*
- *Potential to alter waterborne, rail or air traffic;*
- *Potential to substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); and*
- *Potential to cause an effect upon, or a need for new or altered maintenance of roads.*

Potential Impact: *Potential to conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.*

Impact Analysis: The analysis presented here considers the degree to which the Project may hinder the safe and comfortable access to the Project site from other locations, with a special focus on people relying on transit services or active transportation modes such as biking or walking.

The Project does not propose elements or aspects that would conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. In this respect, the Project is designed to accommodate pedestrians via sidewalks provided along adjacent public roadways. Landscaping would be installed along the Project's perimeter, separating and defining the adjacent public roadway rights-of-way (and their associated streetscapes and sidewalks) from the Project interior spaces, minimizing or avoiding conflict between Project operations and pedestrian traffic (please refer to EIR Section 3.0, Project Description, Figure 3.4-6, Landscape Plan Concept). Additionally, all Project site design features, including but not

limited to sidewalk designs and driveway access to adjacent streets would be subject to review and approval by the County of Riverside at the time improvement plans are submitted. Established County review processes ensure that Project driveway access control and sight distance standards conform to County safety standards, acting to minimize potential pedestrian/vehicle conflicts at the Project driveway intersections with adjacent sidewalks.

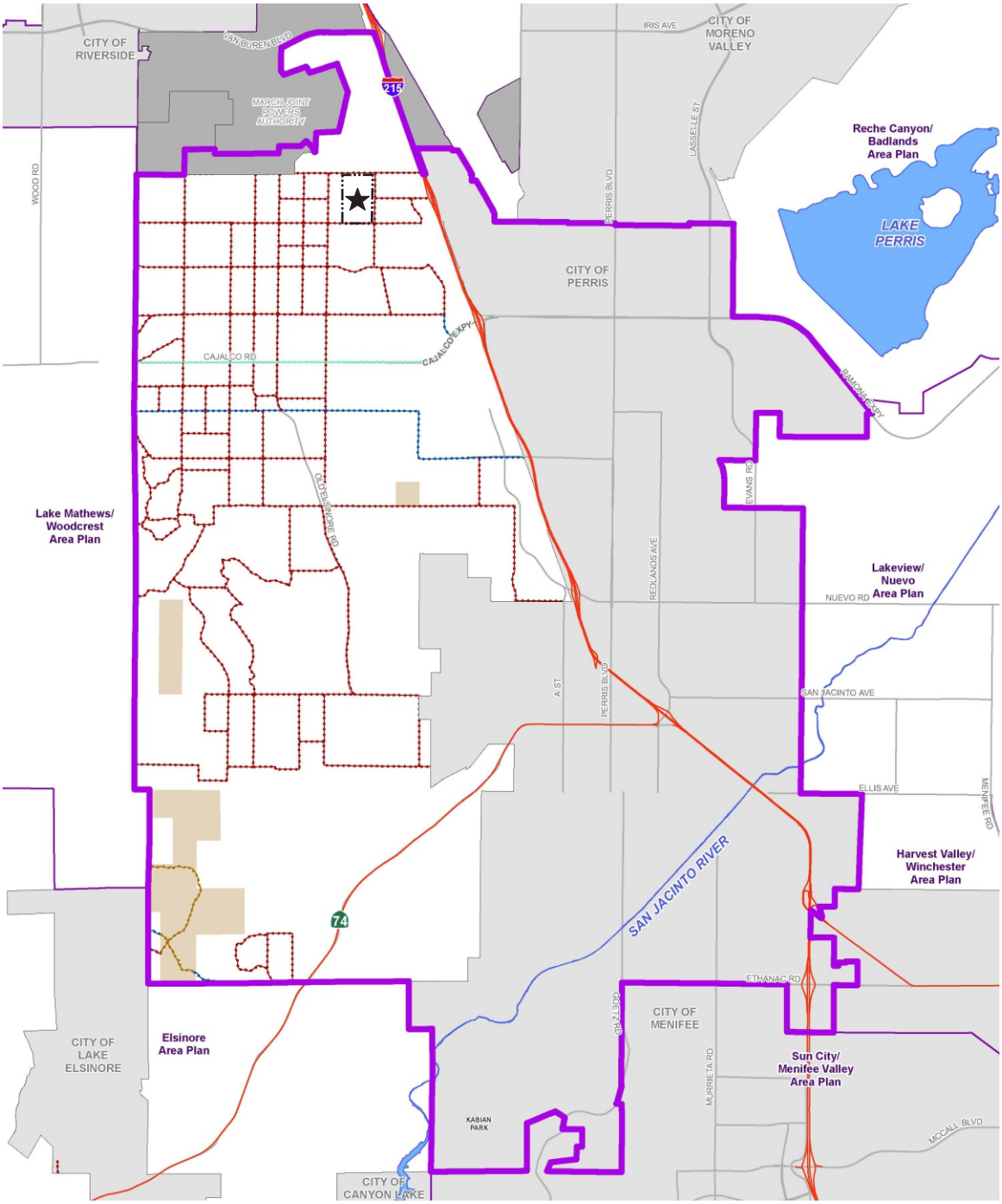
The Project is located within the MVAP. The MVAP Trails and Bikeway System Plan is presented at Figure 4.1-1. In the Project vicinity, community trails are proposed along Oleander Avenue, Harvill Avenue (north of Oleander Avenue), and Harley Knox Boulevard. Consistent with County requirements, the Project would design and construct adjacent roadway sections, including any trail improvements and/or incorporation of trail easements.

There are no public transit services in the vicinity of the Project site under existing conditions. On a long-term basis, the Project may result in increased demand for public transportation as increased employment opportunities become available on-site; however, transit agencies routinely review and adjust their ridership schedules to accommodate public demand. Accordingly, the Project has no potential to conflict with local public transit service.

No designated truck routes exist within the County jurisdiction. However, when Project truck traffic passes through adjacent jurisdictions (e.g., City of Perris) trucks would be required to use designated truck routes. Mandatory use of designated truck routes would minimize potential conflicts between truck traffic and other motorized and non-motorized transportation modes.

Based on the preceding, the potential for the Project to conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities is considered less-than-significant.

Level of Significance: Less-Than-Significant.



Regional Trail
Community Trail
Class 2 Bike Path
Non-County Public and Quasi-Public Lands Trails
Project Site Boundary
Highways
Area Plan Boundary
March Joint Powers Authority
City Boundary
Waterbodies
Bureau of Land Management (BLM) Lands

N
NOT TO SCALE

Source: Mead Valley Area Plan; Applied Planning, Inc.

applied planning inc

Figure 4.1-1
MVAP Trails and Bikeway System Plan

Potential Impact: *Potential to result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.*

Impact Analysis: The Project site is located approximately one mile southwesterly of March Air Reserve Base/Inland Port Airport (MARB/IPA), within the MARB/IPA Airport Influence Area (Airport Influence Area). Within the Airport Influence Area are three designated Compatibility Zones. Properties within these zones are subject to MARB/IPA Airport Land Use Compatibility Plan (ALUCP) policies and regulations governing such issues as land use, development intensity, density, height of structures, and noise. The Project site is located within Compatibility Zone C2.

The Project proposes conventional warehouse/manufacturing uses and does not propose or require facilities or operations that would affect or be affected by MARB/IPA air traffic levels or air traffic patterns. The Project does not propose designs or uses that would not encroach on restricted air space(s) nor would the Project structures otherwise adversely affect MARB/IPA airfield operations. The Project would comply with all requirements established under the ALUCP. Please refer also to related discussions presented at EIR Section 4.5, *Hazards/Hazardous Materials*.

Based on the preceding, the potential for the Project to result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks would be less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Potential to alter waterborne, rail or air traffic.*

Impact Analysis: As discussed above, the potential for the Project to alter air traffic patterns would be less-than-significant. There are no existing or proposed waterborne traffic routes or rail traffic routes within the Study Area. The Project would have no impact on waterborne traffic or rail traffic. On this basis, the potential for the Project to alter waterborne, rail, or air traffic would be less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Potential to substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).*

Impact Analysis: The final design of the Project site plan and all Project traffic improvements would be subject to review and approval by the County, thereby ensuring conformance of the Project improvements with County design and safety standards. In addition, representatives of the County Sheriff Department and County Fire Department would review the Project's plans to ensure that emergency access is provided consistent with Department(s) requirements. Efficient and safe access within, and access to, the Project is provided by the site plan design concept, site access improvements, and site adjacent roadway improvements included as components of the Project. On-site traffic signing and striping would be implemented in conjunction with detailed construction plans for the Project site. Sight distance at each Project access point would be reviewed to ensure conformance with County sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

Based on the preceding, the implemented Project would not substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or result in inadequate emergency access.

It is also recognized that temporary and short-term traffic detours and traffic disruption could result during Project construction activities. Management and control of construction traffic would be addressed through the preparation of a construction area traffic management plan to be submitted to the County prior to or concurrent with Project building plan review(s). The Project Construction Traffic Management Plan (Plan), summarized within the EIR Project Description, would identify traffic controls for any street closures, detours, or other potential disruptions to traffic circulation during Project construction. The Plan would also be required to identify construction vehicle access routes, and hours of construction traffic.

As supported by the preceding discussions and information presented in the EIR Project Description, the potential for the Project to substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or result in inadequate emergency access is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Potential to cause an effect upon, or a need for new or altered maintenance of roads.*

Impact Analysis: The Project would implement recommended roadway system improvements identified in this Section and any additional/alternative improvements that may be required pursuant to the Project Conditions of Approval. All proposed improvements would be designed and constructed consistent with County engineering standards and requirements. The County would review and inspect all roads constructed as part of the Project prior to their acceptance for maintenance, thereby minimizing potential roadway maintenance requirements.

Roadways in the Study Area generally would require routine, intermittent maintenance. Periodic maintenance of the Study Area roadway system is a function of the County (and Caltrans for Caltrans facilities). Such maintenance activities would not result in any new or substantially different impacts beyond those identified and addressed in this EIR.

Maintenance and repair of Study Area roads is funded by federal, state, and local tax revenues. The Project will also contribute fees and tax revenues to the County that may be directed to the repair and maintenance of Study Area roads.

Based on the preceding, the potential for the Project to cause an effect upon, or a need for new or altered maintenance of roads would be less-than-significant.

Level of Significance: Less-Than-Significant.

4.2 AIR QUALITY

4.2 AIR QUALITY

Abstract

This Section identifies and addresses potential air quality impacts that may result from construction and implementation of the Project. More specifically, the air quality analysis evaluates the potential for the Project to result in the following impacts:

- *Conflict with or obstruct implementation of the applicable air quality plan;*
- *Violate any air quality standard or contribute substantially to an existing or projected air quality violation;*
- *Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard, including releasing emissions which exceed quantitative thresholds for ozone precursors; or*
- *Expose sensitive receptors which are located within 1 mile of the project site to project substantial point source emissions.*

The following analysis of Project air quality impacts supports the following conclusions:

- *Even with application of mitigation, Project operational-source NOx emissions would exceed applicable South Coast Air Quality Management District (SCAQMD) regional thresholds.*

- *Project operational-source NOx emissions in exceedance of applicable SCAQMD regional thresholds would result in cumulatively considerable air quality impacts.*

- *Project operational-source NOx emissions exceedances would result in a cumulatively considerable net increase in criteria pollutants (ozone and PM_{10}/$PM_{2.5}$) for which the Project region is non-attainment.*

- *Project operational-source emissions would exceed applicable SCAQMD regional thresholds. Project operational-source NOx emissions exceedances may delay or obstruct goals and strategies articulated in the AQMP for the South Coast Air Basin. On this basis, the Project would conflict with the governing AQMP. This is a Project-level and cumulatively significant and unavoidable impact.*

Other potential air quality impacts of the Project addressed in this Section are either less-than-significant or can be reduced to levels that are less-than-significant with application of mitigation measures described herein.

4.2.1 INTRODUCTION

This Section presents existing air quality conditions and identifies potential air quality impacts resulting from construction and operations of the Project. Local and regional climate, meteorology and air quality are discussed, as well as existing federal, state and regional air quality regulations. The information presented in this Section is summarized from: *Oleander Business Park Air Quality Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) December 13, 2019 (Project AQIA); *Oleander Business Park Mobile Source Health Risk Assessment, County of Riverside* (Urban Crossroads, Inc.) December 13, 2019 (Project HRA); and [Oleander Business Park] *Construction Health Risk Assessment Memorandum* (Urban Crossroads, Inc.) December 13, 2019 (Construction HRA). The Project AQIA, Project HRA, Construction HRA, and all supporting information are presented at EIR Appendix C.

4.2.2 AIR QUALITY FUNDAMENTALS

Air pollution comprises many substances generated from a variety of sources, both man-made and natural. Since the rapid industrialization of the twentieth century, almost every human endeavor, especially those relying on the burning of fossil fuels, creates air pollution. Most contaminants are actually wasted energy in the form of unburned fuels or by-products of the combustion process. Motor vehicles are by far the most significant source of air pollutants in urban areas, emitting photochemically reactive hydrocarbons (unburned fuel), carbon monoxide, and oxides of nitrogen. These primary pollutants chemically react in the atmosphere with sunlight and the passage of time to form secondary pollutants such as ozone.

Air pollutants are generally classified as either primary or secondary pollutants. Primary pollutants are generated daily and emitted directly from the source, whereas secondary pollutants are created over time and occur within the atmosphere as chemical and photochemical reactions take place. Examples of primary pollutants include carbon monoxide (CO), oxides of nitrogen (NO_2 and NO), sulfur dioxide (SO_2), particulate matter (PM_{10} and $PM_{2.5}$), and various hydrocarbons or volatile organic compounds (VOC). Examples of secondary pollutants include ozone (O_3), which is a product of the reaction between NO_x and VOC in the presence of sunlight. Other secondary pollutants include photochemical aerosols.

To aid in the review of discussions presented subsequently in this Section, recurring terms, abbreviations, and acronyms are defined as follows: PPM - Parts per Million; $\mu g/m^3$ - Micrograms Per Cubic Meter; PM_{10} - Particulate Matter Less Than 10 Microns In Diameter; $PM_{2.5}$ - Particulate Matter Less Than 2.5 Microns In Diameter.

4.2.2.1 Criteria Air Pollutants

Criteria air pollutants are those air contaminants for which air quality standards currently exist. Currently, state and federal air quality standards exist for ozone, nitrogen dioxide (NO_2), sulfur dioxide (SO_2), carbon monoxide (CO), suspended particulate matter (PM_{10} and $PM_{2.5}$), and lead. California has also set standards for visibility, sulfates, hydrogen sulfide, and vinyl chloride. Evaluated criteria air contaminants, or their precursors,

typically also include volatile organic compounds (VOC), oxides of nitrogen (NO_x), sulfur oxides (SO_x), and respirable particulate matter (PM_{10} and $PM_{2.5}$). In general, the Basin as a whole has experienced decreases in criteria air pollutant levels when compared to historic conditions. Pollutant properties and sources, and potential health effects are summarized below.

Carbon Monoxide

Properties and Sources

Carbon monoxide (CO) is a colorless, odorless, toxic gas formed by incomplete combustion of fossil fuels. CO levels tend to be highest during the winter mornings, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, motor vehicles operating at slow speeds are the primary source of CO in the Basin. The highest CO concentrations are generally found near congested transportation corridors and intersections. Other sources include aircraft, off-road vehicles, stationary equipment (e.g., fuel-fired furnaces, gas water heaters, fireplaces, gas stoves, gas dryers, charcoal grills), and landscape maintenance equipment such as lawnmowers and leaf blowers.

Human Health Effects

A consistent association between increased ambient CO levels and higher-than-average rates of hospital admissions for heart diseases (such as congestive heart failure) has been observed. Carbon monoxide can cause decreased exercise capacity, and adversely affects conditions with an increased demand for oxygen supply (fetal development, chronic hypoxemia, anemia, and diseases involving the heart and blood vessels). Exposure to CO can cause impairment of time interval estimation and visual function.

Ozone

Properties and Sources Ozone (O_3) is a highly reactive and unstable gas that is formed when volatile organic compounds (VOC) and oxides of nitrogen (NO_x), which are both byproducts of internal combustion engine exhaust, undergo slow photochemical

reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of the pollutant.

Human Health Effects

Short-term exposure to ozone can cause a decline in pulmonary function in healthy individuals including breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue and immunological changes. Additionally, an increase in the frequency of asthma attacks, cough, chest discomfort and headache can result.

A correlation has been reported between elevated ambient ozone levels and increases in daily hospital admission rates and mortality as a result of long-term ozone exposure. A risk to public health implied by altered connective tissue metabolism and host defense in animals has also been reported.

Oxides of Nitrogen

Properties and Sources

Oxides of nitrogen (NO_x) serve as integral participants in the process of photochemical smog production. During combustion, oxygen reacts with nitrogen to produce NO_x. Two major forms of NO_x are nitric oxide (NO) and nitrogen dioxide (NO_2). Natural causal sources or originators of NO_x include lightning, soils, wildfires, stratospheric intrusion, and the oceans. Natural sources accounted for approximately seven percent of 1990 emissions of NO_x for the United States (EPA 1997). Atmospheric deposition of NO_x occurs when atmospheric or airborne nitrogen is transferred to water, vegetation, soil, or other materials. Acid deposition involves the deposition of nitrogen and/or sulfur acidic compounds that can harm natural resources and materials. The major source of NO_x in the Basin is on-road vehicles. Stationary commercial and service source fuel combustion are other contributors.

Human Health Effects

Exposure to NO_x may alter sensory responses or impair pulmonary function, and may increase incidence of acute respiratory disease including infections and respiratory symptoms in children. Difficulty in breathing in healthy individuals as well as bronchitic groups may also occur. NO_x is also an ozone precursor. Health effects of ground-level ozone include: aggravated asthma; reduced lung capacity; increased respiratory illness susceptibility; increased respiratory and cardiovascular hospitalizations; and premature deaths.

Sulfur Dioxide

Properties and Sources

Sulfur dioxide (SO_2) is a colorless, pungent gas. At levels greater than 0.5 ppm, SO_2 has a strong odor. Sulfuric acid is formed from sulfur dioxide, which is an aerosol particle component that affects acid deposition. Anthropogenic, or human-caused, sources include fossil-fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. SO_2 is a precursor to sulfates and PM_{10}.

Human Health Effects

Health effects of SO_2 include higher frequencies of acute respiratory symptoms (including airway constriction in some asthmatics and reduction in breathing capacity leading to severe difficulties) and diminished ventilatory function in children. Very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract.

Lead

Properties and Sources

Lead (Pb) is a solid heavy metal that can exist in air pollution as an aerosol particle component. An aerosol is a collection of solid, liquid, or mixed-phase particles suspended in the air. It was first regulated as an air pollutant in 1976. Leaded gasoline was first marketed in 1923 and was used in motor vehicles until around 1970. The exclusion of lead

from gasoline helped to decrease emissions of lead in the United States from 219,000 to 4,000 short tons per year between 1970 and 1997. Lead-ore crushing, lead-ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources emanate from the dust of soils contaminated with lead-based paint and solid waste disposal.

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. Lead is no longer a gasoline additive, accounting for substantive reductions in airborne lead concentrations throughout the Basin.

Human Health Effects

Lead adversely affects the development and function of the central nervous system, leading to learning disorders, distractibility, lower IQ and increased blood pressure. An increase in blood lead levels may impair or decrease hemoglobin synthesis. Lead poisoning can cause anemia, lethargy, seizures, and death.

Particulate Matter

Properties and Sources

Particulate matter is a generic term that defines a broad group of chemically and physically different particles (either liquid droplets or solids) that can exist over a wide range of sizes. Examples of atmospheric particles include those produced from combustion (diesel soot or fly ash), light (urban haze), sea spray (salt particles), and soil-like particles from re-suspended dust. Fugitive dust is defined as any solid particulate matter that becomes airborne, other than that emitted from an exhaust stack, directly or indirectly as a result of human activities (Rule 403, Fugitive Dust, SCAQMD).

Within air quality analyses, particulate matter is categorized by diameter: PM_{10} and $PM_{2.5}$. PM_{10} refers to particulate matter that is 10 microns or less in diameter (1 micron is one millionth of a meter, or one micrometer [μm]). $PM_{2.5}$ refers to particulate matter that is 2.5 microns or less in diameter. The size of particles can determine the residence time of the

material in the atmosphere. $PM_{2.5}$ has a longer atmospheric lifetime than PM_{10} and, therefore, can be transported over longer distances.

Particulate matter originates from a variety of stationary and mobile sources. Stationary sources that generate particulate matter include: fuel combustion for electric utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal and recycling. Mobile or transportation-related sources that generate particulate matter include highway vehicles, non-road vehicles and fugitive dust from paved and unpaved roads. Diesel Particulate Matter (DPM) is a mixture of many exhaust particles and gases that is produced when an engine burns diesel fuel. As the result of California Air Resources Board (CARB) regulatory actions, DPM emissions within the Basin have been reduced when compared to historic levels, and will continue to decline.

Human Health Effects

A consistent correlation between elevated ambient PM_{10} levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed.

Many compounds found in diesel exhaust are carcinogenic, including sixteen compounds that are classified as possibly carcinogenic by the International Agency for Research on Cancer. DPM includes the particle-phase constituents in diesel exhaust. Some short-term (acute) effects of diesel exhaust include eye, nose, throat and lung irritation, as well as coughs, headaches, light-headedness and nausea. Diesel exhaust is a major source of ambient particulate matter pollution, and numerous studies have linked elevated particle levels in the air to increased hospital admission, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. DPM in the Basin poses the greatest cancer risk of all identified toxic air pollutants.

Valley Fever may also be transmitted through PM_{10} and $PM_{2.5}$ emissions. "Valley Fever is a fungal infection caused by coccidioides organisms. It can cause fever, chest pain and coughing, among other signs and symptoms. Two species of coccidioides fungi cause

valley fever. These fungi are commonly found in the soil in specific areas and can be stirred into the air by anything that disrupts the soil, such as farming, construction and wind. The fungi can then be breathed into the lungs and cause valley fever, also known as acute coccidioidomycosis. Mild cases of valley fever usually resolve on their own. In more severe cases, doctors prescribe antifungal medications that can treat the underlying infection."[1]

Volatile Organic Compounds

Properties and Sources

Volatile Organic Compounds (VOCs), also termed Reactive Organic Gases (ROGs) are defined as any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. It should be noted that there is no state or national ambient air quality standard for VOCs because they are not classified as criteria pollutants. They are regulated, however, because a reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are also transformed into organic aerosols in the atmosphere, which contribute to higher PM_{10} and lower visibility. The major sources of VOCs in the Basin are on-road motor vehicles and solvent evaporation. VOCs are also an ozone precursor.

Benzene is a commonly occurring VOC within the Basin. Typical sources of benzene emissions include: gasoline service stations (fuel evaporation), motor vehicle exhaust, tobacco smoke, and oil and coal incineration. Benzene is also sometimes employed as a solvent for paints, inks, oils, waxes, plastic, and rubber. It is used in the extraction of oils from seeds and nuts. It is also used in the manufacture of detergents, explosives, dyestuffs, and pharmaceuticals.

[1] Mayo Clinic Staff. "Diseases and Conditions-Valley Fever." *Mayo Clinic*. n.p., 27 May 2015. Web. 13 Oct. 2015.

Human Health Effects

Health effects of ground-level ozone include: aggravated asthma; reduced lung capacity; increased respiratory illness susceptibility; increased respiratory and cardiovascular hospitalizations; and premature deaths.

Benzene is a known carcinogen. Short-term (acute) exposure to high doses from inhalation of benzene may cause dizziness, drowsiness, headaches, eye irritation, skin irritation, and respiratory tract irritation, and at higher levels, unconsciousness can occur. Long-term (chronic) occupational exposure to high doses by inhalation has caused blood disorders, including aplastic anemia and lower levels of red blood cells.

4.2.3 SETTING

4.2.3.1 Local and Regional Climate

The Project site is located in the South Coast Air Basin (SCAB, Basin) within the jurisdiction of SCAQMD. The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. The SCAQMD has jurisdiction over an area of approximately 10,743 square miles, consisting of the four-county Basin (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino Counties), and the Riverside County portions of the Salton Sea Air Basin and Mojave Desert Air Basin.

The 6,745-square-mile SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Los Angeles County portion of the Mojave Desert Air Basin is bounded by the San Gabriel Mountains to the south and west, the Los Angeles/Kern County border to the north, and the Los Angeles/San Bernardino County border to the east. The Riverside County portion of the Salton Sea Air Basin is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley.

Persistent climatic conditions, and variations in temperature, wind, humidity, precipitation, and ambient sunshine significantly influence air quality in the SCAB. Annual average temperatures throughout the SCAB vary from the low to mid 60s (degrees Fahrenheit). Due to a decreased marine influence, easterly portions of the SCAB exhibit greater variability in average annual temperatures. January is the coldest month throughout the SCAB, with average minimum temperatures ranging from 47°F in central Los Angeles to 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures exceeding 100°F.

Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide to sulfates is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71 percent along the coast and 59 percent inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. It should be noted that these effects decrease with distance from the coast.

More than 90 percent of the SCAB's rainfall occurs from November through April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SCAB, with frequency being higher near the coast.

Due to its generally clear weather, about three-quarters of available sunshine is received in the SCAB. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year there are approximately 10 hours of possible sunshine, and on the longest day of the year there are approximately 14-½ hours of possible sunshine.

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Anas," each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind.

Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SCAB is the "Catalina Eddy," a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal areas.

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level.

A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as NO_x and CO from

vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline.

The distinctive climate of the Project area and the SCAB is determined by its terrain and geographical location. The Basin is located in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter. Wind patterns across the south coastal region are characterized by westerly and southwesterly on-shore winds during the day and easterly or northeasterly breezes at night. Winds are characteristically light although the speed is somewhat greater during the dry summer months than during the rainy winter season.

4.2.3.2 Existing Air Quality

Existing air quality is measured at established SCAQMD air quality monitoring stations. Monitored air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. For further information regarding NAAQS and CAAQS currently in effect, please refer to the Project Air Quality Impact Analysis, Table 2-2, *Ambient Air Quality Standards*; and http://www.arb.ca.gov/research/aaqs/aaqs.htm. The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards.

Regional Air Quality

The SCAQMD monitors regional air quality through measurement and quantification of various criteria pollutants at 30 monitoring stations located throughout the air district. In 2012, the latest year of record, the federal and state ambient air quality standards (NAAQS and CAAQS) were exceeded on one or more days for ozone, PM_{10}, and $PM_{2.5}$ at most monitoring locations. No areas of the SCAB exceeded federal or state standards for SO_2, CO, or sulfates. Attainment designations for the SCAB are provided at Table 4.2-1.

Table 4.2-1
South Coast Air Basin (SCAB) Attainment Status

Criteria Pollutant	State Designation	Federal Designation
O_3 – 1-hour standard	Nonattainment	--
O_3 – 8-hour standard	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Unclassifiable/Attainment
NO_2	Attainment	Unclassifiable/Attainment
SO_2	Unclassifiable/Attainment	Unclassifiable/Attainment
Pb	Attainment	Unclassifiable/Attainment

Source: *Oleander Business Park Air Quality Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) December 13, 2019.

Local Air Quality

The Project site is located within the Source Receptor Area (SRA) 23. Within SRA 23, the SCAQMD Metropolitan Riverside County 1 monitoring station is located 12.42 miles northwest of the Project site and is the nearest long-term air quality monitoring site for O3, CO, NO_2, PM_{10}, and $PM_{2.5}$. The most recent 3 years of available monitoring data is presented at Table 4.2-2.

Table 4.2-2
Local Air Quality Monitoring Summary 2016–2018

Pollutant	Standard	Year		
		2016	2017	2018
O_3				
Maximum Federal 1-Hour Concentration (ppm)	---	0.142	0.145	0.123
Maximum Federal 8-Hour Concentration (ppm)	---	0.104	0.118	0.101
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	33	47	22
Number of Days Exceeding State/Federal 8-Hour Standard	> 0.070 ppm	71	81	53
CO				
Maximum Federal 1-Hour Concentration	> 35 ppm	1.700	1.900	2.200
Maximum Federal 8-Hour Concentration	> 20 ppm	1.300	1.700	2.000

Table 4.2-2
Local Air Quality Monitoring Summary 2016–2018

Pollutant	Standard	Year		
		2016	2017	2018
NO_2				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.073	0.063	0.055
Annual Federal Standard Design Value	---	0.015	0.015	0.014
PM_{10}				
Maximum Federal 24-Hour Concentration (μg/m³)	> 150 μg/m³	82.000	138.000	126.000
Annual Federal Arithmetic Mean (μg/m³)	---	36.900	41.600	44.000
Number of Days Exceeding Federal 24-Hour Standard	> 150 μg/m³	0	0	0
Number of Days Exceeding State 24-Hour Standard	> 50 μg/m³	58	103	132
$PM_{2.5}$				
Maximum Federal 24-Hour Concentration (μg/m³)	> 35 μg/m³	39.120	50.300	50.700
Annual Federal Arithmetic Mean (μg/m³)	> 12 μg/m³	12.540	12.180	12.410
Number of Days Exceeding Federal 24-Hour Standard	> 35 μg/m³	4	6	2

Source: *Oleander Business Park Air Quality Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) December 13, 2019.
--- Not applicable.

4.2.3.3 Air Quality Improvement Trends

Discussions below have been excerpted and summarized from the Project AQIA. Please refer also to Project AIR Section 2.9 *Regional Air Quality Improvement*.

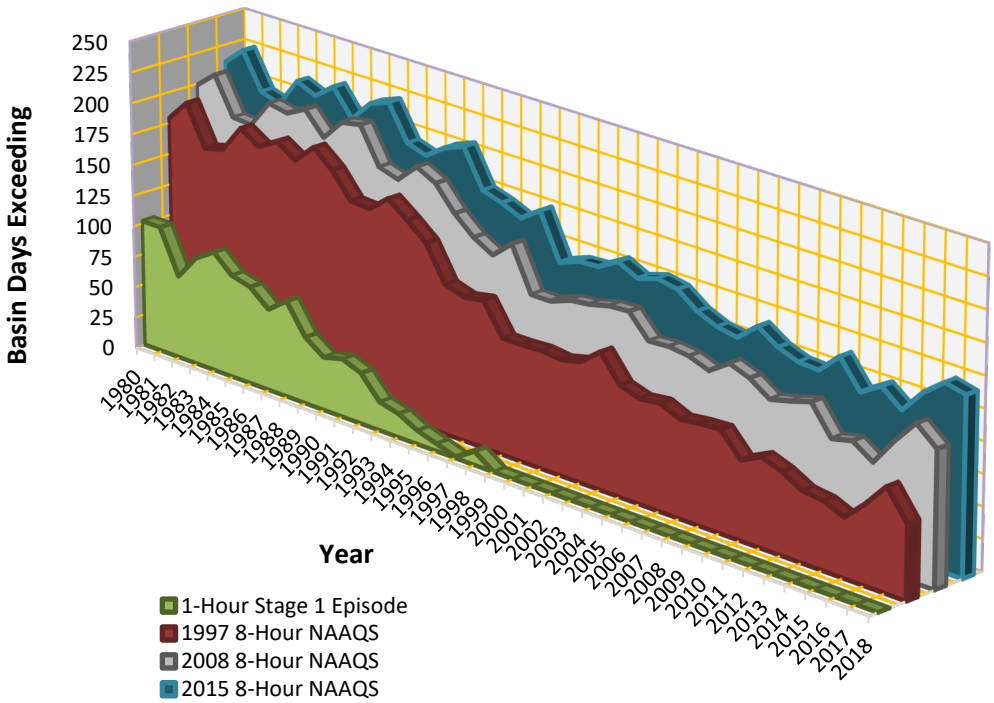
The Project lies within the jurisdiction of the SCAQMD. In 1976, California adopted the Lewis Air Quality Management Act which created SCAQMD from a voluntary association of air pollution control districts in Los Angeles, Orange, Riverside, and San Bernardino counties. SCAQMD develops comprehensive plans and regulatory programs for the South Coast Air Basin (SCAB) that will attain federal air quality standards by dates specified by law. SCAQMD is also responsible for meeting State air quality standards by the earliest date achievable.

SCAQMD rule development through the 1970s and 1980s resulted in dramatic improvement in SCAB air quality. Nearly all control programs developed through the early 1990s relied on (i) the development and application of cleaner technology; (ii) add-

on emission controls, and (iii) uniform CEQA review throughout the SCAB. Industrial emission sources have been significantly reduced by this approach and vehicular emissions have been reduced by technologies implemented at the state level by CARB. SCAQMD has implemented Air Quality Management Plans (AQMPs) providing a regional blueprint for achieving healthful air within the SCAB. The 2012 AQMP attributes the historical improvement in air quality since the 1970's as the direct result of Southern California's comprehensive, multi-year strategy of reducing air pollution from all sources as outlined in its AQMPs.

Emissions of O_3, NO_X, VOC, and CO have been decreasing in the SCAB since 1975 and are projected to continue to decrease through 2020. These decreases result primarily from motor vehicle controls and reductions in evaporative emissions. Although vehicle miles traveled (VMT) in the SCAB continue to increase, NO_X and VOC levels are decreasing because of the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. NO_X emissions from electric utilities have also decreased due to use of cleaner fuels and renewable energy. O_3 contour maps show that the number of days exceeding the 8-hour NAAQS has decreased between 1997 and 2007. In the 2007 period, there was an overall decrease in exceedance days compared with the 1997 period. However, as shown on Figure 4.2-1, O_3 levels have increased in the past two years due to higher temperatures and stagnant weather conditions. Notwithstanding, O_3 levels in the SCAB have decreased substantially over the last 30 years with the current maximum measured concentrations being approximately one-third of concentrations within the late 70's.

Figure 4.2-1
SCAB O_3 Trend



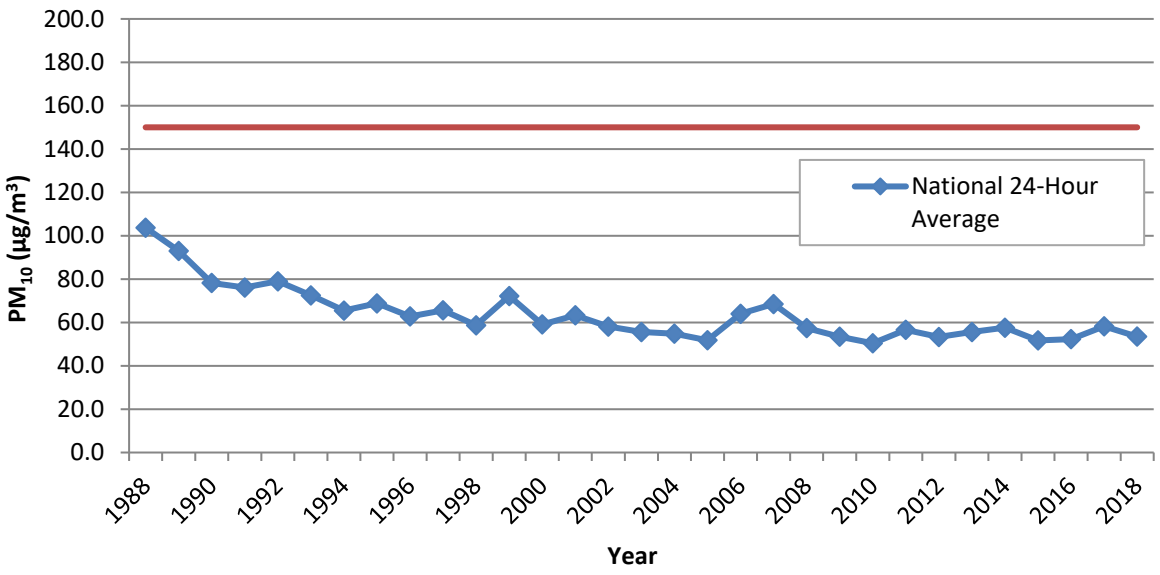
Source: SCAQMD

Ambient PM_{10} and $PM_{2.5}$ levels in the SCAB have also trended downward and show an overall improvement since 1975. Direct emissions of PM_{10} have remained somewhat constant in the SCAB and direct emissions of $PM_{2.5}$ have decreased slightly since 1975. Area wide sources (fugitive dust from roads, dust from construction and demolition, and other sources) contribute the greatest amount of particulate matter emissions.

PM_{10} improvements in the context of federal and state standards are illustrated at Figures 4.2-2, 4.2-3. During the period for which data are available, the 24-hour annual average concentration for PM_{10} decreased by approximately 48 percent, from 103.7 $\mu g/m^3$ in 1988 to 53.5 $\mu g/m^3$ in 2018. Although the values are below the federal standard, it should be noted that there are days within the year where the concentrations continue to exceed the threshold. The annual average for emissions for PM_{10}, have decreased by approximately 53 percent since 1988. Although data in the late 1990's show some variability, this is

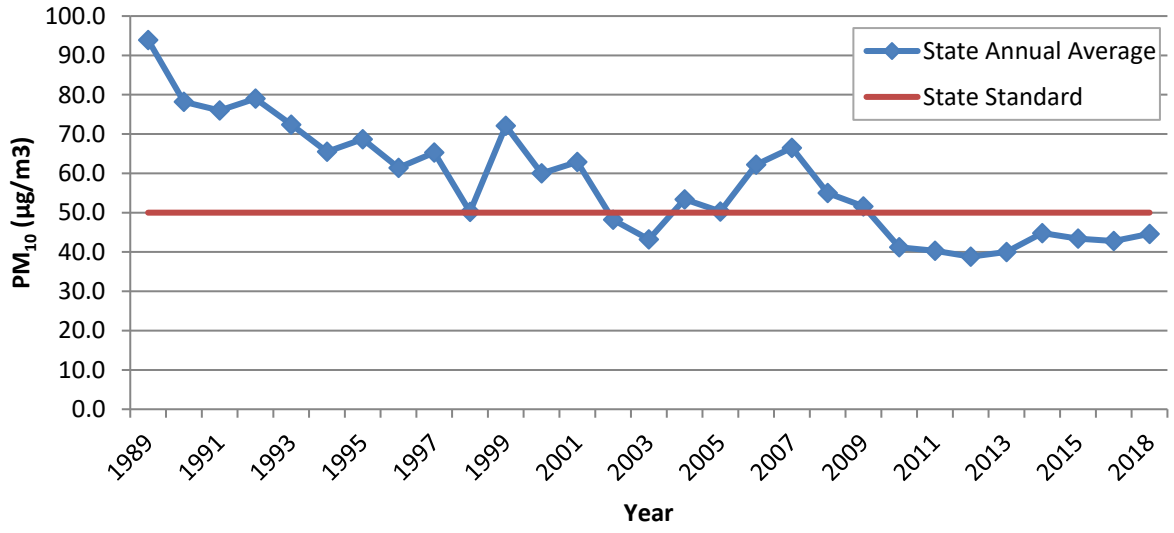
probably due to the advances in meteorological science rather than a change in emissions. The number of days above the 24-hour PM_{10} standards has also shown an overall drop.

Figure 4.2-2
SCAB 24-Hour Average Concentration PM_{10} Trend vs. Federal Standard



Source: CARB

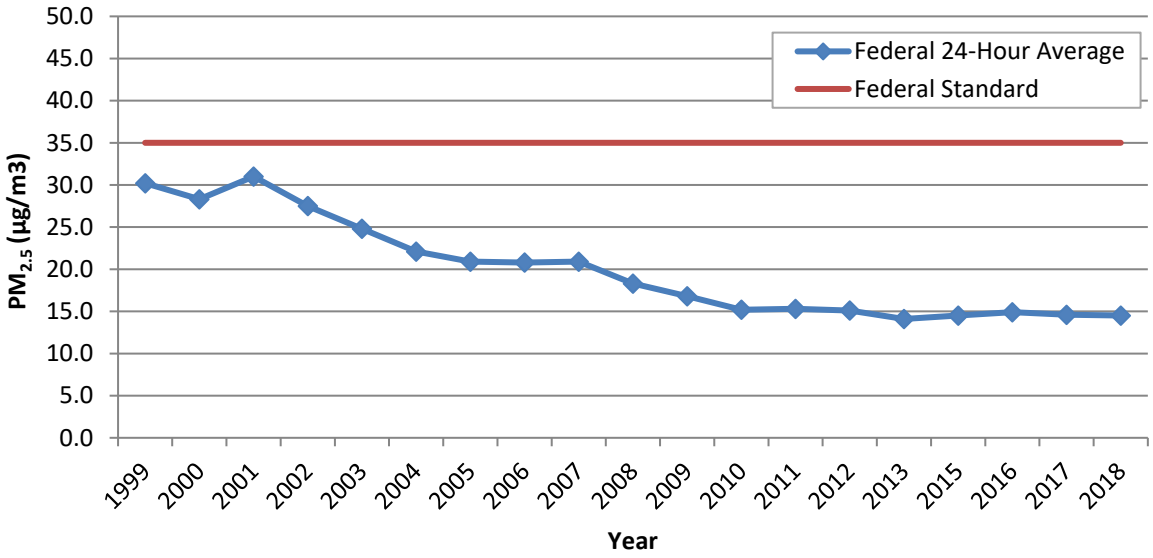
Figure 4.2-3
SCAB Annual Average Concentration PM_{10} Trend vs. State Standard



Source: CARB

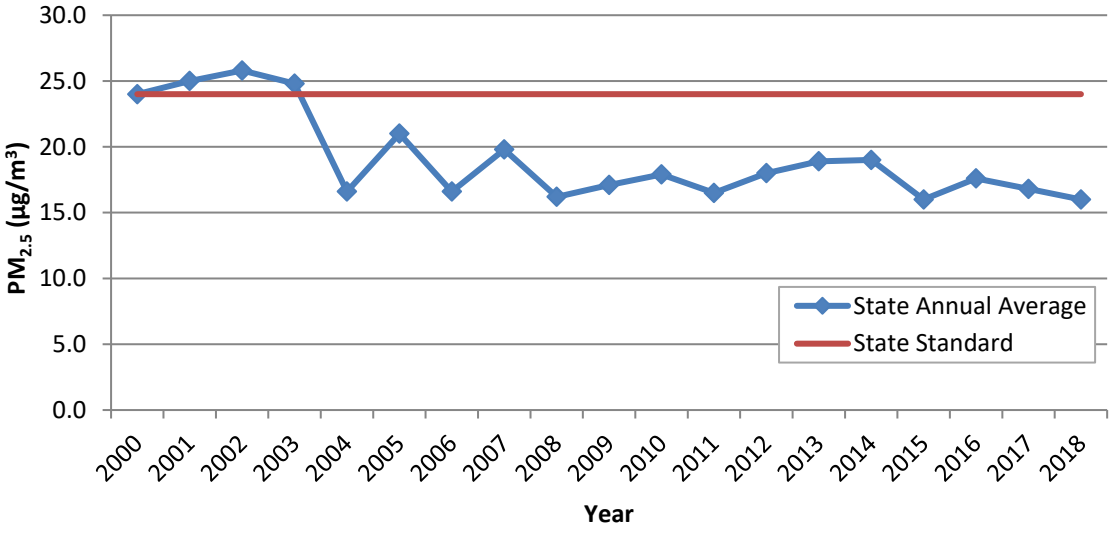
Figures 4.2-4 and 4.2-5 present 24-hour and annual average $PM_{2.5}$ concentrations in the SCAB for the period 1999 – 2018. In the context of federal and state standards, $PM_{2.5}$ concentrations have decreased by almost 52 percent and 33 percent respectively. The SCAB is currently designated as nonattainment for the state and federal $PM_{2.5}$ standards.

Figure 4.2-4
SCAB 24-Hour Average Concentration $PM_{2.5}$ Trend vs. Federal Standard



Source: CARB

Figure 4.2-5
SCAB Annual Average Concentration $PM_{2.5}$ Trend vs. State Standard



Source: CARB

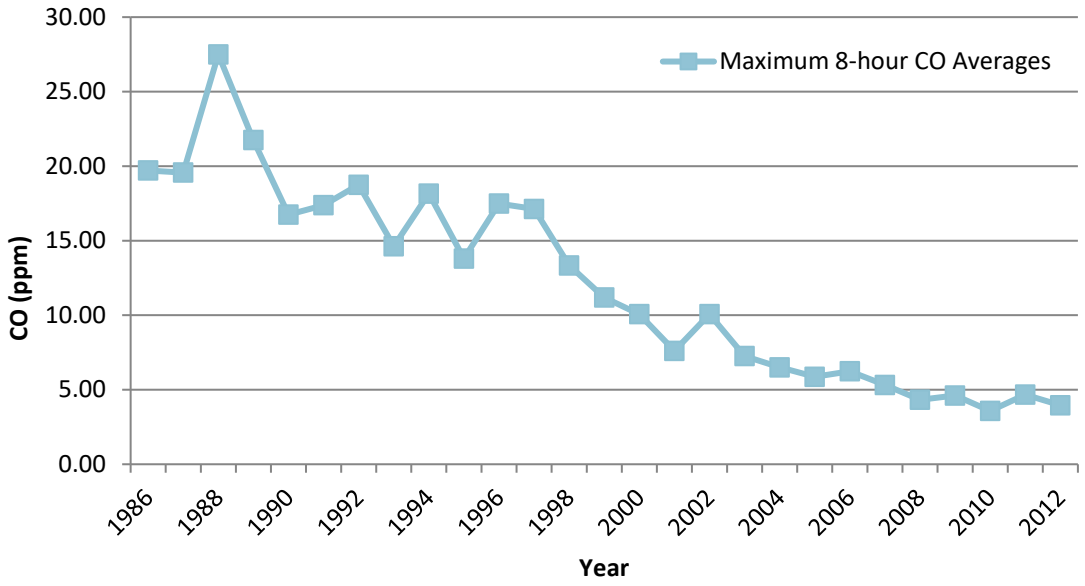
While the 2012 AQMP PM_{10} attainment demonstration and the 2015 associated supplemental SIP submission indicated that attainment of the 24-hour standard was predicted to occur by the end of 2015, it could not anticipate the effect of the ongoing drought on the measured $PM_{2.5}$.

The 2006 – 2010 base period used for the 2012 attainment demonstration had near-normal rainfall. While the trend of $PM_{2.5}$- equivalent emission reductions continued through 2015, the severe drought conditions contributed to the $PM_{2.5}$ increases observed after 2012. As a result of the disrupted progress toward attainment of the federal 24-hour $PM_{2.5}$ standard, SCAQMD submitted a request and the EPA approved, in January 2016, a "bump up" to the nonattainment classification from "moderate" to "serious," with a new attainment deadline as soon as practicable, but not beyond December 31, 2019.

In March 2017, the AQMD released the Final 2016 AQMP. The 2016 AQMP continues to evaluate current integrated strategies and control measures to meet the NAAQS, as well as, explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels. Similar to the 2012 AQMP, the 2016 AQMP incorporates scientific and technological information and planning assumptions, including the 2016 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) and updated emission inventory methodologies for various source categories.

CO concentrations in the SCAB are presented at Figure 4.2-6. CO concentrations in the SCAB have decreased markedly — a total decrease of more about 80 percent in the peak 8-hour concentration since 1986. The number of CO exceedance days has also declined. The entire SCAB is now designated as attainment for both the state and national CO standards. Ongoing reductions from motor vehicle control programs should continue the downward trend in ambient CO concentrations.

Figure 4.2-6
SCAB 24-Hour Average Concentration CO Trend



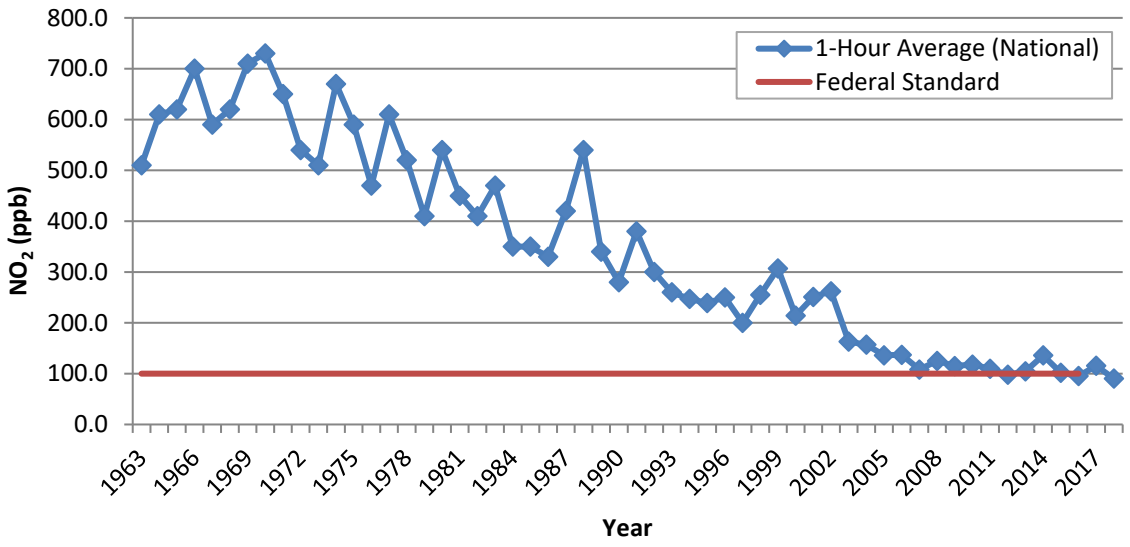
Source: CARB

Part of the control process of the SCAQMD's duty to greatly improve the air quality in the SCAB is the uniform CEQA review procedures required by SCAQMD's CEQA Handbook. The single threshold of significance used to assess Project direct and cumulative impacts has in fact "worked" as evidenced by the track record of the air quality in the SCAB dramatically improving over the course of the past decades. As stated by the SCAQMD, the District's thresholds of significance are based on factual and scientific data and are therefore appropriate thresholds of significance to use for this Project.

NO_2 data for the SCAB is presented at Figures 4.2-7 and 4.2-8. Over the last 50 years, NO_2 values have decreased significantly; the peak 1-hour national and state averages for 2018 is approximately 82 percent lower than what it was during 1963. The SCAB attained the State 1-hour NO_2 standard in 1994, bringing the entire state into attainment. A new state annual average standard of 0.030 parts per million was adopted by the ARB in February 2007. The new standard is just barely exceeded in the SCAQMD. NO_2 is formed from NO_X

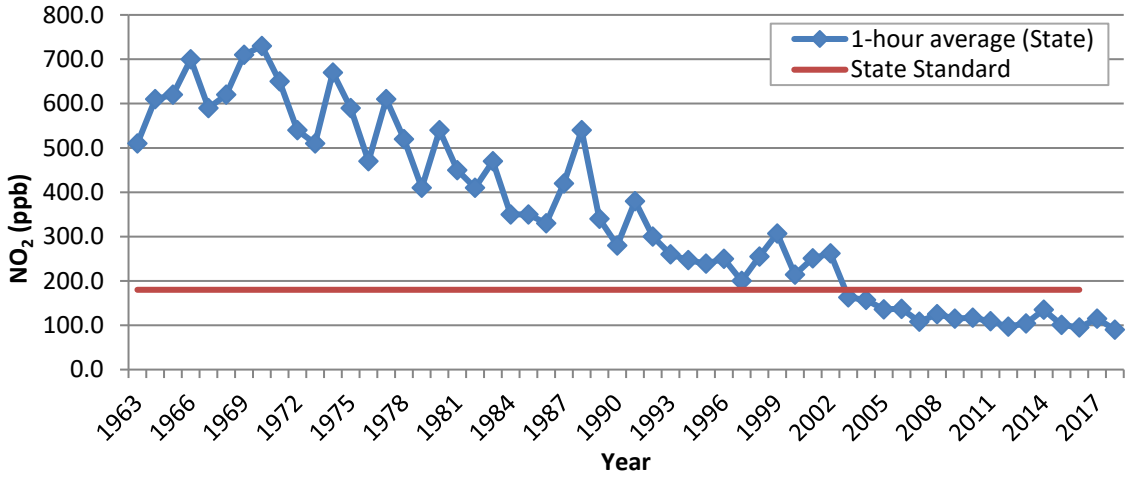
emissions, which also contribute to O_3. As a result, the majority of the future emission control measures will be implemented as part of the overall ozone control strategy. Many of these control measures will target mobile sources, which account for more than three-quarters of California's NOx emissions. These measures are expected to bring the SCAQMD into attainment of the state NOx annual average standard.

Figure 4.2-7
SCAB 1-Hour Average Concentration NO_2 Trend vs. Federal Standard



Source: CARB

Figure 4.2-8
SCAB 1-Hour Average Concentration NO_2 Trend vs. State Standard



Source: CARB

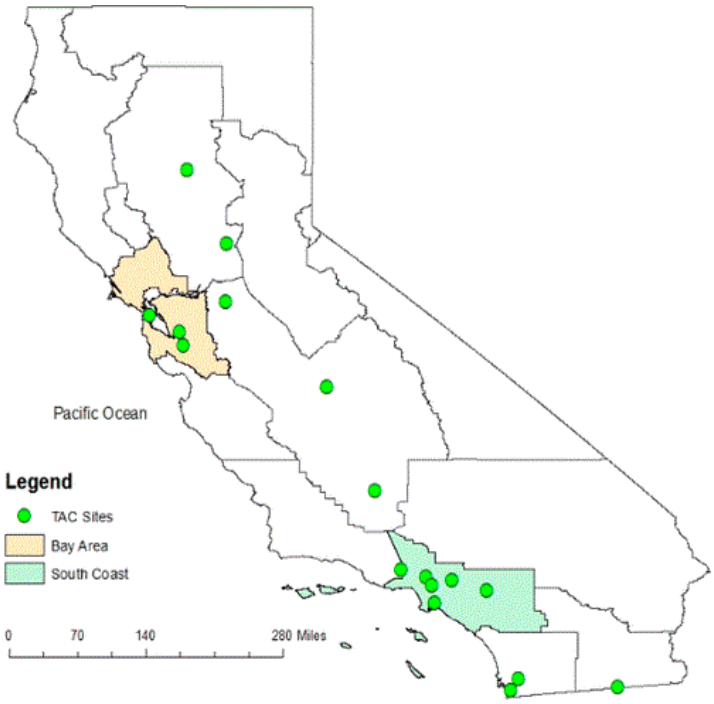
Data provided by the American Lung Association further supports the above findings. This data is used to compile an annual State of the Air Report. The 2018 State of the Air Report indicates that air quality in the SCAB has significantly improved in terms of both pollution levels and high pollution days over the past three decades. The area's average number of high O_3 days dropped from 230 days in the initial 2000 State of the Air report (1996 – 1998) to 146 days in the 2018 report. The SCAB has also seen dramatic reduction in particle pollution since the initial 2000 State of the Air report.

Toxic Air Contaminants (TACs) Trends

In 1984, as a result of public concern for exposure to airborne carcinogens, CARB adopted regulations to reduce the amount of air toxic contaminant emissions resulting from mobile and area sources, such as cars, trucks, stationary products, and consumer products. *Ambient and Emission Trends of Toxic Air Contaminants in California* (CARB) 2015, indicates that for the period 1990 – 2012, ambient concentration and emission trends for the seven TACs responsible for most of the known cancer risk associated with airborne exposure in California have declined significantly. The seven TACs studied include those that are derived from mobile sources: diesel particulate matter (DPM), benzene, and 1,3-butadiene; those that are derived from stationary sources: perchloroethylene and hexavalent chromium; and those derived from photochemical reactions of emitted VOCs: formaldehyde and acetaldehyde[2]. TACs data was gathered at monitoring sites from both the Bay Area and SCAB indicated at Figure 4.2-9. The decline in ambient concentration and emission trends of these TACs are a result of various regulations CARB has implemented to address cancer risk.

[2] Ambient DPM concentrations are not measured directly. Rather, a surrogate method using the coefficient of haze (COH) and elemental carbon (EC) is used to estimate DPM concentrations.

Figure 4.2-9
California Toxic Air Contaminant Data Sites



Source: CARB

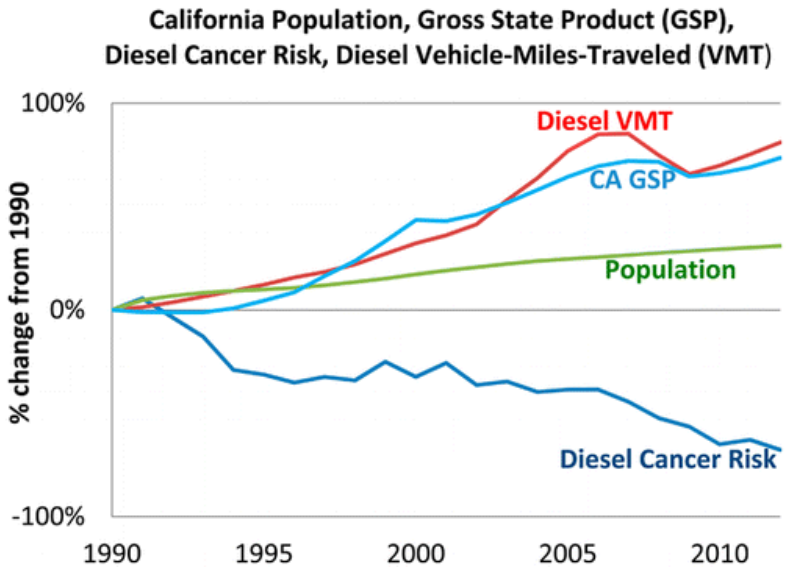
Mobile-Source TACs

CARB introduced two programs that aimed at reducing mobile emissions for light and medium duty vehicles through vehicle emissions controls and cleaner fuel. In California, light-duty vehicles sold after 1996 are equipped with California's second-generation On-Board Diagnostic (OBD-II) system. The OBD-II system monitors virtually every component that can affect the emission performance of the vehicle to ensure that the vehicle remains as clean as possible over its entire life and assists repair technicians in diagnosing and fixing problems with the computerized engine controls. If a problem is detected, the OBD-II system illuminates a warning lamp on the vehicle instrument panel to alert the driver. This warning lamp typically contains the phrase Check Engine or Service Engine Soon. The OBD-II system also stores important information about the detected malfunction so that a repair technician can accurately find and fix the problem. CARB has recently developed similar OBD requirements for heavy-duty vehicles over 14,000 lbs. CARB's phase II Reformulated Gasoline Regulation (RFG-2), adopted in 1996,

also led to a reduction of mobile source emissions. Through such regulations, benzene levels declined 88% from 1990-2012. 1,3-Butadiene concentrations also declined 85% from 1990-2012 as a result of the use of reformulated gasoline and motor vehicle regulations.

In 2000, CARB's Diesel Risk Reduction Plan (DRRP) recommended the replacement and retrofit of diesel-fueled engines and the use of ultra-low-sulfur (<15ppm) diesel fuel. As a result of these measures, DPM concentrations have declined 68% since 2000, even though the state's population increased 31% and the amount of diesel vehicles miles traveled increased 81%. Please refer to Figure 4.2-10. With the implementation of these diesel-related control regulations, CARB expects a DPM decline of 71% for the period 2000 – 2020.

Figure 4.2-10
Diesel Particulate Matter and Diesel Vehicle Miles Trends



Source: CARB

Diesel Regulations

CARB, the Port of Los Angeles (POLA), and the Port of Long Beach (POLB) have adopted several iterations of regulations for diesel trucks that are aimed at reducing DPM. More specifically, CARB Drayage Truck Regulation, CARB statewide On-road Truck and Bus Regulation, and POLA and POLB Clean Truck Programs (CTPs) require accelerated

implementation of "clean trucks" into the statewide truck fleet. Under these regulations and programs, older more polluting trucks will be replaced with newer, cleaner trucks – with resulting reductions in DPM generated per mile traveled and average statewide DPM emissions for Heavy Duty Trucks. Diesel emissions identified in this analysis overstate future DPM emissions since not all the regulatory requirements are reflected in the analysis modeling.

Cancer Risk Trends

The SCAQMD has initiated a comprehensive urban toxic air pollution study, *Multiple Air Toxics Exposure Study* (MATES) that provides estimated TAC-source cancer risks within the SCAB. The first Multiple Air Toxics Exposure Study was conducted in 1986 – 87 and the findings published in June 1987. In 1997, MATES II quantified the then current magnitude of population exposure risk from existing sources of selected air toxic contaminants. In 1998 CARB identified particulate matter from diesel-fueled engines as a toxic air contaminant.

In 2008, the SCAQMD prepared an update to the MATES II study: MATES III. MATES III estimated that the average excess cancer risk level from exposure to TACs declined by approximately 17% in comparison to the MATES II study.

MATES IV (SCAQMD) 2015, substantiates a further decline in TACs and TAC-source cancer risks when compared to MATES III. MATES IV indicates that diesel particulate is the major contributor to air toxics risk in the SCAB, accounting on average for about 68% of the total. The most dramatic reduction identified in MATES IV is in the level of diesel particulate, which showed 70% reduction in average level measured at the 10 monitoring sites compared to MATES III. The carcinogenic risk from air toxics in the Basin, based on the average concentrations at the 10 monitoring sites, is 65% lower than the monitored average in MATES III (MATES IV, p. ES-2).

In January 2018, as part of the overall effort to further reduce air toxics exposure in the SCAB, SCAQMD initiated the MATES V Program. MATES V field measurements will be conducted over a one-year period at ten fixed sites (the same sites selected for MATES III

and IV) to assess trends in air toxics levels. MATES V will also include measurements of ultrafine particles (UFP) and black carbon (BC) concentrations, which can be compared to the UFP levels measured in MATES IV. SCAQMD has not yet identified completion or publication dates for MATES V.

4.2.3.4 Existing Site Air Pollutant Emissions

The Project site comprises vacant disturbed property and is a potential passive source of wind-blown fugitive dust. The Project site is not otherwise a source of air pollutant emissions. When considering the net air quality impacts of the Project, this analysis conservatively does not take credit for any reduction in ambient emissions that may result from Project implementation.

4.2.4 REGULATORY BACKGROUND

4.2.4.1 Federal

The U.S. Environmental Protection Agency (EPA) is responsible for setting and enforcing the NAAQS for O_3, CO, NO_x, SO_2, PM_{10}, and lead. The U.S. EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The U.S. EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of the California Air Resource Board (CARB).

The Federal Clean Air Act (CAA) was first enacted in 1955, and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the National Ambient Air Quality Standards (NAAQS), and specifies Standards compliance dates. The CAA also mandates that states submit and implement State Implementation Plans (SIPs) for local areas not meeting these Standards. SIPs must include pollution control measures demonstrating how Standards will be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions).

Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O_3, NO_2, SO_2, PM_{10}, CO, $PM_{2.5}$, and lead. The NAAQS were amended in July 1997 to include an additional standard for O_3 and to adopt a NAAQS for $PM_{2.5}$. Table 4.2-1 (previously presented) provides the NAAQS within the basin.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and NO_x. NO_x is a collective term that includes all forms of nitrogen oxides (NO, NO_2, NO_3) which are emitted as byproducts of the combustion process.

4.2.4.2 California

California Air Resources Board

The CARB, which became part of the California EPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. The California CAA mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. The CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for sulfates, visibility, hydrogen sulfide, and vinyl chloride. However, at this time, hydrogen sulfide and vinyl chloride are not measured at any monitoring stations in

the SCAB because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS.

Local air quality management districts, such as the SCAQMD, regulate air emissions from commercial and light industrial facilities. All air pollution control districts have been formally designated as attainment or non-attainment for each CAAQS.

Serious non-attainment areas are required to prepare air quality management plans that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources;
- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g., motor vehicle use generated by residential and commercial development);
- A District-permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;
- Implementing reasonably available transportation control measures and assuring a substantial reduction in growth rate of vehicle trips and miles traveled;
- Significant use of low emissions vehicles by fleet operators;
- Sufficient control strategies to achieve a five percent or more annual reduction in emissions or 15 percent or more in a period of three years for ROGs, NO_x, CO and PM_{10}. However, air basins may use alternative emission reduction strategy that achieves a reduction of less than five percent per year under certain circumstances.

Title 24 Building Energy Efficiency Standards

California Code of Regulations (CCR) Title 24 Part 6: *Building Energy Efficiency Standards for Residential and Nonresidential Buildings* was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The Title 24 standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Energy efficient buildings require less electricity; therefore, increased energy efficiency reduces fossil fuel consumption and decreases

greenhouse gas (GHG) emissions. The 2019 update to Title 24 has been adopted by the California Energy Commission (CEC) and will become effective on January 1, 2020. The analysis herein reflects compliance with the 2019 Title 24 Standards because the Project will be constructed after January 1, 2020. The 2019 California Energy Code can be accessed at: https://codes.iccsafe.org/content/CAEC2019/cover.

Title 24 California Green Building Standards Code

CCR, Title 24, Part 11: *California Green Building Standards Code* (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on January 1, 2011. CALGreen is updated on a regular basis. The most recent (2019) update to the CALGreen standards will be effective January 1, 2020. Local jurisdictions are permitted to adopt more stringent requirements. The analysis herein reflects compliance with the 2019 CALGreen Standards because the Project will be constructed after January 1, 2020. The 2019 California Green Building Standards Code can be accessed at: https://codes.iccsafe.org/content/CAGBSC2019/cover.

4.2.4.3 Regional

Currently, the NAAQS and CAAQS are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted regional Air Quality Management Plans AQMPs to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. Project consistency with the current (2016) AQMP is provided subsequently within this Section.

4.2.4.4 County of Riverside

Good Neighbor Policy for Logistics and Warehouse/Distribution Uses

The Project would be subject to provisions of the County of Riverside "Good Neighbor" Policy for Logistics and Warehouse Distribution Centers. See: Board of Supervisors Policy F-3 (Board Policy F-3); https://www.rivcocob.org/wp-content/uploads/2020/01/Good-Neighbor-Policy-F-3-Final-Adopted.pdf.

The purpose of this Policy is to provide framework for the development and operations of logistics and warehouse projects larger than 250,000 square feet in size in a manner that would lessen their impact on surrounding communities. This Policy provides development and operational criteria that can be implemented to supplement project-level mitigation measures.

The proposed Oleander Business Park Project would be required to comply with applicable provisions of the Good Neighbor Policy as implemented through the Project Conditions of Approval. The analysis provided here does not take credit for any reduction in environmental impacts that may be achieved under the Good Neighbor Policy. The EIR thereby establishes a likely maximum impact scenario.

4.2.5 STANDARDS OF SIGNIFICANCE

Pursuant to the *CEQA Guidelines* as implemented by the County, air quality impacts would be considered potentially significant if the Project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard, including releasing emissions which exceed quantitative thresholds for ozone precursors;
- Expose sensitive receptors which are located within 1 mile of the project site to project substantial point source emissions;
- Involve the construction of a sensitive receptor located within one mile of an existing substantial point source emitter; or

- Create objectionable odors affecting a substantial number of people.

4.2.5.1 SCAQMD Thresholds

To determine if a given project would cause a significant effect on air quality, the impact of the project must be determined by examining the types and levels of emissions generated and their impacts on factors that affect air quality. To accomplish this determination of significance, the SCAQMD has established air pollution thresholds against which a proposed project can be evaluated and assist lead agencies in determining if the impacts of a project are significant. If the project's air pollutant emissions exceed applicable SCAQMD thresholds, then the impact should be considered significant. While the final determination of significance thresholds is within the purview of the lead agency, the SCAQMD recommends that its regional and local air quality thresholds for regulated pollutants (summarized below) be employed by lead agencies in determining whether criteria air pollutant emissions impacts generated by construction or operations of a given project are significant.

Regional Thresholds

SCAQMD regional significance thresholds for maximum daily emissions of regulated pollutants are listed at Table 4.2-3. Project emissions exceeding these thresholds would be considered potentially significant.

Table 4.2-3
Maximum Daily Emissions-Regional Thresholds

Pollutant	Construction-source	Operational-source
NOx	100 lbs./day	55 lbs./day
VOC	75 lbs./day	55 lbs./day
PM_{10}	150 lbs./day	150 lbs./day
$PM_{2.5}$	55 lbs./day	55 lbs./day
SO_x	150 lbs./day	150 lbs./day
CO	550 lbs./day	550 lbs./day
Lead	3 lbs./day	3 lbs./day

Source: *Oleander Business Park Air Quality Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) December 13, 2019.

Carbon Monoxide Concentrations (CO "hot spots") Thresholds

CO "hot spots" are areas of carbon monoxide concentrations exceeding national or state air quality standards. CO hotspots typically occur because of excessive vehicular idling, often associated with traffic backups at underperforming intersections or congested roadway links. SCAQMD also recommends an evaluation of potential localized CO "hot spot" impacts for projects that may adversely affect, or substantially contribute to, level of service impacts along area roadway segments or at area intersections. Based on the SCAQMD's *CEQA Air Quality Handbook* (1993), a project's localized CO emissions impacts would be significant if they exceed the following California standards for localized CO concentrations:

- 1-hour CO standard of 20.0 parts per million (ppm);
- 8-hour CO standard of 9.0 ppm.

Localized Significance Thresholds (LSTs)

LSTs represent the maximum localized emissions concentrations that would not cause or contribute to an exceedance of the most stringent applicable national or state ambient air quality standard (NAAQS or CAAQS) at the nearest residence or sensitive receptor. LSTs apply to carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter less than 10 microns (PM_{10}), and particulate matter less than 2.5 microns ($PM_{2.5}$). The SCAQMD states that the Lead Agency may, at the Agency's discretion, employ LSTs as another indicator of significance in air quality impact analyses.

Health Risk Assessment (HRA) Thresholds

Carcinogenic Risks

Pursuant to SCAQMD thresholds, impacts of Toxic Air Contaminants (TACs) are considered potentially significant if a Health Risk Assessment (HRA) shows an increased carcinogenic risk of greater than 10 incidents per million population.

Noncarcinogenic Risks

Noncarcinogenic risks are numerically expressed as a Hazard Index (HI), with a threshold HI of 1.0. Pursuant to SCAQMD thresholds, noncarcinogenic Hazard Indices calculated to be greater than 1.0 are considered potentially significant.

4.2.6 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.2.6.1 Introduction

The following discussions focus on areas where it has been determined that the Project may result in potentially significant air quality impacts, pursuant to comments received through the NOP process, and based on the analysis presented within this Section and included within the EIR Initial Study. Of the CEQA threshold considerations presented at Section 4.2.5, and as substantiated in the Initial Study, the Project's potential impacts under the following topics are determined to be less-than-significant, and are not further discussed in this Section:

- Involve the construction of a sensitive receptor located within one mile of an existing substantial point source emitter; or

- Create objectionable odors affecting a substantial number of people.

Please refer also to EIR Appendix A, *Initial Study and NOP Responses*; Initial Study Checklist Section, *Air Quality*.

4.2.6.2 Impact Statements

Following is an analysis of potential air quality impacts that are expected to occur as a result of the Project. Potential emissions are considered for Project construction and operation. For each topical discussion, potential impacts are evaluated under applicable criteria established above at Section 4.2.5 *Standards of Significance.*

Potential Impact: ***Conflict with or obstruct implementation of the applicable air quality plan.***

Impact Analysis: The Project is located within the SCAB, which is characterized by relatively poor air quality. The SCAQMD has jurisdiction over an approximately 10,743-square-mile area consisting of the four-county SCAB and the Los Angeles County and Riverside County portions of what used to be referred to as the Southeast Desert Air Basin. In these areas, the SCAQMD is principally responsible for air pollution control, and works directly with the SCAG, county transportation commissions, and local governments, as well as state and federal agencies, to reduce emissions from stationary, mobile, and indirect sources to meet state and federal ambient air quality standards.

Currently, state and federal air quality standards are exceeded in most parts of the Basin. In response, the SCAQMD has adopted AQMPs outlining strategies to achieve state and federal ambient air quality standards. AQMPs are periodically updated to reflect technological advances, recognize new or pending regulations, more effectively reduce emissions, accommodate growth, and minimize any negative fiscal impacts of air pollution control on the economy.

In March 2017, the AQMD released the Final 2016 AQMP. The 2016 AQMP incorporates the latest scientific and technical information and planning assumptions, including the 2016 Regional Transportation Plan/Sustainable Communities Strategy ("2016 RTP/SCS") and updated emission inventory methodologies for various source categories. Air quality conditions and trends presented in the 2016 AQMP assume that regional development will occur in accordance with population growth projections identified by SCAG in the 2016 RTP/SCS.

The SCAG 2016 RTP/SCS in turn derives its assumptions, in part, from general plans of cities located within the SCAG region. Accordingly, if a project is consistent with the development and growth projections reflected in the adopted general plan, it is considered consistent with the growth assumptions in the SCAG 2016 RTP/SCS and 2016 AQMP. The 2016 AQMP further assumes that development projects within the region

will implement appropriate strategies to reduce air pollutant emissions, thereby promoting timely implementation of the AQMP.

Criteria for determining consistency with the AQMP are identified in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's *CEQA Air Quality Handbook* (1993), as listed below. Project consistency with, and support of these criteria is presented subsequently.

- **Criterion No. 1:** The project under consideration will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

- **Criterion No. 2:** The project under consideration will not exceed the assumptions in the AQMP based on the years of Project build-out phase.

Criterion No. 1: The violations that Criterion No. 1 refers to are the CAAQS and NAAQS. The CAAQS and NAAQS comprise LSTs. As discussed in the Project AQIA, the Project LST analysis substantiates that Project construction-source and operational-source emissions would not exceed applicable LSTs. Further, the Project would implement applicable best available control measures (BACMs), and would comply with applicable SCAQMD rules, acting to further reduce potential LST impacts. On this basis, the Project would not result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations.

However, as substantiated herein, Project operational-source emissions would exceed applicable SCAQMD regional thresholds. There is no feasible mitigation that would reduce this impact to levels that would be less-than-significant.[3] Project operational-source NOx emissions exceedances may delay or obstruct goals and strategies articulated

[3] See following discussions under the topic: Potential to violate any air quality standard or contribute substantially to an existing or projected air quality violation.

in the AQMP for the South Coast Air Basin. On this basis, the Project would conflict with Criterion No. 1.

Criterion No. 2: Criterion No. 2 addresses consistency of a given project with approved local and regional land use plans and associated potential AQMP implications. That is, AQMP emissions models and emissions control strategies are based in part on land use data provided by local general plan documentation; and regional plans, which reflect and incorporate local general plan information. Projects that propose general plan amendments may increase the intensity of use and/or result in higher traffic volumes, thereby resulting in increased stationary area source emissions and/or vehicle source emissions when compared to the AQMP assumptions. However, if a given project is consistent with and does not otherwise exceed the growth projections in the applicable local general plan, then that project would be considered consistent with the growth assumptions in the AQMP.

Peak construction-source emissions are largely independent of land use assignments Rather, construction-source emissions are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities.

The Project site is designated as a Business Park (BP) Land Use under the County General Plan and Mead Valley Area Plan (MVAP). Industrial/manufacturing uses proposed by the Project are allowed under the site's current General and MVAP BP Plan Use designations.

Current Zoning designation of the Project site is Industrial Park (I-P). Industrial/manufacturing uses proposed by the Project are permitted or conditionally permitted under the site's current I-P Zoning designation.

No General Plan Amendment (GPA) or Change of Zone (CZ) is required in conjunction with the Project. The Project would not result in growth or development not anticipated

under the AQMP. On the basis of the preceding discussion, the Project is determined to be consistent with the second criterion.

AQMP Consistency Conclusion

Project operational-source emissions would exceed SCAQMD NOx regional significance thresholds. There is no feasible mitigation that would reduce this impact to levels that would be less-than-significant. Project operational-source NO_X emissions exceedances may delay or obstruct goals and strategies articulated in the AQMP for the SCAB. The Project would therefore conflict with AQMP consistency Criterion No. 1. The Project would not otherwise conflict with the AQMP.

Level of Significance: ***Significant and unavoidable.***

Potential Impact: ***Violate any air quality standard or contribute substantially to an existing or projected air quality violation.***

Impact Analysis: The latest SCAQMD/California Air Pollution Control Officers Association (CAPCOA)-approved version of the California Emissions Estimator Model (CalEEMod, v2016.3.2) was utilized to estimate Project-related air pollutant emissions levels. Project emissions levels were then compared to applicable SCAQMD thresholds in order to determine if air quality standards would be exceeded; or if Project emissions would contribute substantially to existing or projected air quality violations. Unless otherwise noted, CalEEMod default values and assumptions were applied throughout.

REGIONAL IMPACTS

Construction-Source Air Pollutant Emissions

Project construction activities (listed below) would generate emissions of CO, VOCs, NOx, SOx, PM_{10}, and $PM_{2.5}$.

- Site Preparation (including Blasting)
- Grading

- Building Construction
- Paving
- Architectural Coating

Within the Project construction-source emissions estimates, vehicular emissions generated by construction worker commutes and construction materials deliveries are also reflected.

The approximate Project construction schedule is summarized at Table 4.2-4. Air pollutant emissions based on the construction schedule presented here represents a "worst-case" analysis scenario. That is, should construction occur any time after the dates presented here, incremental and aggregate construction-source emissions would likely decrease since emission factors for construction equipment would progressively decrease in the future. This is due to the natural turnover of the older vehicle fleet and replacement with more fuel efficient equipment with enhanced emissions controls; and implementation of more stringent regulations which collectively act to reduce construction-source (and operational-source) emissions.

Table 4.2-4
Project Construction Schedule

Activity	Start Date	End Date	Days
Site Preparation (including Blasting)	01/06/2020	02/14/2020	30
Grading	02/15/2020	05/29/2020	75
Building Construction	05/30/2020	12/10/2021	400
Paving	10/01/2021	12/16/2021	55
Architectural Coating	10/01/2021	12/16/2021	55

Source: *Oleander Business Park Air Quality Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) December 13, 2019.

Construction equipment use by activity is summarized at Table 4.2-5. The summary represents a reasonable approximation of the types and quantity of construction equipment employed on any given day. Modeled maximum daily construction-source air quality impacts is presented at Table 4.2-6.

Table 4.2-5
Summary of Construction Equipment Use by Activity

Activity	Equipment	Amount	Hours Per Day
Site Preparation (including Blasting)	Crawler Tractors	4	8
	Rubber Tired Dozers	3	8
Grading	Crawler Tractors	2	8
	Excavators	2	8
	Graders	1	8
	Rubber Tired Dozers	1	8
	Scrapers	2	8
Building Construction	Cranes	1	8
	Crawler Tractors	3	8
	Forklifts	3	8
	Generator Sets	1	8
	Welders	1	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	1	8

Source: *Oleander Business Park Air Quality Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) December 13, 2019.

Table 4.2-6
Maximum Daily Construction-Source Air Pollutant Emissions
(pounds per day, unmitigated)

Year	Emissions (lbs./day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer						
2020	7.40	89.96	56.84	0.39	40.60	12.76
2021	73.77	74.68	69.06	0.22	12.95	5.06
Winter						
2020	7.37	90.20	52.62	0.38	40.60	12.76
2021	73.74	74.55	64.13	0.21	12.95	5.06
Maximum Daily Emissions	**73.77**	**91.98**	**69.06**	**0.60**	**40.60**	**12.76**

Table 4.2-6
Maximum Daily Construction-Source Air Pollutant Emissions
(pounds per day, unmitigated)

Year	Emissions (lbs./day)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: *Oleander Business Park Air Quality Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) December 13, 2019.
Notes: 2020 Emissions include dust (PM_{10} and $PM_{2.5}$) from blasting activities.

As indicated at Table 4.2-6, maximum daily Project construction-source air pollutant emissions would not exceed applicable SCAQMD regional thresholds and would therefore be less-than-significant.

Level of Significance: Less-Than-Significant.

<u>Operational-Source Air Pollutant Emissions</u>

Project operational activities would generate emissions of ROG, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$. Operational-source air pollutant emissions would be expected from the following primary sources:

- Stationary/Area Sources, and
- Mobile Sources.

Each of these operational emissions sources are described below, and the estimated emissions from each source are summarized subsequently. Within the following discussions, full Project buildout and occupancy under Opening Year (2021) conditions are assumed.

Stationary/Area Sources

Landscape Maintenance Emissions

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project.

Consumer Products

Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which, when released in the atmosphere, can react to form ozone and other photochemically reactive pollutants.

Architectural Coatings

Over time, maintenance of Project facilities would require exterior application of architectural coatings. Such facility maintenance would generate air pollutant emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings.

Building Energy Consumption

Electricity and natural gas are consumed by almost every development project. Criteria pollutants are emitted through the generation of electricity and the consumption of natural gas. Because electrical generating facilities for the Project area are located either outside the region, are separately evaluated under their own environmental analyses, and/or are offset through the use of pollution credit, criteria pollutant emissions from offsite generation of electricity have been excluded from the analysis presented here.

On-Site Cargo Handling Equipment Emissions

It is common for industrial warehouse buildings to employ on-site cargo handling equipment to move empty containers and empty chassis. The most common type of cargo handling equipment is the yard truck designed for moving cargo containers. Yard trucks

are also known as yard goats, utility tractors (UTRs), hustlers, yard hostlers, and yard tractors. The analysis reflects emissions that would be generated by on-site cargo handling equipment.

Mobile Sources

Project-related operational air quality impacts derive predominantly from mobile sources. In this regard, approximately 90 percent (by weight) of all Project operational-source emissions would be generated by mobile sources (vehicles). Vehicle exhaust impacts are dependent on both overall daily vehicle trip generation and the effect of the Project on peak hour traffic volumes and traffic operations in the vicinity of the Project. Vehicle trip characteristics available from the Project Traffic Impact Analysis and Project Vehicle Miles Traveled Assessment (Project TIA and Project VMT Assessment, EIR Appendix B) were employed in the Project AQIA. Mobile-source vehicle tail pipe emissions cannot be materially controlled or mitigated by the Lead Agency or the Project Applicant. Rather, these emissions sources are regulated by CARB and USEPA. Project traffic would also be a source of fugitive emissions due to the generation of road dust including particulate matter resulting from tire wear.

As the result of CARB and USEPA actions, Basin-wide vehicular-source emissions have been reduced dramatically over the past years and are expected to further decline as clean vehicle and fuel technologies improve. Future CARB and USEPA actions could be expected to have a positive effect on Project-related vehicular-source emissions, resulting in incremental reductions in vehicular-source emissions. Please refer also to related discussions presented at Project AQIA Section 2.9, *Regional Air Quality Improvement*.

On-Site Equipment Operations

Light industrial uses such as those that would be implemented under the Project typically require use of cargo handling equipment for on-site movement of containers and chassis. The most common type of cargo handling equipment is the yard truck which is designed for moving cargo containers. Yard trucks are also known as yard goats, utility tractors (UTRs), hustlers, yard hostlers, and yard tractors. Yard trucks typically have a horsepower (hp) range of approximately 175 hp to 200 hp. SCAQMD information

indicates that high-cube warehouse projects typically employ 3.6 yard trucks per million square feet of building space. For the approximately 710,736 square feet of Project uses considered here, on-site modeled operational equipment assumes six 200-hp, compressed natural gas or gasoline-powered yard tractors operating at up to 4 hours a day for 365 days of the year.

Operational Sources Emissions Summary

Maximum daily air pollutant emissions from all Project operational sources are summarized at Table 4.2-7. Applicable SCAQMD regional significance thresholds are also indicated.

Table 4.2-7
Maximum Daily Operational-Source Air Pollutant Emissions Summary
(pounds per day, unmitigated)

Operational Activities – Summer Scenario	Emissions (lbs./day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Building Area A						
Area Source	8.32	7.50e-04	0.08	1.00e-05	2.90e-04	2.90e-04
Energy Source	0.09	0.79	0.67	4.76e-03	0.06	0.06
Mobile Source (Passenger Cars)	1.45	1.20	20.30	0.06	6.04	1.62
Mobile Source (Trucks)	1.48	50.03	9.85	0.19	7.59	2.73
On-Site Equipment	0.27	3.09	1.55	6.34e-03	0.10	0.10
Subtotal Building A	*11.61*	*55.11*	*32.45*	*0.26*	*13.79*	*4.51*
Building Area B						
Area Source	7.94	6.90e-04	0.08	1.00e-05	2.70e-04	2.70e-04
Energy Source	0.08	0.76	0.64	4.55e-03	0.06	0.06
Mobile Source (Passenger Cars)	1.39	1.14	19.41	0.05	5.78	1.55
Mobile Source (Trucks)	1.42	47.82	9.42	0.18	7.26	2.61
On-Site Equipment	0.27	3.09	1.55	6.34e-03	0.10	0.10
Subtotal Building B	*11.10*	*52.81*	*31.10*	*0.24*	*13.20*	*4.32*
Total Maximum Daily Emissions (Buildings A and B)	**22.71**	**107.93**	**63.53**	**0.50**	**26.99**	**8.82**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**
Operational Activities –	**Emissions (lbs./day)**					

Table 4.2-7
Maximum Daily Operational-Source Air Pollutant Emissions Summary
(pounds per day, unmitigated)

Operational Activities – Summer Scenario Winter Scenario	Emissions (lbs./day)					
	VOC	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
	VOC	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Building Area A						
Area Source	8.32	7.50e-04	0.08	1.00e-05	2.90e-04	2.90e-04
Energy Source	0.09	0.79	0.67	4.76e-03	0.06	0.06
Mobile Source (Passenger Cars)	1.29	1.24	16.49	0.05	6.04	1.62
Mobile Source (Trucks)	1.46	52.25	9.49	0.19	7.59	2.73
On-Site Equipment	0.27	3.09	1.55	6.34e-03	0.10	0.10
Subtotal Building A	*11.43*	*57.37*	*28.28*	*0.25*	*13.79*	*4.51*
Building Area B						
Area Source	7.94	6.90e-04	0.08	1.00e-05	2.70e-04	2.70e-04
Energy Source	0.08	0.76	0.64	4.55e-03	0.06	0.06
Mobile Source (Passenger Cars)	1.23	1.18	15.76	0.05	5.78	1.55
Mobile Source (Trucks)	1.39	49.95	9.07	0.18	7.25	2.61
On-Site Equipment Source	0.27	3.09	1.55	6.34e-03	0.10	0.10
Subtotal Building B	*10.91*	*54.98*	*27.10*	*0.24*	*13.19*	*4.32*
Total Maximum Daily Emissions (Buildings A and B)	**22.34**	**112.36**	**55.37**	**0.49**	**26.99**	**8.81**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Source: *Oleander Business Park Air Quality Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) December 13, 2019.
Note: Sums may not total due to rounding.

Level of Significance: Potentially Significant (NOx emissions would exceed applicable SCAQMD regional thresholds). As shown at Table 4.2-7, Project operational-source emissions of NOx would exceed applicable SCAQMD regional thresholds. This a potentially significant impact.

Mitigation Measures:

4.2.1 Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum, each sign shall include: 1) instructions for truck drivers to shut off engines when not in use; 2) instructions for drivers of diesel trucks to restrict idling to no more than five (5) minutes once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged; and 3) telephone numbers of the building facilities manager and the CARB to report violations. Prior to the issuance of an occupancy permit, the County shall conduct a site inspection to ensure that the signs are in place.

4.2.2 Prior to tenant occupancy, the Project Applicant or successor in interest shall provide documentation to the County demonstrating that occupants/tenants have been provided documentation on funding opportunities, such as the Carl Moyer Program, that provide incentives for using cleaner-than-required engines and equipment.

4.2.3 As agreed to by the Project Applicant and Lead Agency, final designs of the Project buildings shall include electrical infrastructure sufficiently sized to accommodate potential installation of additional auto and truck EV charging stations.

4.2.4 As agreed to by the Applicant and Lead Agency, final Project designs shall provide for installation of conduits in tractor trailer parking areas, for the purpose of accommodating the installation of EV truck charging stations.

Additionally, as provided for under Board Policy F-3 Section 6.4, "the applicant for any new facility may be required to provide a supplemental funding contribution, which would be applied to further off-set potential air quality impacts to the community and provide a community benefit above and beyond any CEQA related mitigation measures. Said financial contribution would generally be determined by the Transportation and Land Management Agency based on the level of nitrogen oxides (NOx) emissions generated by the project that exceeds the regional NOx significance thresholds established by the appropriate AQMD" (Board Policy F-3, p. 9).

Level of Significance After Mitigation: ***Significant and Unavoidable (NOx regional threshold exceedances)***. Mitigation Measures 4.2.1 through 4.2.4 and applicable Board Policy F-3 provisions would act to reduce and off-set Project operational-source NOx emissions. CalEEMod does not allow for quantification of emissions reductions that could be potentially achieved through implementation of Mitigation Measures 4.2.1 through 4.2.4, or that may be achieved through Board Policy F-3 provisions implemented under the Project. Accordingly, emissions reductions resulting from implementing Mitigation Measures 4.2.1 through 4.2.4 and applicable Board Policy F-3 provisions are not quantified within this analysis. For the purposes of this analysis, unmitigated and mitigated operational-source emissions are considered substantively equal.

Moreover, it is important to recognize that approximately 93 percent of the Project operational-source NOx emissions (by weight) derive from mobile-source tailpipe emissions. Regulation and mitigation of tailpipe emissions is the responsibility of CARB and EPA. The Lead Agency and/or Applicant cannot autonomously regulate or mitigate tailpipe emissions.

Based on the preceding, even with application of Mitigation Measures 4.2.1 through 4.2.4 and implementation of applicable Board Policy F-3 provisions, Project operational-source NOx emissions impacts would exceed applicable SCAQMD regional thresholds. ***Individually and cumulatively, Project operational-source NOx emissions would result in significant and unavoidable air quality impacts.***

<u>Regional Air Quality Impact Summary</u>

- Project maximum daily construction-source emissions would not exceed applicable SCAQMD regional thresholds and would therefore be less-than-significant.

- Even with the application of mitigation measures and implementation of applicable Board Policy F-3 provisions, Project maximum daily operational-source emissions would exceed applicable SCAQMD NOx regional thresholds. Project

operational-source NOx regional threshold exceedances would therefore be individually and cumulatively significant.

LOCALIZED IMPACTS

Localized Significance Threshold (LST) Analysis

The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the national and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, the NAAQS/CAAQS establish LSTs.

LSTs were developed in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4. More specifically, to address potential Environmental Justice implications of localized air pollutant impacts, the SCAQMD adopted LSTs indicating whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. LSTs apply to carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter less than 10 microns (PM_{10}), and particulate matter less than 2.5 microns ($PM_{2.5}$). LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable national or state ambient air quality standard at the nearest residence or sensitive receptor. Though not required, lead agencies may employ LSTs as another indicator of significance in its air quality impact analyses.

The significance of localized emissions impacts depends on whether ambient levels in the vicinity of the project are above or below state standards. In the case of CO and NO_2, if ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. For the nonattainment pollutants PM_{10} and $PM_{2.5}$, background ambient concentrations already exceed state and/or national standards. LSTs for PM_{10} and $PM_{2.5}$ are therefore based on SCAQMD Rules 403/1303 (construction-source/operational-source emissions respectively) and are established as an allowable change in concentration. Background concentrations are irrelevant.

Emissions Considered/Methodology

LSTs apply to carbon monoxide (CO), nitrogen dioxide (NO_2), particulate matter less than 10 microns (PM_{10}), and particulate matter less than 2.5 microns ($PM_{2.5}$). The Project LST analysis incorporates, and is consistent with, protocols and methodologies established in *Final Localized Significance Threshold Methodology* (Methodology) (SCAQMD, revised July 2008). The Methodology clearly states that "off-site mobile emissions from the Project should NOT be included in the emissions compared to LSTs." Accordingly, the Project LST analysis considers only "on-site" emissions sources.

Receptors

Localized air quality impacts were evaluated at proximate receptor land uses. Receptors in the Project study area include existing residential homes and industrial uses described below and identified at Figure 4.2-11.

Source: Urban Crossroads, Inc.

Figure 4.2-11
Proximate Receptor Locations

R1: Location R1 represents existing residential homes west of Day Street, approximately 2,573 feet westerly of the Project site.

R2: Location R2 represents the existing residential homes located west of the Project site at roughly 2,012 feet, on the west side of Day Street.

R3: Location R3 represents existing residential homes on the north side of Old Oleander Avenue, approximately 2,006 feet westerly of the Project site.

R4: Location R4 represents existing residential homes located approximately 1,702 feet southwesterly of the Project site, east of Day Street.

R5: Location R5, approximately 1,764 feet southwesterly of the Project site, represents existing residential homes on the east side of Day Street.

R6: Location R6 represents existing residential homes along Redwood Drive, approximately 1,282 feet southeasterly of the Project site.

R7: Location R7 represents an industrial use building along Harley Knox Boulevard located approximately 393 feet easterly of the Project site.

Construction-Source Emissions LST Analysis

The SCAQMD has issued guidance on applying CalEEMod to LST analyses. In this regard, CalEEMod calculates construction emissions (off-road exhaust and fugitive dust) based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment. Table 4.2-8 summarizes Project construction equipment hours and maximum daily disturbed acreages.

Table 4.2-8
Construction Equipment Operations and Disturbed Acreages

Activity	Equipment	Quantity	Acres graded per 8-hour day	Operating Hours per Day	Disturbed Acres per Day
Site Preparation	Crawler Tractors	4	0.5	8	2.0
	Rubber Tired Dozers	3	0.5	8	1.5
Site Preparation Total Acres Disturbed					**3.5**
Grading	Crawler Tractors	2	0.5	8	1.0
	Graders	1	0.5	8	0.5
	Rubber Tired Dozers	1	0.5	8	0.5
	Scrapers	2	1.0	8	2.0
Grading Total Acres Disturbed					**4.0**

Source: *Oleander Business Park Air Quality Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) December 13, 2019.

Based on the information presented at Table 4.2-8, localized construction-source emissions concentrations were estimated and applicable LSTs were identified by using SCAQMD's LST Screening "Look-Up Tables" (Look-Up Tables). Since the Look-Up Tables consider only 1-acre, 2-acres, and 5-acre site increments, linear regression has been utilized to determine pollutant levels and LST thresholds for the 3 acres disturbed during Project Site Disturbance activities; and the 4 acres disturbed during Project Grading Activities. Maximum daily localized construction-source emissions concentrations are summarized at Table 4.2-9.

Table 4.2-9
Localized Construction-Source Emissions Impacts Summary

Site Preparation	**Emissions (pounds per day)**			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Emissions	**65.58**	**29.43**	**40.40**	**12.71**
SCAQMD Localized Threshold	344	3,467	156	72
Threshold Exceeded?	No	No	No	No
Grading	**Emissions (pounds per day)**			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Emissions	**60.88**	**32.40**	**6.52**	**3.75**

Table 4.2-9
Localized Construction-Source Emissions Impacts Summary

Site Preparation	Emissions (pounds per day)			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
SCAQMD Localized Threshold	362	3,685	160	74
Threshold Exceeded?	No	No	No	No

Source: *Oleander Business Park Air Quality Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) December 13, 2019.

As indicated at Table 4.2-9, localized Project construction-source emissions would not exceed applicable LSTs and would therefore be less-than-significant.

Level of Significance: Less-Than-Significant.

Operational-Source Emissions LST Analysis

The Project Operational-Source Emissions LST Analysis evaluates emissions generated by all on-site stationary/area sources inclusive of on-site landscaping/maintenance activities, facility energy consumption, on-site equipment use (yard trucks, etc.), and all on-site vehicle travel. Detailed operational-source localized emissions modeling information is presented in the Project AQIA (AQIA Section 3.7, *Localized Significance – Long-Term Operational Activity*). Project operational-source localized emissions impacts are summarized at Table 4.2-10.

Table 4.2-10
Localized Operational-Source Emissions Impacts Summary

	Emissions (pounds per day)			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
Maximum Daily Emissions	**12.97**	**7.50**	**1.66**	**0.74**
SCAQMD Localized Threshold	400	4,122	40	19
Threshold Exceeded?	No	No	No	No

Source: *Oleander Business Park Air Quality Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) December 13, 2019.

As indicated at Table 4.2-10, Project localized operational-source emissions concentrations would not exceed applicable LSTs, and would therefore be less-than-significant.

Level of Significance: Less-Than-Significant.

CO "Hot Spot" Analysis

Potentially Adverse localized CO concentrations ("hot spots") are caused by vehicular emissions, primarily when idling at congested intersections. With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentrations within the Basin have declined over time. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent).

To establish a more accurate record of baseline CO concentrations affecting the Basin, a CO "hot spot" analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon traffic periods. Peak hour traffic volumes reflected in the 2003 Los Angeles CO hot spot analysis are presented at Table 4.2-11. The 2003 Los Angeles CO Hot Spot Analysis (2003 Hot Spot Analysis) did not predict any violation of CO standards (please refer to Table 4.2-12). It can, therefore, be reasonably concluded that projects (such as the proposed Project) that are not subject to the extremes in vehicle volumes and vehicle congestion that was evidenced in the 2003 Hot Spot Analysis would similarly not result in CO hot spots.

Table 4.2-11
2003 Hot Spot Analysis Intersection Traffic Volumes

Intersection Location	Peak Traffic Volumes (vph)				
	Eastbound (AM/PM)	Westbound (AM/PM)	Southbound (AM/PM)	Northbound (AM/PM)	Total (AM/PM)
Wilshire/Veteran	4,954/2,069	1,830/3,317	721/1,400	560/933	8,062/7,719
Sunset/Highland	1,417/1,764	1,342/1,540	2,304/1,832	1,551/2,238	6,614/5,374
La Cienega/Century	2,540/2,243	1,890/2,728	1,384/2,029	821/1,674	6,634/8,674
Long Beach/Imperial	1,217/2,020	1,760/1,400	479/944	756/1,150	4,212/5,514

Source: *Oleander Business Park Air Quality Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) December 13, 2019.

Table 4.2-12
2003 Hot Spot Analysis CO Modeling Results

Intersection Location	CO Concentrations (ppm)		
	Morning 1-hour	Afternoon 1-hour	8-hour*
Wilshire/Veteran	4.6	3.5	3.7
Sunset/Highland	4	4.5	3.5
La Cienega/Century	3.7	3.1	5.2
Long Beach/Imperial	3	3.1	8.4

Source: *Oleander Business Park Air Quality Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) December 13, 2019.
Notes: * Reported carbon monoxide concentrations were a result of unusual meteorological and topographical conditions and not a result of traffic volumes and congestion at a particular intersection. As evidence of this, for example the 8-hr CO concentration measured at the Long Beach Blvd. and Imperial Hwy. intersection (highest CO generating intersection within the 2003 Hot Spot Analysis, only 0.7 ppm was attributable to the traffic volumes and congestion at this intersection; the balance of the reported CO concentration (approximately 7.7 ppm) was due to the ambient conditions at the time the 2003 Hot Spot Analysis prepared. In contrast, the current ambient 8-hr CO concentration within the Project study area is estimated at 1.4 ppm—1.6 ppm (please refer to AQIA Table 2-3).

The busiest intersection evaluated in the 2003 Hot Spot Analysis was Wilshire Boulevard at Veteran Avenue which reported a daily traffic volume of approximately 100,000 vehicles per day, and AM/PM traffic volumes of 8,062 vehicles per hour and 7,719 vehicles per hour respectively. The 2003 AQMP estimated that the maximum 1-hour concentration for this intersection was 4.6 ppm. This indicates that, should the daily traffic volume increase by as much as four times to 400,000 vehicles per day, CO

concentrations (4.6 ppm x 4 = 18.4 ppm) would still not likely exceed the most stringent 1-hour CO standard (20.0 ppm).[4]

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) CO Hot Spot screening criteria provides that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection to more than 44,000 vehicles per hour—or to more 24,000 vehicles per hour where vertical and/or horizontal air does not mix (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway)—in order to generate a significant CO impact (BAAQMD CEQA Air Quality Guidelines, p. 3-4).

At buildout of the Project, the greatest traffic volumes experienced on a segment of road would be approximately 42,700 daily trips on I-215 Northbound Ramps and Harley Knox Boulevard (please refer to Project TIA Exhibit 7-1). This is less than half the estimated 100,000 vehicles per day traffic volumes for Wilshire Boulevard and Veteran Avenue reflected in the 2003 Hot Spot Analysis.

Additionally, at buildout of the Project, the greatest intersection AM/PM peak hour volumes would be 3,452 vehicles per hour at the intersection of I-215 Northbound Ramps and Harley Knox Boulevard (see Project TIA Exhibit 7-1). This is less than half the 8,674 vehicle peak hour traffic volume reported at La Cienega and Century Boulevard as part of the 2003 Hot Spot Analysis.

Additionally, under Project buildout conditions, the maximum 3,452 vehicles per hour occurring at I-215 Northbound Ramps and Harley Knox Boulevard would be less than one-tenth of the 44,000 vehicle per hour BAAQMD CO Hot Spot screening criteria.

[4] Based on the ratio of the CO standard (20.0 ppm) and the modeled value (3.1 ppm).

As indicated above, the Project would not produce the volume of traffic required to generate a CO "hot spot" either in the context of the 2003 Hot Spot Analysis, or based on representative Bay Area Air Quality Management District (BAAQMD) CO Hot Spot screening criteria. Therefore, CO "hot spots" are not an environmental impact of concern for the proposed Project. Localized air quality impacts related to CO Hot Spots would therefore be less-than-significant.

It is further noted that as the result of the SCAQMD Air Quality Management Plan strategies and requirements, levels of all criteria pollutant (including CO) within the Basin have steadily improved and are expected to continue to do so, further reducing the potential for occurrence of CO hot spots.

Level of Significance: Less-Than-Significant.

Toxic Air Contaminants Health Risk Analysis

Toxic Air Contaminants (TACs) of primary concern for the Project would be Diesel Particulate Matter (DPM) emissions generated by heavy duty trucks accessing the Project site. Heavy equipment operations during Project construction activities would also generate DPM emissions. Project DPM sources are discussed below. Potential health risks of Project-related DPM emissions are described and evaluated subsequently.

The Project would generate truck traffic, a portion of which may be diesel-powered. DPM emissions are known carcinogens and could increase area health risks. Accordingly, an analysis of potential long-term diesel exposure health risks is provided. To this end, *Oleander Business Park Mobile Source Health Risk Assessment, County of Riverside* (Urban Crossroads, Inc.) December 13, 2019 (Project HRA, EIR Appendix C) characterizes and quantifies potential diesel emissions generated by, and health risk exposure resulting from, Project operations.

Truck trip generation characteristics presented in the Project TIA (*Oleander Business Park Traffic Impact Analysis, County of Riverside* [Urban Crossroads, Inc.] August 16, 2019) were utilized in the Project HRA. It should be noted that the Project TIA presents truck trips in

terms of Passenger Car Equivalents (PCEs) in an effort to recognize and acknowledge the effects of larger/longer truck vehicles at Study Area intersections. For purposes of the HRA, however, the actual number and types of vehicles accessing the Project site (not PCEs) establishes the basis of the emissions quantification and analysis, and truck PCEs were not used. Rather, to more accurately estimate and model vehicular-source emissions, the actual number of vehicles, by vehicle classification [e.g., passenger cars (including light trucks) and heavy trucks] were used in the analysis.

The Project is required to comply with CARB's on-site truck idling limit of 5 minutes. SCAQMD staff recommends that HRA's assume a minimum of 15 minutes of on-site truck idling, which would take into account potential protracted on-site idling which could occur at loading/unloading areas, or other areas or instances where on-site truck traffic movements may be impeded or delayed. Consistent with SCAQMD recommendations, the Project HRA analysis assumed on-site truck idling for a period of 15 minutes.

Carcinogenic and Noncarcinogenic Risks

Carcinogenic Risks

The SCAQMD *CEQA Air Quality Handbook* (1993) states that emissions of Toxic Air Contaminants (TACs) are considered significant if a Health Risk Assessment shows an increased carcinogenic risk of greater than 10 incidents per million population. Consistent with the stated SCAQMD *Handbook* cancer risk threshold, for the purposes of this analysis, an increase in cancer risk of 10 incidents per million population is considered significant. Also relevant to the Project HRA, specific guidance in determining health risks from diesel emissions is provided in *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* (SCAQMD) 2003.

Health risks associated with exposure to carcinogenic compounds are defined in terms of the probability of developing cancer as a result of exposure to a chemical at a given concentration. The cancer risk probability is determined by multiplying the chemical's annual concentration by its unit risk factor (URF). The Project HRA employs the CARB-adopted diesel exhaust URF of 300 in one million per μg/m3 is based upon the upper 95 percentile of estimated risk for each of the epidemiological studies utilized to develop the URF. Using the 95th percentile URF represents a very conservative (health-protective) risk posed by DPM.

Consistent with CARB and Office of Environmental Health Hazard (OEHHA) guidance, and SCAQMD HRA protocols, Project-related DPM-source cancer risks were evaluated for two exposure scenarios: "Residential," and "Worker."[5] Exposure parameters and assumptions for each scenario are summarized at Tables 4.2-13, 4.2-14.

Table 4.2-13
Residential Exposure Parameters and Assumptions

Age	Daily Breathing Rate (L/kg-day)	Age Specific Factor	Exposure Duration (years)	Fraction of Time at Home	Exposure Frequency (days/year)	Exposure Time (hours/day)
-0.25 to 0	361	10	0.25	0.85	350	24
0 to 2	1090	10	2	0.85	350	24
2 to 16	572	3	14	0.72	350	24
16 to 30	261	1	14	0.73	350	24

Source: *Oleander Business Park Mobile Source Health Risk Assessment, County of Riverside (*Urban Crossroads, Inc.) December 13, 2019.

[5] The school nearest the Project site is Tomas River Middle School, located over one mile southwesterly of the site. Proximity to sources of toxics is critical to determining potential health risk impacts. In traffic-related studies, the additional non-cancer health risk attributable to proximity was seen within 1,000 feet and was strongest within 300 feet. California freeway studies show about a 70-percent drop-off in particulate pollution levels at 500 feet. Based on CARB and SCAQMD emissions and modeling analyses, an 80-percent drop-off in pollutant concentrations is expected at approximately 1,000 feet from a distribution center. On this basis, there would be a less-than-significant potential for Project DPM emissions to adversely affect school populations. An evaluation of potential school child exposures was therefore not included as part of the Project HRA.

Table 4.2-14
Worker Exposure Parameters and Assumptions

Age	Daily Breathing Rate (L/kg-day)	Age Specific Factor	Exposure Duration (years)	Fraction of Time at Home	Exposure Frequency (days/year)	Exposure Time (hours/day)
16 – 41	230	1	0.25	0.85	350	24

Source: *Oleander Business Park Mobile Source Health Risk Assessment, County of Riverside* (Urban Crossroads, Inc.) December 13, 2019.

Noncarcinogenic Risks

An evaluation of the potential noncarcinogenic effects of chronic exposures was also conducted. Noncarcinogenic adverse health effects are evaluated by comparing a compound's annual concentration with its toxicity factor or Reference Exposure Level (REL). The REL for diesel particulates was obtained from OEHHA for this analysis. The REL for DPM established by OEHHA is 5 μg/m3 (OEHHA Toxicity Criteria Database, http://www.oehha.org/risk/chemicaldb/index.asp).

The SCAQMD has established non-carcinogenic risk parameters for use in HRAs. Non-carcinogenic risks are quantified by calculating a Hazard Index, expressed as the ratio between the ambient pollutant concentration and its toxicity or Reference Exposure Level (REL). An REL is a concentration at or below which health effects are not likely to occur. A Hazard Index less of than one (1.0) means that adverse health effects are not expected. Within this analysis, non-carcinogenic exposures not exceeding the SCAQMD Hazard Index of 1.0 are considered less-than-significant.

Risk Exposure: Quantification Results

Operational-Source DPM Emissions

The Project HRA results for residential (maximally exposed individual receptor, MEIR), and worker (maximally exposed individual worker, MEIW) carcinogenic and noncarcinogenic risk exposures are summarized below. Locations of the modeled MEIR and MEIW sites relative to the Project site are presented at Figure 4.2-12. Please refer also to the Project HRA (EIR Appendix C) for detailed exposure modeling inputs and results.

LEGEND:

- Residential (MEIR)
- Worker (MEIW)

N

NOT TO SCALE

Source: Urban Crossroads, Inc.

applied planning inc

Figure 4.2-12
Modeled MEIR and MEIW Locations

Residential Exposure Scenario

For the Residential Exposure Scenario, the Project HRA substantiates that DPM emissions generated by Project operations would in less-than-significant health risks at the maximally impacted residential land use (MEIR). More specifically, at the MEIR, the maximum carcinogenic risk is estimated at 1.03 in one million, which does not exceed the SCAQMD cancer risk threshold of 10 in one million. At this same location, the noncarcinogenic Hazard Index is estimated at 0.0004, which would not exceed the applicable Hazard Index threshold of 1.0. As such, Project operations would not cause or result in potentially significant cancer risks or noncarcinogenic risks at the MEIR.

All other potentially affected residential receptors are located at greater distances from the Project site than the MEIR, and would be exposed to fewer emissions and therefore less risk than would occur at the evaluated MEIR. The cancer and noncarcinogenic risks at these more distant residential receptors would also be less-than-significant.

Worker Exposure Scenario

For the Worker Exposure Scenario, the Project HRA substantiates that DPM emissions generated by Project operations would have a less-than-significant health risk at the maximally impacted worker location. More specifically, for the maximally exposed individual worker (MEIW), the maximum cancer risk is estimated at 0.28 in one million, which would not exceed the SCAQMD cancer risk threshold of 10 in one million. At this same location, the noncarcinogenic Hazard Index is estimated at 0.0001, which would not exceed the applicable Hazard Index threshold of 1.0. As such, Project operations would not cause or result in potentially significant cancer risks or noncarcinogenic risks at the MEIW.

All other potentially affected worker receptors are located at greater distances from the Project site than the MEIW, and would be exposed to fewer emissions and therefore less risk than would occur at the evaluated MEIW. The cancer and noncarcinogenic risks at these more distant worker receptors would also be less-than-significant.

Construction-Source DPM Emissions

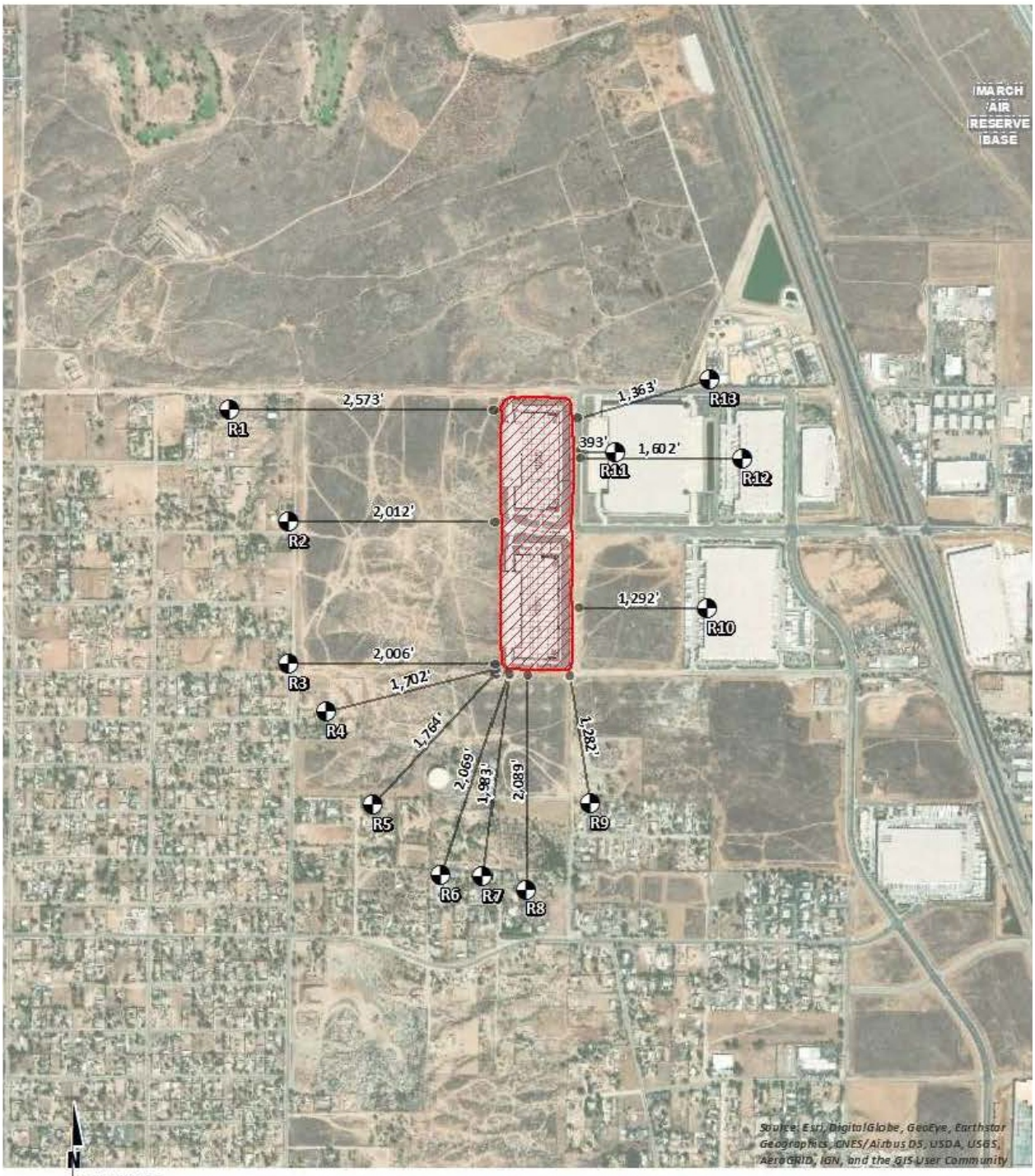
CARB requests that projects that involve construction activity longer than two months should include a construction health risk assessment (HRA). The Project construction HRA evaluated potential health risks that could result from construction equipment and haul truck DPM emissions. Construction equipment and haul truck emissions were modeled employing CalEEMod v2016.3.2. Please refer to previous discussions in this Section for assumed timeframes of construction activities, and associated equipment use (see: Tables 4.2-4, 4.2-5).

The Project construction HRA exposure quantification methodology and protocol comply with applicable provisions of *Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis* (SCAQMD) 2003. SCAQMD recommends using the Environmental Protection Agency's (U.S. EPA's) AERMOD model. For purposes of this analysis, the Lakes AERMOD View (Version 9.7.0) was used to calculate annual average particulate concentrations.

For the Project construction HRA, on-site construction activity was modeled as an area source encompassing the construction area. Construction equipment haul routes were modeled as volume sources. Modeled sensitive receptors were placed at residential and non-residential locations identified at Figure 4.2-13.

Residential Exposure Scenario

For the Residential Exposure Scenario, the residential land use with the greatest potential exposure to construction-source DPM emissions (the MEIR) is located approximately 1,282 feet southeasterly of the Project site (Figure 4.2-13, Location R9.) At the MEIR, the maximum incremental cancer risk attributable to construction-source DPM emissions is estimated at 1.17 in one million, which is less than the SCAQMD cancer threshold of 10 in one million. At this same location, noncarcinogenic Hazard Index is estimated at 0.001, which would not exceed the applicable Hazard Index threshold of 1.0. As such, Project construction activities would not cause or result in potentially significant cancer risks or noncarcinogenic risks at the MEIR.



LEGEND:

- Receptor Locations
- Construction Activity
- Distance from receiver to construction activity (in feet)

N

NOT TO SCALE

Source: Urban Crossroads, Inc.

Figure 4.2-13
Construction-Source Sensitive Receptor Locations

applied planning inc

All other potentially affected residential receptors are located at greater distances from the Project site than the MEIR, and would be exposed to fewer emissions and therefore less risk than would occur at the evaluated MEIR. The cancer and noncarcinogenic risks at these more distant residential receptors would also be less-than-significant.

Worker Exposure Scenario

For the Worker Exposure Scenario, the worker receptor land use with the greatest potential exposure to construction-source DPM emissions (the MEIW) is located approximately 393 feet easterly of the Project site (Figure 4.2-13, location R11). At the MEIW, the maximum incremental cancer risk attributable to construction-source DPM emissions is estimated at 0.13 in one million, which is less than the SCAQMD cancer threshold of 10 in one million. At this same location, the noncarcinogenic Hazard Index is estimated at 0.006, which would not exceed the applicable Hazard Index threshold of 1.0. As such, Project construction activities would not cause or result in potentially significant cancer risks or noncarcinogenic risks at the MEIW.

All other potentially affected worker receptors are located at greater distances from the Project site than the MEIW, and would be exposed to fewer emissions and therefore less risk than would occur at the evaluated MEIW. The cancer and noncarcinogenic risks at these more distant worker receptors would also be less-than-significant.

Localized Air Quality Impact Summary

- Project construction-source criteria pollutant emissions would not exceed applicable LSTs. Project construction-source LST impacts would be less-than-significant. Project construction-source DPM emissions would not exceed applicable cancer or noncarcinogenic risk thresholds. Project construction-source DPM emissions health risk impacts would be less-than-significant.

- Project operational-source criteria pollutant emissions would not exceed applicable LSTs. Project operational-source LST impacts would be less-than-significant. Project operational-source DPM emissions would not exceed applicable cancer or noncarcinogenic risk thresholds. Project operational-source DPM emissions health risk impacts would be less-than-significant.

- The Project would not result in localized significant CO Hot Spots.

Level of Significance: Less-Than-Significant.

OTHER CONSIDERATIONS

Sierra Club v. County of Fresno (Friant Ranch)

A recent Supreme Court of California decision, *Sierra Club v. County of Fresno* (Friant Ranch), found an EIR inadequate and states that:

> *The EIR should be revised to relate the expected adverse air quality impacts to likely health consequences or explain in meaningful detail why it is not feasible at the time of drafting to provide such an analysis, so that the public may make informed decisions regarding the costs and benefits of the Project*[6].

Given that the AQIA for this Project identifies significant and unavoidable project level and cumulative impacts with regard to VOCs and NO_X emissions, the following assessment serves to provide an analysis in conformance with the cited *Friant Ranch* decision. The discussion presented here further clarifies, amplifies, and augments the air quality analysis already undertaken for the Project.

[6] It should be noted that the EIR for Friant Ranch did not include a health risk assessment report. In contrast, the Oleander Business Park Project CEQA documentation includes a detailed mobile source health risk assessment which evaluates the Project's potential health impacts to sensitive land uses as a result of diesel exhaust generated by the Project's construction and on-going operations. The Project CEQA documentation also includes an analysis of potential localized impacts attributable to CO, NOx, PM_{10}, and $PM_{2.5}$ emissions that correlate to potential health impacts on a local level.

As summarized in the Project AQIA, the Project's operational-source NO_X emissions would exceed applicable SCAQMD regional mass daily thresholds. Per SCAQMD significance guidance, these impacts at the Project level are also considered cumulatively significant and would persist over the life of the Project. NO_X is an ozone precursor and, as such, Project emissions of NO_X have the potential to contribute to existing ozone non-attainment conditions within the Basin. NO_X is also a precursor to $PM_{10}/PM_{2.5}$. Project emissions of NO_X have the potential to contribute to existing $PM_{10}/PM_{2.5}$ non-attainment conditions within the Basin. These are cumulatively significant impacts persisting over the life of the Project.

SCAQMD Analysis in its Brief

As noted in the Brief of Amicus Curiae by the SCAQMD in the Friant Ranch case (April 6, 2015, Appendix 3.16) (SCAQMD Brief), SCAQMD has among the most sophisticated air quality modeling and health impact evaluation capability of any of the air districts in the State, and thus it is uniquely situated to express an opinion on how lead agencies should correlate air quality impacts with specific health outcomes.

The SCAQMD discusses that it may be infeasible to quantify health risks caused by developments similar to the Project, due to many factors. It is necessary to have data regarding the sources and types of air toxic contaminants, location of emission points, velocity of emissions, the meteorology and topography of the area, and the location of receptors (worker and residence). (SCAQMD Brief, pp. 9-10). The SCAQMD Brief states that it may not be feasible to perform a health risk assessment for airborne toxics that will be emitted by a generic industrial building that was built on "speculation" (i.e., without knowing the future tenant(s)).[7] (SCAQMD Brief, p. 10). Even where a health risk assessment can be prepared, however, the resulting maximum health risk value is only a calculation of risk - it does not necessarily mean anyone will contract cancer as a result of the Project. The SCAQMD Brief also cites the author of the CARB methodology, which

[7] The occurrence of specific health conditions is based on numerous other factors that are infeasible to quantify, such as an individual's genetic predisposition, diet, exercise regiment, stress, and other behavioral characteristics.

reported that a $PM_{2.5}$ methodology is not suited for small projects and may yield unreliable results. (SCAQMD Brief, p. 14). Similarly, SCAQMD staff does not currently know of a way to accurately quantify ozone-related health impacts caused by NO_X or VOC emissions from relatively small projects due to photochemistry and regional model limitations. (SCAQMD Brief, p. 12). The SCAQMD Brief concludes, with respect to the Friant Ranch EIR, that although it may have been technically possible to plug the data into a methodology, the results would not have been reliable or meaningful. (SCAQMD Brief, p. 15).

On the other hand, for extremely large regional projects (unlike the Project), the SCAQMD states that it has been able to correlate potential health outcomes for very large emissions sources – as part of their rulemaking activity, specifically 6,620 lbs./day of NO_X and 89,180 lbs./day of VOC were expected to result in approximately 20 premature deaths per year and 89,947 school absences due to ozone. (SCAQMD Brief, p. 12).

Application of SCAQMD Analysis to the Project

The Brief makes it clear that SCAQMD does not believe that there must be a quantification of a project's health risks in all CEQA documents prepared for individual projects. Any attempt to quantify the Project's health risks would be considered unreliable and misleading. The Project is much less intense than the Friant Ranch project and has dramatically fewer air quality emissions, and the SCAQMD determined that an attempt to quantify the Friant Ranch health risks would be unreliable and misleading, due to the aforementioned factors.

The Project does not generate anywhere near 6,620 lbs./day of NO_X emissions, which SCAQMD stated was a large enough emission to quantify ozone-related health impacts (see Pages 12-14 of SCAQMD Brief of Amicus Curiae). The Project would generate a maximum of 90.20 lbs./day of NO_X during construction and a maximum of 112.36 lbs./day of NO_X during operations (1.37 percent and 1.70 percent of 6,620 lbs./day, respectively). Therefore, the Project's NO_X emissions are not sufficient to use a regional modeling program to correlate health effects on a basin-wide level.

While the Project is expected to exceed the SCAQMD's regional mass daily thresholds for NO_X this does not in itself constitute a significant health impact to the population adjacent to the Project and within the SCAB.

The Project AQIA does evaluate localized impacts that correlate to potential health impacts on a local level to immediately adjacent land uses. To these ends, the Project LST analysis compares Project on-site emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$ to applicable SCAQMD LST thresholds. As evaluated in the Project AQIA, the Project would not result in emissions that would exceed applicable SCAQMD LSTs. Therefore, the Project would not be expected to exceed the most stringent applicable NAAQS and CAAQS for emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$.

Further Discussion of the Proposed Project's Health Risks

Although it may be misleading and unreliable to attempt to specifically and numerically quantify the proposed Project's health risks, the Project AQIA provides extensive information concerning the Project's potential health risks. While the Project is expected to exceed the SCAQMD's numeric regional mass daily thresholds for NOx, this does not in itself constitute a significant health impact to the population adjacent to the Project and within the air basin.

The SCAQMD regional thresholds are based in part on Section 180 (e) of the federal Clean Air Act (CAA) – it should be noted that the regional mass daily thresholds have not changed since their adoption as part of the *CEQA Air Quality Handbook* published by SCAQMD in 1993 (over 20 years ago). The regional mass daily thresholds are also intended to provide a means of consistency in significance determination within the environmental review process. Notwithstanding, simply exceeding the SCAQMD's regional mass daily thresholds does not constitute a particular health impact to an individual receptor. The reason for this is that the mass daily thresholds are in pounds per day emitted into the air whereas health effects are determined based on the concentration of emissions in the air at a particular receptor (e.g., parts per million by volume of air, or micrograms per cubic meter of air). State and federal ambient air quality standards were developed to protect the most susceptible population groups from

adverse health effects and were established in terms of parts per million or micrograms per cubic meter for the applicable emissions.

For this reason, the SCAQMD developed a methodology to assist lead agencies in analyzing localized air quality impacts from a proposed project as they relate to CO, NO_X, $PM_{2.5}$ and PM_{10}. This methodology employs Localized Significance Thresholds (LSTs). LSTs differ from the regional mass daily thresholds since the LSTs are based on the amount of emissions generated from a given project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard. LSTs and the localized air quality impact analysis specifically account for ambient pollutant concentrations and the relative distance to the nearest sensitive receptor (the SCAQMD LST methodology and protocol incorporates air dispersion modeling that quantifies distance-based emissions concentrations).

The Project AQIA evaluated the Project's localized impact to air quality for emissions of CO, NO_X, PM_{10}, and $PM_{2.5}$ by comparing the Project's on-site emissions to the SCAQMD's applicable LST thresholds (see Project AQIA at Section 3.6). As substantiated in the Project AQIA, the Project would not generate emissions exceeding applicable SCAQMD LSTs. Therefore, the Project would not be expected to exceed the most stringent applicable federal or state ambient air quality standards for emissions of CO, NO_X, PM_{10}, and PM_{10}. It should be noted that the ambient air quality standards are developed and represent levels at which the most susceptible persons (children and the elderly) are protected from health-based impacts. In other words, the ambient air quality standards are purposefully set low to protect children, elderly, and those with existing respiratory problems.

Furthermore, as summarized herein at Section 4.2.3.3, *Air Quality Improvement Trends,* air quality trends for emissions of NO_X have been trending downward within the Basin even as development has increased over the last several years. Therefore, although the Project emissions would exceed the SCAQMD's threshold for NO_X, this does not in itself constitute a basin-wide increase in potential health effects related to these pollutants.

Unfortunately, current scientific, technological, and modeling limitations prevent the relation of expected CEQA-defined adverse air quality impacts to likely health consequences. The preceding discussion explains in meaningful detail why it is not feasible to provide such a causal relationship analysis, but why health-based impacts are nonetheless anticipated to be less-than-significant.

Potential Impact: ***Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable federal or state ambient air quality standard, including releasing emissions which exceed quantitative thresholds for ozone precursors.***

Impact Analysis: The Project area is designated as an extreme non-attainment area for ozone; a serious non-attainment area for PM_{10}; and a non-attainment area for $PM_{2.5}$. The Project-specific evaluation of emissions presented in this Section indicates that even after application of mitigation, Project operational-source NO_x emissions would exceed applicable SCAQMD regional significance thresholds. The fact that the Project operational-source NOx emissions would exceed applicable SCAQMD thresholds indicates that the Project impacts in these regards are significant on an individual basis, and under SCAQMD significance criteria, would therefore also be cumulatively considerable. NO_x is an ozone precursor. Project operational-source emissions of NO_x would therefore contribute to a cumulatively considerable net increase in the ozone precursor NO_x within the encompassing ozone non-attainment area. Additionally, NO_x is a precursor to PM_{10}/$PM_{2.5}$, and Project operational-source emissions of NO_x would therefore contribute to a cumulatively considerable net increase in PM_{10}/$PM_{2.5}$ levels within the encompassing PM_{10}/$PM_{2.5}$ nonattainment area. These are potentially significant cumulative air quality impacts.

Please refer also to the discussion of cumulative air quality impacts presented at EIR Section 5.0, *Other CEQA Considerations*.

Level of Significance: Potentially Cumulatively Significant.

Mitigation Measures: Please refer to Mitigation Measures 4.2.1 through 4.2.4.

Level of Significance after Mitigation: ***Cumulatively Significant and Unavoidable.*** Mitigation Measures 4.2.1 through 4.2.4 would reduce Project-source air pollutant emissions, including NOx emissions, to the extent feasible. The Project would also comply with all applicable SCAQMD Rules and would be required to comply with County of Riverside development standards, California Title 24 energy efficiency performance standards, and the pollutant emissions mitigation measures presented herein. No further feasible measures are available that would substantively mitigate the Project's operational-source NO_x emissions. ***On this basis, even with the application of mitigation, Project operations would result in cumulatively considerable net increase of in the non-attainment pollutants NOx, PM_{10} and $PM_{2.5}$. Project impacts in this regard are cumulatively considerable and the impacts are cumulatively significant and unavoidable.***

Potential Impact: ***Expose sensitive receptors which are located within one mile of the Project site to project substantial point source emissions.***

Impact Analysis: Sensitive receptors can include uses such as long-term health care facilities, rehabilitation centers, and retirement homes. Residences, schools, playgrounds, childcare centers, and athletic facilities can also be considered as sensitive receptors. As concluded in the above discussion of Localized Air Quality Impacts, the sensitive receptors nearest the Project site would not be subject to emissions exceeding SCAQMD LSTs. Nor would the Project create or result in localized CO hot spots. The Project HRA, summarized herein, substantiates that the Project would not generate or result in localized DPM emissions that would create or result in potentially significant health risks.

Based on the preceding, the potential for the Project to expose sensitive receptors which are located within one mile of the Project site to project substantial point source emissions would be less-than-significant.

Level of Significance: Less-Than-Significant.

4.3 GREENHOUSE GAS EMISSIONS

4.3 GREENHOUSE GAS EMISSIONS

Abstract

This Section identifies and addresses potential greenhouse gas (GHG) emissions impacts that may result from construction and implementation of the Project. More specifically, the GHG emissions impacts analysis evaluates the potential for the Project to cause or result in the following impacts:

- *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.*

The County, through its adopted Climate Action Plan Update, *November 2019 (CAP Update), has determined that new development projects that generate less than 3,000 MTCO$_2$e/year (the CAP Update GHG emissions screen level threshold), when combined with the modest efficiency measures are considered to have a less than significant GHG emissions impact.*[1] *The CAP Update 3,000 MTCO$_2$E/year screening-level threshold is the most conservative metric available and is employed in this analysis in of GHG emissions significance.* For the purposes of this analysis, new development projects that generate greater than *3,000 MTCO$_2$e/year are considered to have a potentially significant impact on the environment.*

As substantiated herein, even with application of mitigation, Project-source GHG emissions would exceed 3,000 MTCO$_2$e/year; and the Project cannot feasibly achieve the County of Riverside CAP Update screening-level threshold of 3,000 MTCO$_2$e/year. On this basis, the Project

[1] *County of Riverside Climate Action Plan Update*, November 2019 (CAP Update), Appendix D, *Screening Tables*, p. 6.

would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Impacts in this regard are therefore considered to be individually and cumulatively significant and unavoidable.

As also summarized herein, with incorporation of mitigation, the Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Project impacts in this regard would therefore be less-than-significant.

4.3.1 INTRODUCTION

Global Climate Change (GCC) is defined as the change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms. GCC is currently one of the most controversial environmental issues in the United States, and much debate exists within the scientific community about whether or not GCC is occurring naturally or as a result of human activity. Some data suggests that GCC has occurred in the past over the course of thousands or millions of years. These historical changes to the earth's climate have occurred naturally without human influence, as in the case of an ice age. However, many scientists believe that the climate shift taking place since the industrial revolution (1900) is occurring at a quicker rate and magnitude than in the past. Scientific evidence suggests that GCC is the result of increased concentrations of greenhouse gases in the earth's atmosphere, including carbon dioxide, methane, nitrous oxide, and fluorinated gases. Many scientists believe that this increased rate of climate change is the result of greenhouse gases resulting from human activity and industrialization over the past 200 years.

An individual development proposal, such as the Project considered herein, cannot generate enough greenhouse gas emissions to effect a discernible change in the global climate. However, the Project may contribute to GCC through its increment of greenhouse gases (GHG) in combination with the cumulative increase in GHG from all other sources, which when taken together constitute potential influences on GCC. This Section summarizes the potential for the Project to have a significant effect upon the environment as a result of its potential contribution to GCC. Detailed analysis of the Project's potential GHG/GCC impacts is presented in *Oleander Business Park Greenhouse*

Gas Analysis, County of Riverside (Urban Crossroads, Inc.) August 21, 2020 (Project GHG Analysis); EIR Appendix D.

4.3.2 BACKGROUND

4.3.2.1 Global Climate Change

GCC refers to the change in average meteorological conditions with respect to temperature, wind patterns, precipitation and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO_2 (Carbon Dioxide), N_2O (Nitrous Oxide), CH_4 (Methane), hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. These particular gases are important due to their residence time (duration) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the atmosphere, but prevent heat from escaping, thus warming the atmosphere. GCC can occur naturally, as it has in the past with the previous ice ages.

4.3.2.2 Greenhouse Gases

Gases that trap heat in the atmosphere are often referred to as GHGs. GHGs are released into the atmosphere by both natural and anthropogenic (human) activity. Without the natural greenhouse gas effect, the average temperature would be approximately 61° Fahrenheit (F) cooler than it is currently. The accumulation of these gases in the atmosphere is considered to be the cause for the observed increase in the Earth's temperature.

GHGs have varying global warming potential (GWP) values; GWP values represent the potential of a gas to trap heat in the atmosphere. Carbon dioxide is used as the reference gas for GWP, and thus has a GWP of 1. GWP and atmospheric lifetimes of typical GHGs are summarized in Table 4.3-1.

Table 4.3-1
GHG Global Warming Potentials and Atmospheric Lifetimes

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)	
		2nd Assessment Report	5th Assessment Report
CO_2	*	1	1
CH_4	12 .4	21	28
N_2O	121	310	265
HFC-23	222	11,700	12,400
HFC-134a	13.4	1,300	1,300
HFC-152a	1.5	140	138
SF_6	3,200	23,900	23,500

Source: *Oleander Business Park Greenhouse Gas Analysis, County of Riverside* (Urban Crossroads, Inc.) August 21, 2020.
Notes: * Per IPCC 5th Assessment Report (Appendix 8.A), no single atmospheric lifetime.

The following discussions summarize and describe commonly occurring GHGs, their sources, and general characteristics.

Water Vapor

Water vapor (H_2O) is the most abundant, important, and variable GHG in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere, it maintains a climate necessary for life. Changes in its concentration are primarily considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization. Climate feedback is an indirect, or secondary, change, either positive or negative, that occurs within the climate system in response to a forcing mechanism. The feedback loop in which water is involved is critically important to projecting future climate change.

As the temperature of the atmosphere rises, more water is evaporated from ground storage (rivers, oceans, reservoirs, soil). Because the air is warmer, the relative humidity can be higher (in essence, the air is able to 'hold' more water when it is warmer), leading to more water vapor in the atmosphere. As a GHG, the higher concentration of water vapor is then able to absorb more thermal indirect energy radiated from the Earth, thus further warming the atmosphere. The warmer atmosphere can then hold more water vapor and so on and so on. This is referred to as a "positive feedback loop." The extent

to which this positive feedback loop will continue is unknown as there are also dynamics that hold the positive feedback loop in check. For example, increased atmospheric water vapor translates to increased cloud cover and increased reflection of incoming solar radiation (thus diminishing potential radiant heating of the Earth's surface).

There are no human health effects from water vapor itself; however, when some pollutants come in contact with water vapor, they can dissolve and the water vapor can then act as a pollutant-carrying agent. The main source of water vapor is evaporation from the oceans (approximately 85%). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from sea ice and snow, and transpiration from plant leaves.

Carbon Dioxide

Carbon dioxide (CO_2) is an odorless and colorless GHG. Outdoor levels of carbon dioxide are not high enough to result in negative health effects. Carbon dioxide is emitted from natural and manmade sources. Natural sources include: the decomposition of dead organic matter; respiration of bacteria, plants, animals and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources include: the burning of coal, oil, natural gas, and wood. Carbon dioxide is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks.

Since the industrial revolution began in the mid-1700s, the sort of human activity that increases GHG emissions has increased dramatically in scale and distribution. Data from the past 50 years suggests a corollary increase in levels and concentrations. As an example, prior to the industrial revolution, CO_2 concentrations were fairly stable at 280 parts per million (ppm). Today, they are around 370 ppm, an increase of more than 30%. Left unchecked, the concentration of carbon dioxide in the atmosphere is projected to increase to a minimum of 540 ppm by 2100 as a direct result of anthropogenic sources.

Methane

Methane (CH_4) is an extremely effective absorber of radiation, though its atmospheric concentration is less than carbon dioxide and its lifetime in the atmosphere is brief (10-12 years), compared to other GHGs. No health effects are known to occur from exposure to methane.

Methane has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane. Other anthropogenic sources include fossil-fuel combustion and biomass burning.

Nitrous Oxide

Nitrous oxide (N_2O), also known as laughing gas, is a colorless GHG. Nitrous oxide can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses, it is considered harmless. However, in some cases, heavy and extended use can cause Olney's Lesions (brain damage).

Concentrations of nitrous oxide also began to rise at the beginning of the industrial revolution. In 1998, the global concentration was 314 parts per billion (ppb). Nitrous oxide is produced by microbial processes in soil and water, including those reactions which occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used as an aerosol spray propellant (i.e., in whipped cream bottles). It is also used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars. Nitrous oxide can be transported into the stratosphere, be deposited on the Earth's surface, and be converted to other compounds by chemical reaction.

Chlorofluorocarbons

Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C_2H_6) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs are no longer being used; therefore, it is not likely that health effects would be experienced. Nonetheless, in confined indoor locations, working with CFC-113 or other CFCs is thought to result in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation.

CFCs have no natural source but were first synthesized in 1928. They were used for refrigerants, aerosol propellants and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and was extremely successful, so much so that levels of the major CFCs are now remaining steady or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.

Hydrofluorocarbons

Hydrofluorocarbons (HFCs) are synthetic, man-made chemicals that are used as a substitute for CFCs. Among the constituents classified as GHGs, they are one of three groups with the highest GWP. The HFCs with the greatest measured atmospheric abundances are (in order), HFC-23 (CHF_3), HFC-134a (CF_3CH_2F), and HFC-152a (CH_3CHF_2). Prior to 1990, the only significant emissions were of HFC-23. HFC-134a emissions are increasing due to its use as a refrigerant. The U.S. EPA estimates that concentrations of HFC-23 and HFC-134a are now about 10 parts per trillion (ppt) each; and that concentrations of HFC-152a are about 1 ppt. No health effects are known to result from exposure to HFCs, which are manmade for applications such as automobile air conditioners and refrigerants.

Perfluorocarbons

Perfluorocarbons (PFCs) have stable molecular structures and do not break down through chemical processes in the lower atmosphere. High-energy ultraviolet rays, which occur about 60 kilometers above Earth's surface, are able to destroy the

compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). The U.S. EPA estimates that concentrations of CF_4 in the atmosphere are over 70 ppt.

No health effects are known to result from exposure to PFCs. The two main sources of PFCs are primary aluminum production and semiconductor manufacture.

Sulfur Hexafluoride

Sulfur hexafluoride (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated (22,800). The U.S. EPA indicates that concentrations in the 1990s were about 4 ppt. In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

4.3.2.3 Existing Greenhouse Gases Emissions Inventories

Global

Worldwide anthropogenic GHG emissions are tracked by the Intergovernmental Panel on Climate Change for industrialized nations (referred to as Annex I) and developing nations (referred to as Non-Annex I). This GHG emission data through 2017 is available for Annex I nations. Global GHG emissions are summarized in Table 4.3-2, and are representative of currently available inventory data.

United States

As identified in Table 4.3-2, the United States, as a single country, was the number two producer of GHG emissions in 2017. Carbon dioxide from fossil fuel combustion is the largest source of GHG emissions in the United States.

Table 4.3-2
Global GHG Emissions by Source Countries and the EU (2107)

Sources	GHG Emissions (Gigagram CO_2e)
China	11,911,710
United States	6,456,718
European Union (28-member countries)	4,323,163
India	3,079,810
Russian Federation	2,155,470
Japan	1,289,630
Total	**29,216,501**

Source: *Oleander Business Park Greenhouse Gas Analysis, County of Riverside* (Urban Crossroads, Inc.) August 21, 2020.

State of California

California has significantly slowed the rate of growth of GHG emissions through implementation of energy efficiency programs and adoption and implementation of strict emission controls, California nonetheless is still a substantial contributor to the U.S. emissions inventory total.

The California Air Resource Board (CARB) compiles GHG inventories for the State of California. Per CARB GHG inventory data for the 2000-2017 GHG emissions period, California emitted an average 424.1 million metric tons of CO_2e ($MMTCO_2e$) per year, including emissions resulting from imported electrical power in 2015.

County of Riverside

Riverside County's community-wide 2008 GHG emissions totaled an estimated 7,012,938 metric tons of CO_2e (MTCO2e).[2] The County's 2020 Business as Usual (BAU) GHG emissions inventory is estimated at 12,129,497 MTCO2e community-wide.[3]

[2] County of Riverside Climate Action Plan (County of Riverside, Transportation and Land Management Agency, Planning Department) July 2018, p. ES-1.
[3] Ibid., p. ES-2.

Project Site

The Project site comprises vacant, disturbed property, and is not a source of GHG emissions.

4.3.2.4 Effects of Climate Change in California

Public Health

Higher temperatures may increase the frequency, duration, and intensity of conditions conducive to air pollution formation. For example, days with weather conducive to ozone formation could increase from 25 to 35% under the lower warming range to 75 to 85% under the medium warming range. In addition, if global background ozone levels increase as predicted in some scenarios, it may become impossible to meet local air quality standards. Air quality could be further compromised by increases in wildfires, which emit fine particulate matter that can travel long distances, depending on wind conditions. The Climate Scenarios Report indicates that large wildfires could become up to 55% more frequent if GHG emissions are not significantly reduced.

In addition, under the higher warming range scenario, there could be up to 100 more days per year with temperatures above 90°F in Los Angeles and 95°F in Sacramento by 2100. This is a large increase over historical patterns and approximately twice the increase projected if temperatures remain within or below the lower warming range. Rising temperatures could increase the risk of death from dehydration, heat stroke/exhaustion, heart attack, stroke, and respiratory distress caused by extreme heat.

Water Resources

A vast network of man-made reservoirs and aqueducts captures and transports water throughout the State from northern California rivers and the Colorado River. The current distribution system relies on Sierra Nevada snowpack to supply water during the dry spring and summer months. Rising temperatures, potentially compounded by decreases in precipitation, could severely reduce spring snowpack, increasing the risk of summer water shortages.

If temperatures continue to increase, more precipitation could fall as rain instead of snow, and the snow that does fall could melt earlier, reducing the Sierra Nevada spring snowpack by as much as 70 to 90%. Under the lower warming range scenario, snowpack losses could be only half as large as those possible if temperatures were to rise to the higher warming range. How much snowpack could be lost depends in part on future precipitation patterns, the projections for which remain uncertain. However, even under the wetter climate projections, the loss of snowpack could pose challenges to water managers and hamper hydropower generation. It could also adversely affect winter tourism. Under the lower warming range, the ski season at lower elevations could be reduced by as much as a month. If temperatures reach the higher warming range and precipitation declines, there may be years with insufficient snow for skiing and snowboarding.

State water supplies are also at risk from rising sea levels. An influx of saltwater could degrade California's estuaries, wetlands, and groundwater aquifers. Saltwater intrusion caused by rising sea levels is a major threat to the quality and reliability of water within the southern edge of the Sacramento/San Joaquin River Delta – a major fresh water supply.

Agriculture

Increased temperatures could cause widespread changes to the agriculture industry reducing the quantity and quality of agricultural products statewide. First, California farmers could possibly lose as much as 25% of its water supply. Although higher CO_2 levels can stimulate plant production and increase plant water-use efficiency, California's farmers could face greater water demand for crops and a less reliable water supply as temperatures rise. Crop growth and development could change, as could the intensity and frequency of pest and disease outbreaks. Rising temperatures could aggravate O_3 pollution, which makes plants more susceptible to disease and pests and interferes with plant growth.

Plant growth tends to be slow at low temperatures, increasing with rising temperatures up to a threshold. However, faster growth can result in less-than-optimal development

for many crops, so rising temperatures could worsen the quantity and quality of yield for a number of California's agricultural products. Products likely to be most affected include wine grapes, fruits, and nuts.

In addition, continued GCC could shift the ranges of existing invasive plants and weeds and alter competition patterns with native plants. Range expansion could occur in many species while range contractions may be less likely in rapidly evolving species with significant populations already established. Should range contractions occur, new or different weed species could fill the emerging gaps. Continued GCC could alter the abundance and types of many pests, lengthen pests' breeding season, and increase pathogen growth rates.

Forests and Landscapes

GCC has the potential to intensify the current threat to forests and landscapes by increasing the risk of wildfire and altering the distribution and character of natural vegetation. If temperatures rise into the medium warming range, the risk of large wildfires in California could increase by as much as 55%, which is almost twice the increase expected if temperatures stay in the lower warming range. However, since wildfire risk is determined by a combination of factors, including: precipitation, winds, temperature, terrain, and vegetation, future risks would likely not be uniform throughout the State. For example, wildfires in northern California could increase by up to 90% due to decreased precipitation.

Moreover, continued GCC has the potential to alter natural ecosystems and biological diversity within the State. For example, alpine and subalpine ecosystems could decline by as much as 60 to 80% by the end of the century as a result of increasing temperatures. The productivity of the State's forests has the potential to decrease as a result of GCC.

Rising Sea Levels

Rising sea levels, more intense coastal storms, and warmer water temperatures could increasingly threaten the State's coastal regions. Under the higher warming range scenario, sea level is anticipated to rise 22 to 35 inches by 2100. Increased sea level

elevations of this magnitude would inundate low-lying coastal areas with saltwater, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. Under the lower warming range scenario, sea level could rise 12 to 14 inches.

4.3.2.5 Health Effects of Greenhouse Gases

Water Vapor

There are no known direct health effects related to water vapor at this time. However, water vapor can be a transport mechanism for other pollutants to enter the human body.

Carbon Dioxide

According to the National Institute for Occupational Safety and Health (NIOSH), high concentrations of carbon dioxide can result in health effects such as: headaches, dizziness, restlessness, difficulty breathing, sweating, increased heart rate, increased cardiac output, increased blood pressure, coma, asphyxia, and/or convulsions. It should be noted that current concentrations of carbon dioxide in the earth's atmosphere are estimated to be approximately 370 ppm, while the actual reference exposure level (level at which adverse health effects typically occur) is at exposure levels of 5,000 ppm averaged over 10 hours in a 40-hour workweek and short-term reference exposure levels of 30,000 ppm averaged over a 15-minute period.

Methane

Methane (CH_4) is extremely reactive with oxidizers, halogens, and other halogen-containing compounds, may displace oxygen in an enclosed space and act as an asphyxiant.

Nitrous Oxide

Nitrous Oxide (N_2O) is often referred to as laughing gas; it is a colorless GHG. Health effects associated with exposure to elevated concentrations of nitrous oxide include dizziness, euphoria, slight hallucinations. In extreme cases of elevated concentrations nitrous oxide can also cause brain damage.

Chlorofluorocarbons (CFCs)

In confined indoor locations, working with CFCs may result in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation.

Hydrofluorocarbons (HFCs)

No health effects are known to result from exposure to HFCs.

Perfluorinated Carbons (PFCs)

No health effects are known to result from exposure to PFCs.

Sulfur Hexafluoride (SF_6)

In high concentrations in confined areas, SF_6 may result in suffocation because it displaces the oxygen.

Nitrogen Trifluoride (NF_3)

Long-term or repeated exposure to NF_3 may adversely affect the liver and kidneys, and may cause fluorosis.

4.3.3 GCC REGULATORY SETTING

The current GHG regulatory setting is extensive and constantly evolving. The GHG regulatory setting is discussed in detail within the Project GHG Analysis (Project GHGA Section 2.7). GHG regulatory setting of relevance to the Project is summarized below.

4.3.3.1 State of California

Overview

The State of California legislature has enacted a series of bills and associated actions, described below, that collectively act to reduce GHG emissions. Certain State legislation, such as Assembly Bill (AB 32) *California Global Warming Solutions Act of 2006*, was specifically enacted to address GHG emissions. Other State legislation, such as Title 24 and Title 20 energy standards, originally adopted for other purposes (energy and water conservation), also facilitate GHG emissions reductions. Additionally, California's

Executive Branch has taken several actions to reduce GHGs through the use of Executive Orders. Although not regulatory, Executive Orders set the tone for the State and guide the actions of State agencies.

AB 32. The California State Legislature enacted AB 32, which requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. GHGs, as defined under AB 32, include carbon dioxide, methane, N_2O, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride, has also been added to the list of GHGs. The California Air Resources Board (CARB) is the State agency charged with monitoring and regulating sources of GHGs.

The State has made steady progress in implementing AB 32 and achieving targets included in Executive Order S-3-05. The progress is shown in updated emission inventories prepared by CARB for 2000 through 2012. The State has achieved the Executive Order S-3-05 target for 2010 of reducing GHG emissions to 2000 levels. Substantial progress has also been made in achieving the State goal of reducing GHG emissions to 1990 levels by 2020.

CARB Scoping Plan. The CARB Climate Change Scoping Plan (Scoping Plan) contains measures designed to reduce the State's emissions to 1990 levels by the year 2020 and thereby comply with AB 32 GHG emissions reductions targets. The Scoping Plan identifies recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors.

The CARB approved the First Update to the Scoping Plan (Update) on May 22, 2014. The Update identifies progress made to meet the near-term objectives of AB 32 and defines California's climate change priorities and strategies. The Update does not set new targets for the State, but rather describes a path that would achieve the State's 2050 goal to achieve GHG emissions levels that are 80% below 1990 baseline levels.

As part of CEQA compliance for the Scoping Plan, CARB prepared a Supplemental Functional Equivalent Document (FED) in 2011. The FED included an updated 2020 BAU emissions inventory projection based on current economic forecasts (i.e., as influenced by the 2008 economic downturn) and emission reduction measures already in place, replacing its prior 2020 BAU emissions inventory. The updated BAU estimate of 507 $MMTCO_2e$ by 2020 requires a reduction of 80 $MMTCO_2e$, or a 16% reduction below the estimated BAU levels to return to 1990 levels (i.e., 427 $MMTCO_2e$) by 2020.

To establish a BAU reduction scenario that is consistent with threshold definitions used in thresholds adopted by lead agencies for CEQA purposes and many climate action plans, the updated inventory without regulations was also included in the Supplemental FED. The updated CARB 2020 BAU projection in the Supplemental FED is 545 $MMTCO_2e$. Considering the updated BAU estimate of 545 $MMTCO_2e$ by 2020, CARB estimates a 21.7% reduction below the estimated statewide BAU levels is necessary to return to 1990 emission levels.

2017 Climate Change Scoping Plan Update. In November 2017, CARB released the final 2017 Scoping Plan Update, which identifies the State's post-2020 reduction strategy. The 2017 Scoping Plan Update reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by Senate Bill 32 (SB 32). Key programs that the proposed Second Update builds upon include the Cap-and-Trade Regulation, the Low Carbon Fuel Standard, and much cleaner cars, trucks and freight movement, utilizing cleaner, renewable energy, and strategies to reduce methane emissions from agricultural and other wastes.

The 2017 Scoping Plan establishes a new emissions limit of 260 $MMTCO_2e$ for the year 2030, which corresponds to a 40% decrease in 1990 levels by 2030.

Major elements of the 2017 Scoping Plan framework include:

- Implementing and/or increasing the standards of the Mobile Source Strategy, which include increasing ZEV buses and trucks.

- Low Carbon Fuel Standard (LCFS), with an increased stringency (18% by 2030).
- Implementing SB 350, which expands the Renewables Portfolio Standard (RPS) to 50% RPS and doubles energy efficiency savings by 2030.
- California Sustainable Freight Action Plan, which improves freight system efficiency, utilizes near-zero emissions technology, and deployment of ZEV trucks.
- Implementing the proposed Short-Lived Climate Pollutant Strategy (SLPS), which focuses on reducing methane and hydrofluorocarbon emissions by 40% and anthropogenic black carbon emissions by 50% by year 2030.
- Continued implementation of SB 375.
- Post-2020 Cap-and-Trade Program that includes declining caps.
- 20% reduction in GHG emissions from refineries by 2030.
- Development of a Natural and Working Lands Action Plan to secure California's land base as a net carbon sink.

In addition to the statewide strategies listed above, the 2017 Scoping Plan also recognizes local governments as essential partners in achieving the State's long-term GHG reduction goals and identifies local actions to reduce GHG emissions. As part of the recommended actions, CARB advocates local government attainment of a community-wide goal of 6 $MMTCO_2e$ or less per capita by 2030, and 2 $MMTCO_2e$ or less per capita by 2050. For CEQA projects, CARB states that lead agencies may develop evidenced-based bright-line numeric thresholds—consistent with the Scoping Plan and the State's long-term GHG goals—and projects with emissions over that amount may be required to incorporate on-site design features and mitigation measures that avoid or minimize project emissions to the extent feasible. Alternatively, a lead agency may employ performance-based metric using a climate action plan or other plan to reduce GHG emissions. Note, however, that the 2017 Scoping Plan specifically acknowledges that:

> . . . [a]chieving net zero increases in GHG emissions, resulting in no contribution to GHG impacts, may not be feasible or appropriate for every project, however, and the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial

contribution to the cumulatively significant environmental impact of climate change under CEQA (2017 Scoping Plan, p. 102).

Senate Bill 32. On September 8, 2016, Governor Jerry Brown signed the Senate Bill (SB) 32 and its companion bill, Assembly Bill (AB) 197. SB 32 requires the State to reduce statewide greenhouse gas emissions to 40% below 1990 levels by 2030, a reduction target that was first introduced in Executive Order B-30-15.

Cap-and-Trade Program. The Scoping Plan identifies a Cap-and-Trade Program as one of the key strategies for California to reduce GHG emissions. According to CARB, a cap-and-trade program will help put California on the path to meet its goal of reducing GHG emissions to 1990 levels by the year 2020 and ultimately achieving an 80% reduction from 1990 levels by 2050. Under cap-and-trade, an overall limit on GHG emissions from capped sectors is established, and facilities subject to the cap will be able to trade permits to emit GHGs within the overall limit.

CARB adopted a California Cap-and-Trade Program consistent with authority established under AB 32. The Cap-and-Trade Program is designed to reduce GHG emissions from major sources (deemed "covered entities") by setting a firm cap on statewide GHG emissions and employing market mechanisms to achieve AB 32's emission-reduction mandate of returning to 1990 levels of emissions by 2020. The statewide cap for GHG emissions from the capped sectors (e.g., electricity generation, petroleum refining, and cement production) commenced in 2013 and will decline over time, achieving GHG emission reductions throughout the program's duration.

The Cap-and-Trade Program works with other direct regulatory measures and provides an economic incentive to reduce GHG emissions. If California's direct regulatory measures reduce GHG emissions more than expected, then the Cap-and-Trade Program will be responsible for relatively fewer emissions reductions. If California's direct regulatory measures reduce GHG emissions less than expected, then the Cap-and-Trade Program will be responsible for relatively more emissions reductions. In this manner, the

Cap-and-Trade Program assures that California will meet its 2020 GHG emissions reduction mandate.

As of January 1, 2015, the Cap-and-Trade Program covered approximately 85% of California's GHG emissions. The Cap-and-Trade Program covers the GHG emissions associated with electricity consumed in California, whether generated in-State or imported. Accordingly, GHG emissions associated with a CEQA projects' electricity usage are covered by the Cap-and-Trade Program.

The Cap-and-Trade Program also covers fuel suppliers (natural gas and propane fuel providers and transportation fuel providers) to address emissions from such fuels and from combustion of other fossil fuels not directly covered at large sources in the Program's first compliance period. While the Cap-and-Trade Program technically covered fuel suppliers as early as 2012, they did not have a compliance obligation (i.e., they were not fully regulated) until 2015. The Cap-and-Trade Program covers the GHG emissions associated with the combustion of transportation fuels in California, whether refined in-State or imported. The point of regulation for transportation fuels is when they are "supplied" (i.e., delivered into commerce). Accordingly, as with stationary source GHG emissions and GHG emissions attributable to electricity use, virtually all, if not all, of GHG emissions from CEQA projects associated with vehicle-miles traveled (VMT) are covered by the Cap-and-Trade Program.

In addition, the Scoping Plan differentiates between "capped" and "uncapped" strategies. "Capped" strategies are subject to the proposed cap-and-trade program. The Scoping Plan states that the inclusion of these emissions within the Program will help ensure that the year 2020 emission targets are met despite some degree of uncertainty in the emission reduction estimates for any individual measure. Implementation of the capped strategies is calculated to achieve sufficient GHG emissions reductions by 2020 to achieve the emission target contained in AB 32. "Uncapped" strategies that will not be subject to the cap-and-trade emissions caps and requirements are provided as a margin of safety by accounting for additional GHG emission reductions.

SB 375 - the Sustainable Communities and Climate Protection Act of 2008. The Sustainable Communities and Climate Protection Act of 2008 (SB 375) implements the following measures: (1) requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) aligns planning for transportation and housing, and (3) creates specified incentives for the implementation of the strategies.

Concerning CEQA, SB 375, as codified in Public Resources Code Section 21159.28, states that CEQA findings for certain projects are not required to reference, describe, or discuss (1) growth inducing impacts, or (2) any project-specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network, if the project:

1. Is in an area with an approved sustainable communities strategy or an alternative planning strategy that CARB accepts as achieving the GHG emission reduction targets.

2. Is consistent with that strategy (in designation, density, building intensity, and applicable policies).
3. Incorporates the mitigation measures required by an applicable prior environmental document.

AB 1493 Pavley Regulations and Fuel Efficiency Standards/Advanced Clean Cars Program. California AB 1493, enacted on July 22, 2002, required CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Initial CARB regulations and standards for 2009 – 2012 vehicles provided for an approximate 22% reduction in GHG emissions compared with the 2002 fleet GHG emissions. Initial CARB regulations and standards for 2013 – 2016 vehicles provided for an approximate 30% reduction in GHG emissions compared with the 2002 fleet GHG emissions.

The second phase of the Pavley bill, CARB Advanced Clean Cars Program, combines the control of smog-causing pollutants and GHG emissions into a single coordinated package of requirements for model years 2017 through 2025. By the year 2025, the Advanced Clean Cars Program will reduce GHGs from new cars by 34% from 2016 levels.

SB 350 - Clean Energy and Pollution Reduction Act of 2015. SB 350 reaffirms California's commitment to reducing its GHG emissions and addressing climate change. Key provisions include an increase in the RPS, higher energy efficiency requirements for buildings, initial strategies towards a regional electricity grid, and improved infrastructure for electric vehicle charging stations. Specifically, SB 350 requires the following to reduce statewide GHG emissions:

- Increase the amount of electricity procured from renewable energy sources from 33% to 50% by 2030, with interim targets of 40% by 2024, and 25% by 2027.

- Double the energy efficiency in existing buildings by 2030. This target will be achieved through the California Public Utility Commission (CPUC), the California Energy Commission (CEC), and local publicly-owned utilities.

- Reorganize the Independent System Operator (ISO) to develop more regional electricity transmission markets and to improve accessibility in these markets, which will facilitate the growth of renewable energy markets in the western United States.

Executive Order B-55-18 and SB 100. Executive Order B-55-18 establishes a carbon neutrality goal for the state of California by 2045; and sets a goal to maintain net negative emissions thereafter. The Executive Order directs the California Natural Resources Agency (CNRA), California Environmental Protection Agency (CalEPA), the Department of Food and Agriculture (CDFA), and CARB to include sequestration targets in the Natural and Working Lands Climate Change Implementation Plan consistent with the carbon neutrality goal.

SB 100 raises California's RPS requirement to 50% renewable resources target by December 31, 2026, and to achieve a 60% target by December 31, 2030. SB 100 also requires that retail sellers and local publicly owned electric utilities procure a minimum quantity of electricity products from eligible renewable energy resources so that the total kilowatt hours of those products sold to their retail end-use customers achieve 44% of retail sales by December 31, 2024, 52% by December 31, 2027, and 60% by December 31, 2030.

Executive Order S-3-05. Executive Order S-3-05 established the following reduction targets for GHG emissions:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80% below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order S-01-07 – Low Carbon Fuel Standard. The California Low Carbon Fuel Standard (LCFS) contributes to State GHG emission reduction goals established under AB 32. THE LCFS program incentivizes adoption of low-carbon transportation fuels based on the fuel's lifecycle carbon intensity (CI). The current LCFS regulation became effective on January 1, 2016. In September 2018, CARB adopted regulatory amendments to extend the LCFS for an additional ten years with a target of 20% CI reduction from 2010 levels by 2030.

Executive Order S-13-08. The 2009 California Climate Adaptation Strategy (California Natural Resources Agency 2009) was adopted pursuant to Executive Order S-13-08. The Strategy is ". . . first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States." Objectives include analyzing

risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order B-30-15. Executive Order B-30-15 aligns California's GHG reduction targets with those of leading international governments. The Order sets a new interim statewide GHG emission reduction target to reduce GHG emissions to 40% below 1990 levels by 2030 in order to ensure California meets its target of reducing GHG emissions to 80% below 1990 levels by 2050 and directs CARB to update the Climate Change Scoping Plan to express the 2030 target in terms of million metric tons of CO_2 equivalent ($MMCO_2e$). The Order also requires the State's climate adaptation plan to be updated every three years, and for the State to continue its climate change research program, among other provisions.

Title 20 Appliance Efficiency Standards. California Code of Regulations, Title 20: Division 2, Chapter 4, Article 4, Sections 1601-1608: Appliance Efficiency Regulations regulates the sale of appliances in California. The Appliance Efficiency Regulations include standards for both federally regulated appliances and non-federally regulated appliances. Twenty-three categories of appliances are included in the scope of these regulations. The standards within these regulations apply to appliances that are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the State and those designed and sold exclusively for use in recreational vehicles or other mobile equipment.

Title 24 Energy Efficiency Standards and California Green Building Standards. California Code of Regulations Title 24 Part 6: *California's Energy Efficiency Standards for Residential and Nonresidential Buildings*, was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. Buildings permitted on or after January 1, 2020, must comply with the 2019 Energy Efficiency Standards.

California Code of Regulations, Title 24, Part 11: California Green Building Standards Code (CALGreen). CALGreen is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on January 1, 2011. CALGreen is updated on a regular basis, with the most recent update consisting of the 2019 California Green Building Code Standards. Under State law, local jurisdictions are permitted to adopt more stringent requirements. CALGreen requirements applicable to the Project would include those listed below. CALGreen Section citations are presented parenthetically.

- Short-term bicycle parking. If the new project or an additional alteration 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% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack (5.106.4.1.1).

- Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5% of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (5.106.4.1.2).

- Designated parking. In new projects or additions to 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 as shown in Table 5.106.5.2 (5.106.5.2).

- Construction waste management. Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1. 5.405.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent (5.408.1).

- Excavated soil and land clearing debris. 100% of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled.

For a phased project, such material may be stockpiled on site until the storage site is developed (5.408.3).

- Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive (5.410.1).

- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
  - Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (5.303.3.1)
  - Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush (5.303.3.2.1). The effective flush volume of floor-mounted or other urinals shall not exceed 0.5 gallons per flush (5.303.3.2.2).
  - Showerheads. Single showerheads shall have a minimum flow rate of not more than 1.8 gallons per minute and 80 psi (5.303.3.3.1). When a shower is served by more than one showerhead, the combine flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi (5.303.3.3.2).
  - Faucets and fountains. Nonresidential lavatory faucets shall have a maximum flow rate of note more than 0.5 gallons per minute at 60 psi (5.303.3.4.1). Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute of 60 psi (5.303.3.4.2). Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute (5.303.3.4.3). Metering faucets shall not deliver more than 0.20 gallons per cycle (5.303.3.4.4). Metering faucets for wash fountains shall have a maximum flow rate not more than 0.20 gallons per cycle (5.303.3.4.5).

- Outdoor potable water use in landscaped areas. Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California

Department of Water Resources' Model Water Efficient (MWELO), whichever is more stringent (5.304.1).

- Water meters. Separate submeters or metering devices shall be installed for new buildings or additions in excess of 50,000 sf or for excess consumption where any tenant within a new building or within an addition that is project to consume more than 1,000 gal/day (5.303.1.1 and 5.303.1.2).

- Outdoor water use in rehabilitated landscape projects equal or greater than 2,500 sf. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 sf requiring a building or landscape permit (5.304.3).

- Commissioning. For new buildings 10,000 sf and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements (5.410.2).

CARB Refrigerant Management Program. 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 sections 95380 to 95398 of Title 17, California Code of Regulations.

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.

Tractor-Trailer GHG Regulation. Tractors and trailers subject to this regulation must either use EPA SmartWay certified tractors and trailers, or retrofit their existing fleet with SmartWay verified technologies. The regulation applies primarily to owners of 53-foot or longer box-type trailers, including both dry-van and refrigerated-van trailers, and owners of the heavy-duty tractors that pull them on California highways. These owners are responsible for replacing or retrofitting their affected vehicles with compliant aerodynamic technologies and low rolling resistance tires. Sleeper cab tractors model year 2011 and later must be SmartWay certified. All other tractors must use SmartWay verified low rolling resistance tires. There are also requirements for trailers to have low rolling resistance tires and aerodynamic devices.

Phase 1 and 2 Heavy-Duty Vehicle GHG Standards. CARB has adopted a new regulation for greenhouse gas (GHG) emissions from heavy-duty trucks and engines sold in California. It establishes GHG emission limits on truck and engine manufacturers and harmonizes with the U.S. EPA rule for new trucks and engines nationally. Existing heavy-duty vehicle regulations in California include engine criteria emission standards, tractor-trailer GHG requirements to implement SmartWay strategies (i.e., the Heavy Duty Tractor-Trailer Greenhouse Gas Regulation), and in-use fleet retrofit requirements such as the Truck and Bus Regulation.

CARB staff has worked jointly with the U.S. Environmental Protection Agency (U.S. EPA) and the National Highway Traffic Safety Administration (NHTSA) on the next phase of federal greenhouse gas (GHG) emission standards for medium- and heavy-duty vehicles, called federal Phase 2. The federal Phase 2 standards were built on the improvements in engine and vehicle efficiency required by the Phase 1 emission standards and represent a significant opportunity to achieve further GHG reductions for 2018 and later model year heavy-duty vehicles, including trailers.

SB 97 and the CEQA Guidelines Update. Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. The code states "(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions

as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the Office of Planning and Research pursuant to subdivision (a)." Section 21097 was also added to the Public Resources Code.

Implementing SB 97, *CEQA Guidelines* Section 15064.4, was added to assist agencies in determining the significance of GHG emissions. Section 15064.4 allows agencies the discretion to determine whether a quantitative or qualitative analysis is best for a particular project. *CEQA Guidelines* Section 15064.4 has been subsequently updated and clarified under the 2019 *CEQA Guidelines.*

4.3.3.2 South Coast Air Quality Management District

The Project lies within the South Coast Air Basin, which is under the jurisdiction of the SCAQMD. Relevant SCAQMD GHG policies and regulations are summarized below.

The SCAQMD *Draft Guidance Document – Interim CEQA GHG Significance Threshold Guidance Document* provides substantial evidence supporting the approaches to significance of GHG emissions that can be considered by the lead agency in adopting its own threshold. The current interim thresholds consist of the following tiered approach:

- Tier 1 consists of evaluating whether or not the project qualifies for any applicable exemption under CEQA.

- Tier 2 consists of determining whether the project is consistent with a GHG reduction plan. If a project is consistent with a qualifying local GHG reduction plan, it does not have significant GHG emissions.

- Tier 3 consists of screening values, which the lead agency can choose, but must be consistent with all projects within its jurisdiction. A project's construction emissions are averaged over 30 years and are added to the project's operational

emissions. If a project's emissions are below one of the following screening thresholds, then the project is less than significant:

- Residential and Commercial land use: 3,000 $MTCO_2e$ per year.
- Industrial land use: 10,000 $MTCO_2e$ per year.
- Based on land use type: residential: 3,500 $MTCO_2e$ per year; commercial: 1,400 $MTCO_2e$ per year; or mixed use: 3,000 $MTCO_2e$ per year.

- Tier 4 has the following options:
  - Option 1: Reduce BAU emissions by a certain percentage; this percentage is currently undefined.
  - Option 2: Early implementation of applicable AB 32 Scoping Plan measures.
  - Option 3, 2020 target for service populations (SP), which includes residents and employees: 4.8 $MTCO_2e$/SP/year for projects and 6.6 $MTCO_2e$/SP/year for plans.
  - Option 3, 2035 target: 3.0 $MTCO_2e$/SP/year for projects and 4.1 $MTCO_2e$/SP/year for plans.

- Tier 5 involves mitigation offsets to achieve target significance threshold.

SCAQMD only has authority over GHG emissions from development projects that include air quality permits. At this time, it is unknown if the Project would include stationary sources of emissions subject to SCAQMD permits. Notwithstanding, if the Project requires a stationary permit, it would be subject to the applicable SCAQMD regulations. SCAQMD Regulation XXVII, adopted in 2009 includes the following Rules addressing GHG emissions:

- Rule 2700 defines terms and post global warming potentials.

- Rule 2701, SoCal Climate Solutions Exchange, establishes a voluntary program to encourage, quantify, and certify voluntary, high quality certified GHG emission reductions in the SCAQMD.

- Rule 2702, GHG Reduction Program created a program to produce GHG emission reductions within the SCAQMD. The SCAQMD will fund projects through contracts in response to requests for proposals or purchase reductions from other parties.

4.3.3.3 County of Riverside

Good Neighbor Policy for Logistics and Warehouse/Distribution Uses. The purpose of this Policy is to provide framework for the development and operations of logistics and warehouse projects larger than 250,000 sf in size in a way that would lessen their impact on the surrounding communities. This Policy provides development and operational criteria that can be implemented to supplement project-level mitigation measures. Relevant Policy provisions include the following:

- During construction of the warehouse/distribution facility, all heavy-duty haul trucks accessing the site shall have CARB-approved 2010 engines or newer approved CARB engine standards.

- All excavators, graders, rubber-tired dozers, and similar "off-road" construction equipment shall be CARB Tier 3 Certified engines or better.

- The maximum daily disturbance area (actively graded area) shall not exceed 10 acres per day.

- Appropriate dust control measures that meet the SCAQMD standards shall be implemented for grading and construction activity.

- Facility operators shall maintain records of their fleet equipment and ensure that all diesel-fueled Medium-Heavy-Duty Trucks (MHDT) and Heavy-Heavy-Duty Trucks (HHDT) accessing the site use year CARB 2010 or newer engines. The records should be maintained on-site and be made available for inspection by the County.

- Facility operators shall prohibit truck drivers from idling more than five (5) minutes and require operators to turn off engines when not in use, in compliance with CARB regulations.

- Facility operators shall establish specific truck routes between the facility and regular destinations, identifying the most direct routes to the nearest highway/freeway and avoid traveling through local residential communities.

The County of Riverside is currently in the process of approving this policy, however no definitive Policy adopted date has been identified.

County of Riverside Climate Action Plan Update, November 2019

The County of Riverside Climate Action Plan Update, November 2019 (CAP Update) establishes GHG emission reduction programs and regulations that correlate with and support evolving State GHG emissions reduction goals and strategies. The CAP Update includes reduction targets for year 2030 and year 2050. These reduction targets require the County to reduce emissions by at least 525,511 MT CO2e below the Adjusted Business As Usual (ABAU)[4] scenario by 2030 and at least 2,982,948 MT CO2e below the ABAU scenario by 2050 (CAP Update, p.7-1).

The CAP Update implements local GHG emissions reduction measures via its Screening Tables. The Screening Tables establish categories of GHG Implementation Measures. Under each Implementation Measure category, mitigation or project design features (collectively "features") are assigned point values that correspond to the minimum GHG emissions reduction that would result from each feature. The point values in the Screening Tables were derived from the projected emissions reductions that each of the Implementation Measures within the Riverside County CAP Update would achieve. Projects that yield at least 100 points are considered to be consistent with the GHG

[4] Adjusted Business As Usual (ABAU) Scenario reflects GHG emissions reductions achieved through anticipated future State actions (CAP Update, p. 2-1).

emissions reduction quantities anticipated in the County's GHG Technical Report, and support the GHG emissions reduction targets established under the CAP Update.

4.3.4 SOURCES OF PROJECT GHG EMISSIONS

4.3.4.1 Construction-Source GHG Emissions

Project construction activities would generate emissions of CO_2, CH_4 and N_20. Project construction-source emissions are quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the SCAQMD recommends calculating the total greenhouse gas emissions for the construction activities, dividing it by a 30-year project life, then adding that number to the annual operational GHG emissions. Accordingly, Project construction-source GHG emissions were amortized over a 30-year period and added to the annual operational-source GHG emissions of the Project.

4.3.4.2 Operational-Source GHG Emissions

Project operations would result in emissions of CO_2, CH_4, and N_2O from the primary sources listed below, and subsequently described.

- Area Sources;
- Building Energy Consumption (combustion emissions associated with natural gas and electricity);
- Mobile Sources;
- On-site Equipment (yard trucks) Operations;
- Water Supply, Treatment and Distribution; and
- Solid Waste Management.

Area Sources

Area sources would include landscape and site maintenance equipment. Landscape and site maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers.

Building Energy Consumption

CO_2 and other GHGs are emitted by building energy consumption. Natural gas or other fuels consumed at/within each Project building site would be direct sources of Project GHGs. GHGs are also emitted by off-site fuel consumption for production of electricity; these are considered to be indirect GHG emissions.

Mobile Sources

Project traffic (mobile sources) would also generate GHGs (CO_2, CH_4, and N_2O). Trip characteristics available from the Project Traffic Impact Analysis were utilized in estimating and modeling mobile source GHG emissions.

On-site Equipment Operations

Industrial warehouse buildings such as proposed by the Project require cargo handling equipment to move empty containers and empty chassis to and from the various pieces of cargo handling equipment that receive and distribute containers. The most common type of cargo handling equipment is the yard truck which is designed for moving cargo containers. Yard trucks and similar equipment are potential sources of GHGs.

Water Supply, Treatment and Distribution Emissions

Indirect GHG emissions result from the production of electricity used to convey, treat and distribute water and wastewater. The amount of electricity required to convey, treat and distribute water depends on the volume of water as well as the sources of the water.

Solid Waste Management

The Project land uses will result in the generation and disposal of solid waste. A large percentage of solid waste generated by the Project would be diverted and recycled consistent with requirements of AB 39. The remainder of the waste not diverted will be disposed of at a landfill. GHG emissions from landfills are associated with the anaerobic breakdown of material.

4.3.5 PROJECT GHG EMISSIONS IMPACTS

4.3.5.1 California Emissions Estimator Model™ Employed to Estimate GHG Emissions

The latest version of the California Emissions Estimator Model (CalEEMod) v2016.3.2 has been used to estimate Project construction-source and operational-source criteria pollutant (VOCs, NOx, SOx, CO, PM_{10}, and $PM_{2.5}$) and GHG emissions. CalEEMod calculates emissions from direct and indirect sources; and quantifies emissions reductions achieved from mitigation measures.

4.3.5.2 Impact Statements

Analysis of the Project's potential GHG emissions impacts is presented below. The Lead Agency has determined that each of the CEQA GHG emissions impacts thresholds considered herein establish a separate and independent basis upon which to substantiate the significance of the Project's potential GHG emissions impacts.

Potential Impact: *The Project could generate direct or indirect GHG emissions that would result in a significant impact on the environment*.

Impact Analysis: An individual project cannot generate GHG emissions sufficient to influence global climate change. A project participates in potential global climate change impacts through its incremental contribution, combined with the cumulative increase of all other sources of GHGs. Taken together, these effects may have a potentially significant impact on global climate change. Project GHG emissions from construction and operations are summarized at Table 4.3-3.

Table 4.3-3
Annual Project GHG Emissions

Emission Source	Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	Total CO_2E
Annual construction-related emissions amortized over 30 years	130.19	0.02	0.00	130.58
Area Sources	0.04	1.00e-04	0.00	0.04

Table 4.3-3
Annual Project GHG Emissions

Emission Source	Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	Total CO_2E
Building Energy Consumption	1,062.22	0.04	0.01	1,066.74
Mobile Sources (Passenger Cars)	1,735.70	0.04	0.00	1,736.76
Mobile Sources (Trucks)	6,328.73	0.07	0.00	6,300.56
On-site Equipment	305.04	0.10	0.00	307.51
Water Supply	144.27	8.53	0.00	357.42
Solid Waste Management	734.01	5.38	0.13	908.02
Total CO_2E (All Sources)	**10,837.63**			

Source: *Oleander Business Park Greenhouse Gas Analysis, County of Riverside* (Urban Crossroads, Inc.) August 21, 2020.
Note: Totals obtained from CalEEMod™ and may not total 100% due to rounding.
Table results include scientific notation; e is used to represent times ten raised to the power of (which would be written as x 10^{b}") and is followed by the value of the exponent.

As indicated at Table 4.3-3, the Project would generate approximately 10,837.63 $MTCO_2e$ per year. Of this total, approximately 2,800.31 $MTCO_2e$ per year (or approximately 25% of Project total GHG emissions by weight) would be generated by construction activities, area sources, building energy consumption, on-site equipment, water supply, and solid waste management. An additional, 8,037.32 $MTCO_2e$ per year (or approximately 75% of Project total GHG emissions by weight) would be generated by Project mobile sources.

Significance Determination

The CAP Update provides guidance addressing analysis of GHG emissions and CEQA significance determination of GHG emissions impacts. To address State requirements to reduce GHG emissions, the CAP Update establishes a County-wide GHG emissions reduction targets that would support and comply with near-term (2030) and long-term (2050) State GHG emissions targets. The CAP Update GHG emissions reduction target is consistent with the State GHG emissions targets and ensures that the County will be providing GHG reductions locally that will complement State efforts to reduce GHG emissions. Because the County's CAP Update addresses GHG emissions reductions and is consistent with the State and international efforts to reduce GHG emissions, compliance with the CAP Update fulfills the description of mitigation found in the *CEQA Guidelines*. The CAP Update establishes a 3,000 $MTCO_2e$/year screening-level threshold

for new development projects. New development projects that generate less than 3,000 $MTCO_2e$/year are considered to have a less-than-significant impact on the environment. Conversely, and for the purposes of this analysis, new development projects that generate more than 3,000 $MTCO_2e$/year are considered to have a potentially significant impact on the environment.

As indicated at Table 4.3-3, the Project would generate approximately 10,837.63 $MTCO_2e$ per year. The Project would therefore exceed the CAP Update screening threshold of 3,000 $MTCO_2e$ per year. Unmitigated Project GHG emissions could therefore result in a potentially significant impact on the environment.

Level of Significance: Potentially Significant.

Mitigation Measures:

4.3.1 The Project shall implement Screening Table Measures providing for a minimum 100 points per the County Screening Tables. The Project would be consistent with the CAP Update's requirement to achieve at least 100 points. The County shall verify incorporation of the identified Screening Table Measures within the Project building plans and site designs prior to the issuance of building permit(s) and/or site plans (as applicable). The County shall verify implementation of the identified Screening Table Measures prior to the issuance of Certificate(s) of Occupancy.

4.3.2 The Project shall comply with CAP Update Measure R2-CE1. CAP Update Measure R2-CE1 requires that the Project provide onsite renewable energy production generation comprising at least 20% of the Project energy demand. The County shall verify implementation of CAP Update Measure R2-CE1 within the Project building plans and site designs prior to the issuance of building permit(s) and/or site plans (as applicable). The County shall verify implementation of CAP Update Measure R2-CE1 prior to the issuance of Certificate(s) of Occupancy.

For informational purposes, a representative example of how the Project could achieve a minimum of 100 Screening Table Points through implementation of CAP Update Screening Table Measures pursuant to Mitigation Measure 4.3.1 is provided at Table 4.3-

4. Implementation of CAP Update Measure R2-CE1 pursuant to Mitigation Measure 4.3.2 is reflected in the Project GHG emissions modeling.

Table 4.3-4
Representative Implementation of CAP Update Screening Table Measures

Feature	Description	Points
EE10.A.1 Insulation	Enhanced Insulation (rigid wall insulation R-13, roof/attic R-38)	11
EE10.A.2 Windows	Greatly Enhanced Window Insulation (0.28 or less U-factor, 0.22 or less SHGC)	7
EE10-A.3 Cool Roofs	Modest Cool Roof (CRRC Rated 0.15 aged solar reflectance, 0.75 thermal emittance)	7
EE10.A.4 Air Infiltration	Blower Door HERS Verified Envelope Leakage of equivalent	6
EE10.B.1 Heating/Cooling Distribution System	Model Duct Insulation (R-6)	5
EE10.B.2 Space Heating/Cooling Equipment	Improved Efficiency HVAC (EER 14/78% AFUE or 8 HSPF)	4
EE10B.4 Water Heaters	High Efficiency Water Heater (0.72 Energy Factor)	10
EE10.B.5 Daylighting	All rooms daylighted	1
EE10.B.6 Artificial Lighting	High Efficiency Lights (50% of in-unit fixtures are high efficiency)	7
W2.E.2 Toilets	Water Efficient Toilets/Urinals (1.5 gpm)	6
	Waterless Urinals (note that commercial buildings having both waterless urinals and high efficiency toilets will have a combined point value of 6 points)	
W2.E.3 Faucets	Water Efficient faucets (1.28 gpm)	2
T4.B.1 Electric Vehicle Recharging	Install electric vehicle charging stations in garages/parking areas	40[5]
TOTAL		***106***

Source: *Oleander Business Park Greenhouse Gas Analysis, County of Riverside* (Urban Crossroads, Inc.) August 21, 2020.

Level of Significance After Mitigation: ***Significant and Unavoidable.*** The implemented Screening Table Measures and compliance with CAP Update Measure R2-CE1 would

[5] The Project is anticipated to include 5 electric vehicle charging stations. Per the Screening Tables, each station is 8 points.

achieve a minimum of 100 Screening Table Points, and would thereby ensure that the Project would achieve GHG emissions levels and GHG emissions reductions targets consistent with those identified in the County CAP Update. Notwithstanding, implementation of the CAP Screening Table Measures per Mitigation Measures 4.3.1, 4.3.2 does not ensure that quantified Project GHG emissions would not exceed the CAP Update screening level threshold of 3,000 MTCO2e.

The Project cannot feasibly achieve no net increase in GHG emissions, nor can the applicable CAP Update screening-level threshold (3,000 MTCO2e/year) be achieved. In this regard, the majority (approximately 75%) of the Project GHG emissions would be generated by Project vehicular sources. Responsibility and authority for regulation of vehicular-source emissions resides with the State of California (CARB, et al.). Neither the Applicant nor the Lead Agency can effect or mandate substantial reductions in vehicular-source GHG emissions, much less reductions that would achieve no net increase condition or achieve the CAP Update screening-level 3,000 MTCO2e/year threshold. In effect, all Project traffic would need to be eliminated or be "zero GHG emissions sources" in order to achieve the CAP Update threshold. There are no feasible means to or alternatives to eliminate all Project traffic, or to ensure that Project traffic would be zero GHG emissions sources. In terms of its practical application, this would constitute a "no build" condition.

On this basis, even with implementation of Mitigation Measures 4.3.1, 4.3.2, the Project could generate direct or indirect GHG emissions that would result in a significant impact on the environment. ***This is a significant and unavoidable impact.***

Potential Impact: *The Project could conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.*

Impact Analysis: GHG emissions reduction plans, policies and regulations applicable to the Project include: AB 32, SB 32, (including related 2008/2017 ARB Scoping Plan Elements), and the CAP Update. Project consistency with AB 32, SB 32, (including related

2008/2017 ARB Scoping Plan Elements), and the CAP Update is evaluated in the following discussions.

2008 Scoping Plan Consistency

The CARB Scoping Plan identifies strategies to reduce California's greenhouse gas emissions in support of AB 32. Many of the strategies identified in the Scoping Plan are not applicable at the project level, such as long-term technological improvements to reduce emissions from vehicles. Certain measures are applicable to and supported by the Project, such as energy conservation and energy efficiency measures. Other measures, while not directly applicable, would not be obstructed by impeded by Project implementation. Table 4.3-5 summarizes the Project's consistency with the State Scoping Plan measures. As indicated, the Project would not conflict with any of the provisions of the Scoping Plan and supports the Scoping Plan through energy efficiency, water conservation, recycling, and landscaping.

Table 4.3-5
2008 Scoping Plan Consistency

Action Category	Supporting Measures	Remarks
Cap-and-Trade Program	--	**Consistent.** These programs involve capping emissions from electricity generation and similar operations. The Project would not interfere with or obstruct cap-and-trade program measures or initiatives.
Light-Duty Vehicle Standards	T-1	**Consistent.** This is a statewide measure and is not within the purview of the Project. Vehicles accessing the Project would be required to comply with these standards as implemented. Electric Vehicle (EV) charging stations would be installed on site per 2019 Title 24 standards.
Energy Efficiency	E-1	**Consistent.** The Project would achieve building, water, and solid waste management efficiencies consistent with the incumbent CALGreen requirements.
	E-2	
	CR-1	
	CR-2	
Renewables Portfolio Standard (RPS)	E-3	**Consistent.** Establishes the minimum statewide renewable energy mix. The Project would not interfere with or obstruct RPS program measures or initiatives.
Low Carbon Fuel Standard	T-2	**Consistent.** Establishes reduced carbon intensity (CI) of transportation fuels. The Project would not interfere with or obstruct transportation fuel CI program measures or initiatives.

Table 4.3-5
2008 Scoping Plan Consistency

Action Category	Supporting Measures	Remarks
Regional Transportation-Related GHG Targets	T-3	**Consistent**. This is a statewide measure and is not within the purview of the Project. The Project would not interfere with or obstruct transportation-related GHG target measures or initiatives.
Vehicle Efficiency Measures	T-4	**Consistent.** This is a statewide measure and is not within the purview of the Project. Vehicles accessing the Project would be required to comply with these measures as implemented. he Project would not interfere with or obstruct vehicle efficiency measures or initiatives.
Goods Movement	T-5	**Consistent.** This is a statewide measure and is not within the purview of the Project. Goods movement associated with the Project would be required to comply with these measures as implemented. The Project would not interfere with or obstruct goods movement measures or initiatives.
	T-6	
Million Solar Roofs (MSR) Program	E-4	**Consistent.** The MSR program sets a goal for use of solar systems throughout the state as a whole. The building designs incorporate PV solar panels.
Medium- & Heavy-Duty Vehicles	T-7	**Consistent.** This is a statewide measure and is not within the purview of the Project. Medium- & heavy-duty vehicles accessing the Project would be required to comply with these measures as implemented. The Project would not interfere with or obstruct medium- & heavy-duty vehicle measures or initiatives.
	T-8	
Industrial Emissions	I-1	**Consistent.** These measures are applicable to large industrial facilities (> 500,000 $MTCO_2e$/yr) and other intensive uses such as refineries. The Project would not interfere with or obstruct industrial emissions measures or initiatives.
	I-2	
	I-3	
	I-4	
	I-5	
High Speed Rail	T-9	**Consistent.** Supports increased mobility choice via provision of high speed rail. The Project would not interfere with or obstruct high speed rail measures or initiatives.
Green Building Strategy	GB-1	**Consistent.** The Project would implement building, water, and solid waste management efficiencies consistent with incumbent CALGreen requirements.
High Global Warming Potential (GWP) Gases	H-1	**Consistent.** The Project is not a substantial source of high GWP emissions. The Project would not interfere with or obstruct high GWP emissions measures or initiatives.
	H-2	
	H-3	
	H-4	
	H-5	

Table 4.3-5
2008 Scoping Plan Consistency

Action Category	Supporting Measures	Remarks
	H-6	
	H-7	
Recycling and Waste	RW-1	**Consistent.** The Project would comply with mandated State and County recycling and waste management measures.
	RW-2	
	RW-3	
Sustainable Forests	F-1	**Consistent.** The Project would promote carbon sequestration through provision of per the Project on-site landscaping.
Water	W-1	**Consistent.** The Project would provide low-flow fixtures and water-efficient landscaping per County and State requirements.
	W-2	
	W-3	
	W-4	
	W-5	
	W-6	
Agriculture	A-1	**Consistent.** The Project is not an agricultural use. The Project would not interfere with or obstruct Scoping Plan agricultural measures or initiatives.

Source: *Oleander Business Park Greenhouse Gas Analysis, County of Riverside* (Urban Crossroads, Inc.) August 21, 2020.

SB 32/2017 Scoping Plan Consistency

The 2017 Scoping Plan Update reflects the 2030 target of a 40% reduction below 1990 levels, set by Executive Order B-30-15 and codified by SB 32. As summarized, at Table 4.3-6, the Project would support and would not conflict with SB 32/2017 Scoping Plan provisions.

Table 4.3-6
2017 Scoping Plan Consistency

Action	Responsibility	Remarks
Implement SB 350 by 2030		
Increase the Renewables Portfolio Standard to 50% of retail sales by 2030 and ensure grid reliability.	CPUC, CEC, CARB	**Consistent.** The Project would use energy from Southern California Edison (SCE). SCE has committed to diversify its portfolio of energy sources by increasing energy from wind and solar sources. The Project would not interfere with or obstruct SCE energy source diversification efforts.

Table 4.3-6
2017 Scoping Plan Consistency

Action	Responsibility	Remarks
Establish annual targets for statewide energy efficiency savings and demand reduction that will achieve a cumulative doubling of statewide energy efficiency savings in electricity and natural gas end uses by 2030.		**Consistent.** The Project would be designed and constructed to implement the energy efficiency measures for new commercial developments and would include several measures designed to reduce energy consumption. The Project would not interfere with or obstruct policies or strategies to establish annual targets for statewide energy efficiency savings and demand reduction.
Reduce GHG emissions in the electricity sector through the implementation of the above measures and other actions as modeled in Integrated Resource Planning (IRP) to meet GHG emissions reductions planning targets in the IRP process. Load-serving entities and publicly- owned utilities meet GHG emissions reductions planning targets through a combination of measures as described in IRPs.		**Consistent.** The Project would be designed and constructed to implement energy efficiency measures acting to reduce electricity consumption. The Project includes energy efficient lighting and fixtures that meet the current Title 24 Standards. Further, the Project proposes contemporary industrial facilities that would incorporate energy efficient boilers, heaters, and air conditioning systems.
Implement Mobile Source Strategy (Cleaner Technology and Fuels)		
At least 1.5 million zero emission and plug-in hybrid light-duty electric vehicles by 2025.	CARB, California State Transportation Agency (CalSTA), Strategic Growth Council (SGC), California Department of Transportation (Caltrans), CEC, OPR, Local Agencies	**Consistent.** This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty electric vehicle 2025 targets.
At least 4.2 million zero emission and plug-in hybrid light-duty electric vehicles by 2030.		**Consistent.** This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB zero emission and plug-in hybrid light-duty electric vehicle 2030 targets.
Further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations.		**Consistent.** This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to further increase GHG stringency on all light-duty vehicles beyond existing Advanced Clean cars regulations.
Medium- and Heavy-Duty GHG Phase 2.		**Consistent.** This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to implement

Table 4.3-6
2017 Scoping Plan Consistency

Action	Responsibility	Remarks
		Medium- and Heavy-Duty GHG Phase 2 standards.
Innovative Clean Transit: Transition to a suite of to-be-determined innovative clean transit options. Assumed 20% of new urban buses purchased beginning in 2018 will be zero emission buses with the penetration of zero-emission technology ramped up to 100% of new sales in 2030. Also, new natural gas buses, starting in 2018, and diesel buses, starting in 2020, meet the optional heavy-duty low-NO_x standard.		**Consistent.** This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to improve transit-source emissions.
Last Mile Delivery: New regulation that would result in the use of low NO_x or cleaner engines and the deployment of increasing numbers of zero-emission trucks primarily for class 3-7 last mile delivery trucks in California. This measure assumes ZEVs comprise 2.5% of new Class 3–7 truck sales in local fleets starting in 2020, increasing to 10% in 2025 and remaining flat through 2030.		**Consistent**. This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to improve last mile delivery emissions.
Further reduce VMT through continued implementation of SB 375 and regional Sustainable Communities Strategies; forthcoming statewide implementation of SB 743; and potential additional VMT reduction strategies not specified in the Mobile Source Strategy but included in the document "Potential VMT Reduction Strategies for Discussion."		**Consistent.** The Project implements Transportation Demand Measures (TDMs) that would act to reduce VMT. Please refer to the Project VMT Assessment and EIR Section 4.2, *Transportation.*
Increase stringency of SB 375 Sustainable Communities Strategy (2035 targets).	CARB	**Consistent.** This is a CARB Mobile Source Strategy. The Project would not obstruct or interfere with CARB efforts to increase stringency of SB 375 Sustainable Communities Strategy (2035 targets).

Table 4.3-6
2017 Scoping Plan Consistency

Action	Responsibility	Remarks
By 2019, adjust performance measures used to select and design transportation facilities		
Harmonize project performance with emissions reductions and increase competitiveness of transit and active transportation modes (e.g., via guideline documents, funding programs, project selection, etc.).	CalSTA, SGC, OPR, CARB, Governor's Office of Business and Economic Development (GO-Biz), California Infrastructure and Economic Development Bank (IBank), Department of Finance (DOF), California Transportation Commission (CTC), Caltrans	**Consistent.** The Project would not obstruct or interfere with agency efforts to harmonize transportation facility project performance with emissions reductions and increase competitiveness of transit and active transportation modes.
By 2019, develop pricing policies to support low-GHG transportation (e.g. low-emission vehicle zones for heavy duty, road user, parking pricing, transit discounts).	CalSTA, Caltrans, CTC, OPR, SGC, CARB	**Consistent.** The Project would not obstruct or interfere with agency efforts to develop pricing policies to support low-GHG transportation.
Implement California Sustainable Freight Action Plan		
Improve freight system efficiency.	CalSTA, CalEPA, CNRA, CARB, Caltrans, CEC, GO-Biz	**Consistent.** This measure would apply to all trucks accessing the Project site, this may include existing trucks or new trucks that are part of the statewide goods movement sector. The Project would not obstruct or interfere with agency efforts to Improve freight system efficiency.
Deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission freight vehicles and equipment		**Consistent.** The Project would not obstruct or interfere with agency efforts to deploy over 100,000 freight vehicles and equipment capable of zero emission operation and maximize both zero and near-zero emission

Table 4.3-6
2017 Scoping Plan Consistency

Action	Responsibility	Remarks
powered by renewable energy by 2030.		freight vehicles and equipment powered by renewable energy by 2030.
Adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18 percent.	CARB	**Consistent.** When adopted, this measure would apply to all fuel purchased and used by the Project in the state. The Project would not obstruct or interfere with agency efforts to adopt a Low Carbon Fuel Standard with a Carbon Intensity reduction of 18 percent.
Implement the Short-Lived Climate Pollutant Strategy (SLPS) by 2030		
40% reduction in methane and hydrofluorocarbon emissions below 2013 levels.	CARB, CalRecycle, CDFA, SWRCB, Local Air Districts	**Consistent.** The Project would be required to comply with this measure and reduce any Project-source SLPS emissions accordingly. The Project would not obstruct or interfere agency efforts to reduce SLPS emissions.
50% reduction in black carbon emissions below 2013 levels.		
By 2019, develop regulations and programs to support organic waste landfill reduction goals in the SLPS and SB 1383.	CARB, CalRecycle, CDFA SWRCB, Local Air Districts	**Consistent.** The Project would implement waste reduction and recycling measures consistent with State and County requirements. The Project would not obstruct or interfere agency efforts to support organic waste landfill reduction goals in the SLPS and SB 1383.
Implement the post-2020 Cap-and-Trade Program with declining annual caps.	CARB	**Consistent.** The Project would be required to comply with any applicable Cap-and-Trade Program provisions. The Project would not obstruct or interfere agency efforts to implement the post-2020 Cap-and-Trade Program.
By 2018, develop Integrated Natural and Working Lands Implementation Plan to secure California's land base as a net carbon sink		
Protect land from conversion through conservation easements and other incentives.	CNRA, Departments Within CDFA, CalEPA, CARB	**Consistent.** The Project site is designated for industrial uses. The Project does not propose land conversion. The Project would not obstruct or interfere agency efforts to protect land from conversion through conservation easements and other incentives.
Increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity.		**Consistent.** The Project site is vacant disturbed property and does not comprise an area that would effectively provide for carbon sequestration. The Project would not obstruct or interfere agency efforts to increase the long-term resilience of carbon storage in the land base and enhance sequestration capacity.

Table 4.3-6
2017 Scoping Plan Consistency

Action	Responsibility	Remarks
Utilize wood and agricultural products to increase the amount of carbon stored in the natural and built environments.		**Consistent.** Where appropriate, Project designs will incorporate wood or wood products. The Project would not obstruct or interfere agency efforts to encourage use of wood and agricultural products to increase the amount of carbon stored in the natural and built environments.
Establish scenario projections to serve as the foundation for the Implementation Plan.		**Consistent.** The Project would not obstruct or interfere agency efforts to establish scenario projections to serve as the foundation for the Implementation Plan.
Establish a carbon accounting framework for natural and working lands as described in SB 859 by 2018.	CARB	**Consistent.** The Project would not obstruct or interfere agency efforts to establish a carbon accounting framework for natural and working lands as described in SB 859 by 2018.
Implement Forest Carbon Plan	CNRA, California Department of Forestry and Fire Protection (CAL FIRE), CalEPA and Departments	**Consistent.** The Project would not obstruct or interfere agency efforts to implement the Forest Carbon Plan.
Identify and expand funding and financing mechanisms to support GHG reductions across all sectors.	State Agencies & Local Agencies	**Consistent.** The Project would not obstruct or interfere agency efforts to identify and expand funding and financing mechanisms to support GHG reductions across all sectors.

Source: *Oleander Business Park Greenhouse Gas Analysis, County of Riverside* (Urban Crossroads, Inc.) August 21, 2020.

County of Riverside Climate Action Plan Update Consistency

The CAP Update establishes Screening Tables to aid in measuring the reduction of GHG emissions from development projects, and provide a basis for determining project consistency with the CAP Update. Projects that yield at least 100 points are determined to be consistent with the reduction quantities anticipated in the County's GHG Technical Report, and consequently would be consistent with the CAP Update. Absent implementation of Screening Table Measures yielding 100 points, the Project could be considered inconsistent with the County CAP Update. This is a potentially significant impact.

Level of Significance: Potentially Significant.

Mitigation Measures: Please refer to Mitigation Measures 4.3.1, 4.3.2.

Level of Significance After Mitigation: *Less-Than-Significant.* Projects that yield at least 100 points through application of the Screening Table Measures, and that comply with applicable provisions of CAP Update Measure R2-CE1 are determined to be consistent with the reduction quantities anticipated in the County's GHG Technical Report, and consequently would be consistent with the CAP Update. Pursuant to EIR Mitigation Measure 4.3.1, the Project would implement Screening Table Measures that would provide a minimum of 100 Screening Table Points. Pursuant to EIR Mitigation Measure 4.3.2, the Project would be required to comply with CAP Update Measure R2-CE1. With incorporation of Mitigation Measures 4.3.1 and 4.3.2, the Project would be consistent with the CAP Update.

The County's CAP Update currently evaluates and quantifies reductions out to Year 2030. The CAP Update states that . . . "[t]hrough 2050, Riverside County would continue implementation of the Screening Tables. During this time, the reduction measures implemented through the Screening Tables would continue to reduce GHG emissions from new development. Additionally, it is assumed that the State measures would keep being updated and reinforced to further reduce emissions. With these assumptions, Riverside County's emissions would decrease to a level below the reduction target by 2050" (2019 CAP Update, p. 6-2). In this manner, the County CAP Update and Project compliance with the County CAP Update provide for ongoing compliance with applicable plans, policies and regulations adopted for the purpose of reducing the emissions of greenhouse gases.

Based on the preceding, with incorporation of mitigation, the potential for the Project to conflict with applicable plans, policies and regulations adopted for the purpose of reducing the emissions of greenhouse gases would be less-than-significant.

4.4 NOISE

4.4 NOISE

Abstract

This Section assesses whether the Project would substantially increase ambient noise levels; or expose land uses to noise, groundborne noise, or groundborne vibration levels exceeding established standards. In this regard, potential impacts considered within this Section include:

- *A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;*
- *A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;*
- *Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or*
- *Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels.*

As presented in the following analyses, all potential noise impacts of the Project are determined to be less-than-significant.

4.4.1 INTRODUCTION

This Section presents the noise setting, methodology, standards of significance, and potential noise impacts associated with the Project. Where impacts are determined to be potentially significant, mitigation measures are proposed to avoid or reduce the severity of impacts. The information presented herein has been summarized from the *Oleander Business Park Noise Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) August 17, 2020 (Project Noise Impact Analysis). The Project Noise Impact Analysis in its entirety is presented at EIR Appendix E.

4.4.2 SETTING

Following are discussions of noise fundamentals applicable to the Project together with assessments of existing ambient noise levels and noise sources in the Project vicinity.

4.4.2.1 Fundamentals of Noise

Noise levels are measured on a logarithmic scale in decibels which are then weighted and added over a 24-hour period to reflect not only the magnitude of the sound, but also its duration, frequency, and time of occurrence. In this manner, various acoustical scales and units of measurement have been developed, including: equivalent sound levels (Leq), day-night average sound levels (Ldn) and community noise equivalent levels (CNEL).

"A-weighted" decibels (dBA) approximate the subjective response of the human ear to a broad frequency noise source by discriminating against the very low and very high frequencies of the audible spectrum. They are adjusted to reflect only those frequencies which are audible to the human ear. The decibel scale has a value of 0.0 dBA at the threshold of hearing and 120 dBA at the threshold of pain. Each interval of 10 decibels indicates a sound energy ten times greater than before, which is perceived by the human ear as being roughly twice as loud. Thus, a 1.0 decibel increase is just audible, whereas a 10-decibel increase means the sound is perceived as being twice as loud as before.

Examples of the decibel level of various noise sources are provided in the following Figure 4.4-1.

TYPICAL NOISE LEVELS AND THEIR SUBJECTIVE LOUDNESS AND EFFECTS

COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE
THRESHOLD OF PAIN		140	INTOLERABLE OR DEAFENING	HEARING LOSS
NEAR JET ENGINE		130		
		120		
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110		
LOUD AUTO HORN		100	VERY NOISY	
GAS LAWN MOWER AT 1m (3 ft)		90		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80		SPEECH INTERFERENCE
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70	LOUD	
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60		
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50	MODERATE	
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		SLEEP DISTURBANCE
QUIET SUBURBAN NIGHTTIME	LIBRARY	30	FAINT	NO EFFECT
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20		
	BROADCAST/RECORDING STUDIO	10	VERY FAINT	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0		

SOURCE: NOISE TECHNICAL SUPPLEMENT BY CALTRANS

Source: Urban Crossroads, Inc.

appliedplanning inc

Figure 4.4-1
Typical Noise Levels

Noise Rating Schemes

Equivalent sound levels are not measured directly, but rather are calculated from sound pressure levels typically measured in dBA. The equivalent sound level (Leq) is the constant level that, over a given time period, transmits the same amount of acoustic energy as the actual time-varying sound. Equivalent sound levels are the basis for both the Ldn and CNEL scales.

Day-night average sound levels (Ldn) are a measure of the cumulative noise exposure of the community. The Ldn value results from a summation of hourly Leqs over a 24-hour time period with an increased weighting factor applied to the nighttime period between 10:00 p.m. and 7:00 a.m. This noise rating scheme takes into account those subjectively more annoying noise events which occur during normal sleep hours.

Community noise equivalent levels (CNEL) also carry a weighting penalty for noise that occurs during nighttime hours. In addition, CNEL levels include a penalty for noise events that occur during the evening hours between 10:00 p.m. and 7:00 a.m. Because of the weighting factors applied, CNEL values at a given location will always be larger than Ldn values, which in turn will exceed Leq values. However, CNEL values are typically within one decibel of the Ldn value.

Sound Propagation

For a "line source" of noise such as a heavily traveled roadway, the noise level drops off by a nominal value of 3.0 decibels for each doubling of distance between the noise source and the noise receiver. The nominal value of 3.0 dBA with doubling applies to sound propagation from a line source: (1) over the top of a barrier greater than 3 meters in height; or (2) where there is a clear unobstructed view of the highway, the ground is hard, no intervening structures exist and the line-of-sight between the noise source and receiver averages more than three meters above the ground.

Notwithstanding, environmental factors such as wind conditions, temperature gradients, characteristics of the ground (hard or soft) and the air (relative humidity), and the presence of vegetation combine to typically increase the attenuation achieved outside

laboratory conditions to approximately 4.4 decibels per doubling of distance. The increase in noise attenuation in exterior environments is particularly true: (1) for freeways with an elevated or depressed profile or exhibiting expanses of intervening buildings or topography; (2) where the view of a roadway is interrupted by isolated buildings, clumps of bushes, scattered trees; (3) when the intervening ground is soft or covered with vegetation; or (4) where the source or receiver is located more than three meters above the ground.

In an area which is relatively flat and free of barriers, the sound level resulting from a single "point source" of noise drops by six decibels for each doubling of distance or 20 decibels for each factor of ten in distance. This applies to fixed noise sources and mobile noise sources which are temporarily stationary, such as an idling truck or other heavy-duty equipment operating within a confined area (such as industrial processes or construction).

Noise Barrier Attenuation

Effective noise barriers can reduce noise levels by up to 10 to 15 dBA. Noise barriers are most effective when placed close to the noise source or receiver. Noise barriers, however, do have limitations. For a noise barrier to work, it must be high enough and long enough to block the view of the noise source.

Vibration

Per the Federal Transit Administration (FTA) *Transit Noise Impact and Vibration Assessment*, vibration is the periodic oscillation of a medium or object. Sources of ground-borne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or human-made causes (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, such as factory machinery, or transient, such as explosions. As is the case with airborne sound, ground-borne vibrations may be described by amplitude and frequency.

There are several different methods that are used to quantify vibration. 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 but is not always suitable for evaluating human response (annoyance) because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude often described as the root mean square (RMS). The RMS amplitude is defined as the average of the squared amplitude of the signal and is most frequently used to describe the effect of vibration on the human body. Decibel notation (VdB) is commonly used to measure RMS. Decibel notation (VdB) serves to reduce the range of numbers used to describe human response to vibration. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receivers for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration-sensitive equipment and/or activities.

The background vibration-velocity level in residential areas is generally 50 VdB. Ground-borne vibration is normally perceptible to humans at approximately 65 VdB. For most people, a vibration-velocity level of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels. Typical outdoor sources of perceptible ground-borne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration is rarely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration-velocity level, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

Blasting

The intensity of the noise and vibration impacts associated with rock blasting depends on location, size, material, shape of the rock, and the methods used to crack it. While a blasting contractor can design the blasts to stay below a given vibration level that could cause damage to nearby structures, it is difficult to design blasts that produce noise levels which are not perceptible to receivers near the blast site. The noise produced by blasting activities is referred to as air overpressure, or an "airblast," which is generated when explosive energy in the form of gases escape from the detonating blast holes. Much like a point source, airblasts radiate outward in a spherical pattern and attenuate with each

doubling of distance from the blast location, depending on the design of the blast and amount of containment.

Blasting activities generally include: the pre-drilling of holes in the hard rock area; preparation and placement of the charges in the drilled holes; a pre-blast horn signal; additional pre-blast horn signals immediately prior to the blast; and the blast itself. An additional horn signal is sounded to indicate the "all clear" after the blast and the blasting contractor has inspected the blasting area. The noise from the blast itself starts with a cracking sound from the detonator, located at a distance from the charges, and ends with the low crackling sound from each charge as they are subsequently set off. Blasts typically occur for only a few seconds, depending on their design. It is important to note that no other equipment will be operating during each blast in the blast area but will commence operation once the blasting contractor indicates it is safe to do so.

4.4.2.2 Factors Affecting Motor Vehicle Noise

According to the Highway Traffic Noise Analysis and Abatement Policy and Guidance, provided by the Federal Highway Administration (FHWA), the level of traffic noise depends on three primary factors: (1) the volume of the traffic, (2) the speed of the traffic, and (3) the vehicle mix within the flow of traffic. Generally, the loudness of traffic noise is increased by heavier traffic volumes, higher speeds, and a greater number of trucks. A doubling of the traffic volume, assuming that the speed and vehicle mix do not change, results in a noise level increase of 3 dBA. The vehicle mix on a given roadway may also have an effect on community noise levels. As the number of medium and heavy trucks increases and becomes a larger percentage of the vehicle mix, adjacent noise levels will increase. Vehicle noise is a combination of the noise produced by the engine, exhaust, and tires on the roadway.

To account for the ground-effect attenuation (absorption), two types of site conditions are commonly used in traffic noise models, soft site and hard site conditions. Soft site conditions account for the sound propagation loss over natural surfaces such as normal earth and ground vegetation. A drop-off rate of 4.4 dBA per doubling of distance is typically observed over soft ground with landscaping, as compared with a 3.0 dBA drop-

off rate over hard ground such as asphalt, concrete, stone and very hard packed earth. The Project Noise Impact Analysis indicates that, generally, soft site conditions better reflect predicted noise levels within the Study Area. Related, California Department of Transportation (Caltrans) research has shown that the use of soft site conditions is more appropriate for the application of the FHWA traffic noise prediction model used in this analysis.

4.4.2.3 Community Responses to Noise

Approximately ten (10) percent of the population has a very low tolerance for noise and will object to any noise not of their making. Consequently, even in the quietest environment, some complaints will occur. Another 25 percent of the population will not complain even in very severe noise environments. Thus, a variety of reactions can be expected from people exposed to any given noise environment.

Despite this variability in behavior on an individual level, the population as a whole can be expected to exhibit the following responses to changes in noise levels. An increase or decrease of 1.0 dBA cannot be perceived except in carefully controlled laboratory experiments. A 3.0 dBA increase may be perceptible outside of the laboratory. An increase of 5.0 dBA is often necessary before any noticeable change in community response (i.e., complaints) would be expected.

Community responses to noise may range from registering a complaint by telephone or letter, to initiating court action, depending upon each individual's susceptibility to noise and personal attitudes about noise. Several factors are related to the level of community annoyance including:

- Fear associated with noise-producing activities;
- Noise receiver's perception that they are being unfairly treated;
- Attitudes regarding the usefulness of the noise-producing activity;
- Receiver's belief that the noise source can be controlled.

Recent studies have shown that changes in long-term noise levels are noticeable and are responded to by people. For example, about ten (10) percent of the people exposed to traffic noise of 60 Ldn will report being highly annoyed with the noise, and each increase of one (1) Ldn is associated with approximately two (2) percent more people being highly annoyed. When traffic noise exceeds 60 Ldn or aircraft noise exceeds 55 Ldn, people begin complaining. Group or legal actions to stop the noise should be expected to begin at traffic noise levels near 70 Ldn and aircraft noise levels near 65 Ldn.

4.4.2.4 Land Use Compatibility With Noise

Some land uses are less tolerant of noise than others. For example, schools, hospitals, churches and residences are more sensitive to noise intrusion than are commercial or industrial activities. As ambient noise levels affect the perceived amenity or liveability of a development, so too can the mismanagement of noise impacts impair the economic health and growth potential of a community by reducing the area's desirability as a place to live, shop and work. For this reason, land use compatibility with the noise environment is an important consideration in the planning and design process.

4.4.2.5 Sensitive Receivers

Land uses classified as noise-sensitive by the State of California include: schools, hospitals, rest homes, long-term care centers, and mental care facilities. Some jurisdictions also consider day care centers, single-family dwellings, mobile home parks, churches, libraries, and recreation areas to be noise-sensitive. Moderately noise-sensitive land uses typically include: multi-family dwellings, hotels, motels, dormitories, out-patient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs.

Land uses which are considered relatively insensitive to noise include business, commercial, and professional developments. Land uses that are typically not affected by noise include: industrial, manufacturing, utilities, agriculture, natural open space, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

4.4.2.6 Current Noise Exposure

To assess existing noise levels in the Project vicinity, six long-term 24-hour measurements were taken at locations throughout the Study Area. These locations are presented at Figure 4.4-2 and are representative of sites that may be affected by Project-generated noise. Measurements were taken at the nearest noise sensitive uses, to assess the existing ambient hourly noise levels surrounding the Project site. Noise measurement locations included the following:

- Location L1 represents the noise levels on Nandina Avenue, west of the Project site, near existing residential homes.
- Location L2 represents the noise levels on Kuder Avenue, west of the Project site, near existing rural-residential homes.
- Location L3 represents the noise levels on Oleander Avenue, southwest of the Project site, near existing rural-residential homes.
- Location L4 represents the noise levels on Nance Street, southwest of the Project site, near existing rural-residential homes.
- Location L5 represents the noise levels west of Decker Road, south of the Project site, near an existing Water Tank Reservoir.
- Location L6 represents the noise levels on Decker Road, south of the Project site, near existing rural-residential homes.

Source: Urban Crossroads, Inc.

Figure 4.4-2
Noise Measurement Locations

The results of the ambient noise level measurements are presented at Table 4.4-1.

Table 4.4-1
Ambient Noise Level Measurements

Location	Energy Average Noise Level (dBA Leq)		CNEL
	Daytime	Nighttime	
L1	54.5	46.3	55.6
L2	55.4	47.2	56.3
L3	59.8	59.2	65.9
L4	56.2	53.9	60.9
L5	55.7	49.4	57.8
L6	56.3	50.8	59.1

Source: *Oleander Business Park Noise Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) August 17, 2020.

The background ambient noise levels in the Project study area are dominated by transportation-related noise associated with I-215 and March Air Reserve Base, in addition to background industrial land use activities.

4.4.3 EXISTING POLICIES AND REGULATIONS

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise. In most areas, automobile and truck traffic is the major source of environmental noise. Traffic activity generally produces an average sound level that remains fairly constant with time. Air and rail traffic, and commercial and industrial activities are also major sources of noise in some areas. Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies.

4.4.3.1 State of California

Noise Requirements

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards and provides noise/land use compatibility guidance. State law requires that each county and city adopt a General Plan that includes a Noise Element which is to be prepared according to guidelines adopted by the Governor's Office of Planning and Research. The purpose of the Noise Element is to "limit the exposure of the community to excessive noise levels." In addition, the California Environmental Quality Act (CEQA) requires that all known environmental effects of a project be analyzed, including environmental noise impacts.

California Building Code

The State of California's noise insulation standards are codified in the California Code of Regulations, Title 24, Building Standards Administrative Code, Part 2, and the California Building Code. These noise standards are applied to new construction in California for the purpose of controlling interior noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when noise-sensitive structures, such as residential buildings, schools, or hospitals, are located near major transportation noise sources, and where such noise sources create an exterior noise level of 60 dBA CNEL or more. Acoustical studies that accompany building plans must demonstrate that the structure has been designed to limit interior noise in habitable rooms to acceptable noise levels. For new residential buildings, schools, and hospitals, the acceptable interior noise limit for new construction is 45 dBA CNEL.

County of Riverside General Plan Noise Element

The County of Riverside General Plan Noise Element (Noise Element) establishes policies and requirements that act to control and abate environmental noise, and thereby protect the citizens of County of Riverside from excessive exposure to noise. The Noise Element specifies the maximum allowable exterior noise levels for new developments impacted by transportation noise sources such as arterial roads, freeways, airports and railroads. In addition, the Noise Element identifies several polices to minimize the impacts of

excessive noise levels throughout the community, and establishes noise level requirements for all land uses. To protect County of Riverside residents from excessive noise, the Noise Element contains the following policies related to the Project:

N 1.1 Protect noise-sensitive land uses from high levels of noise by restricting noise-producing land uses from these areas. If the noise-producing land use cannot be relocated, then noise buffers such as setbacks, landscaping, or block walls shall be used.

N 1.3 Consider the following uses noise-sensitive and discourage these uses in areas in excess of 65 CNEL:

- Schools
- Hospitals
- Rest Homes
- Long Term Care Facilities
- Mental Care Facilities
- Residential Uses
- Libraries
- Passive Recreation Uses
- Places of Worship

N 1.5 Prevent and mitigate the adverse impacts of excessive noise exposure on the residents, employees, visitors, and noise-sensitive uses of Riverside County.

N 4.1 Prohibit facility-related noise, received by any sensitive use, from exceeding the following worst-case noise levels:

- 45 dBA 10-minute Leq between 10:00 p.m. and 7:00 a.m.;
- 65 dBA 10-minute Leq between 7:00 a.m. and 10:00 p.m.

N 13.1 Minimize the impacts of construction noise on adjacent uses within acceptable standards.

N 13.2 Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse impacts on surrounding areas.

N 13.3 Condition subdivision approval adjacent to developed/occupied noise-sensitive land uses (see policy N 1.3) by requiring the developer to submit a construction-related noise mitigation plan to the [County] for review and approval prior to issuance of a grading permit. The plan must depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of this project, through the use of such methods as:

- Temporary noise attenuation fences;
- Preferential location and equipment; and
- Use of current noise suppression technology and equipment.

N 16.3 Prohibit exposure of residential dwellings to perceptible ground vibration from passing trains as perceived at the ground or second floor. Perceptible motion shall be presumed to be a motion velocity of 0.01 inches/second over a range of 1 to 100 Hz.

To ensure noise-sensitive land uses are protected from high levels of noise (N 1.1), Table N-1 of the Noise Element identifies guidelines to evaluate proposed developments based on exterior and interior noise level limits for land uses and requires a noise analysis to determine needed mitigation measures, if necessary. The Noise Element identifies residential use as a noise-sensitive land use (N 1.3) and discourages new development in areas with 65 CNEL or greater existing ambient noise levels. To prevent and mitigate noise impacts for its residents (N 1.5), County of Riverside requires noise attenuation measures for sensitive land use exposed to noise levels higher than 65 CNEL. Policy N 4.1 of the Noise Element sets a stationary-source exterior noise limit not to be exceeded

for a cumulative period of more than ten minutes in any hour of 65 dBA Leq for daytime hours of 7:00 a.m. to 10:00 p.m., and 45 dBA Leq during the noise-sensitive nighttime hours of 10:00 p.m. to 7:00 a.m.[1] To prevent high levels of construction noise from impacting noise-sensitive land uses, policies N 13.1 through 13.3 identify construction noise mitigation requirements for new development located near existing noise-sensitive land uses. Policy 16.3 establishes the vibration perception threshold for rail-related vibration levels, used in this analysis as a threshold for determining potential vibration impacts due to Project construction.

Land Use Compatibility

The noise criteria identified in the County of Riverside General Plan Noise Element (Table N-1) are guidelines to evaluate the land use compatibility of transportation-related noise. The compatibility criteria provides the County with a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels.

The Land Use Compatibility for Community Noise Exposure matrix describes categories of compatibility and not specific noise standards. Per the General Plan Noise Element, uses such as those proposed by the Project are normally acceptable with unmitigated exterior noise levels of less than 70 dBA CNEL. At noise levels between 70 and 75 dBA CNEL, the Project land uses or similar new development should be undertaken only after a detailed analysis of noise reduction requirements is made, and the needed noise insulation features are included in the design(s). Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

[1] Discussions with the County of Riverside Department of Environmental Health (DEH), Office of Industrial Hygiene (OIH) indicate that the County of Riverside Municipal Code noise level standards incorrectly identify maximum noise level (L_{max}) standards, and instead should reflect average L_{eq} noise standards. Moreover, the County of Riverside DEH OIH's April 15th, 2015 *Requirements for determining and mitigating, non-transportation noise source impacts to residential properties* also identifies operational (stationary-source) noise level limits using the L_{eq} metric. Accordingly, the Project Noise Impact Analysis has been prepared consistent with the County of Riverside DEH OIH guidelines and standards using the L_{eq} noise level metric for stationary-source (operational) noise level evaluations.

Blasting Regulations

The blasting contractor is required to obtain blasting permit(s) from the State, and to notify Riverside County Sheriff's Department within 24 hours of planned blasting events. Further, blasting operations are required to comply with maximum airblast and vibration levels identified by the U.S. Bureau of Mines (USBM) and Office of Surface Mining and Reclamation Enforcement (OSMRE).

Airblast Limits

The OSMRE Blasting Performance Standards (Chapter 30 of the Code of Federal Regulations) identifies the maximum air overpressure and vibration levels at the location of any dwelling, public building, school, church, or community or institutional building. (18) Section 816.64 indicates that blasting shall be restricted to between sunrise and sunset per OSMRE standards, unless nighttime blasting is approved by the regulatory authority based upon a showing by the operator that the public will be protected from adverse noise and other impacts. Section 816.67 identifies maximum airblast limits, in linear dB, based on different frequency levels. For the purposes of the Project Noise Impact Analysis, the lowest limit of 129 dB is used as a conservative threshold for analyzing blasting airblasts.

4.4.4 STANDARDS OF SIGNIFICANCE

Based on the noise criteria presented above, and direction provided within the CEQA Guidelines as implemented by the County of Riverside, Project noise impacts would be considered potentially significant if the Project is determined to result in or cause the following conditions:

- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;

- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;

- Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;

- 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 expose people residing or working in the project area to excessive noise levels;

- For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels;

- Railroad noise;

- Highway noise; or

- Other noise.

Noise Impact Significance Criteria

For each of the standards of significance listed above where it has been determined that the Project may result in potentially significant impacts, noise impact significance criteria germane to the Project are presented below at Table 4.4-2.

Table 4.4-2
Summary of Significance Criteria

Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Off-Site Traffic Noise	Noise-Sensitive[1]	if ambient is < 60 dBA CNEL	≥ 5 dBA CNEL Project increase	
		if ambient is 60 - 65 dBA CNEL	≥ 3 dBA CNEL Project increase	
		if ambient is > 65 dBA CNEL	≥ 1.5 dBA CNEL Project increase	
	Non-Noise-Sensitive[2]	if ambient is < 70 dBA CNEL	≥ 5 dBA CNEL Project increase	
		if ambient is > 70 dBA CNEL	≥ 3 dBA CNEL Project increase	
Operational Noise &	Noise-Sensitive	Exterior Noise Level Standards[3]	65 dBA Leq	45 dBA Leq
		if ambient is < 60 dBA L_{eq1}	≥ 5 dBA L_{eq} Project increase	

Table 4.4-2
Summary of Significance Criteria

Analysis	Receiving Land Use	Condition(s)	Significance Criteria	
			Daytime	Nighttime
Vibration		if ambient is 60 - 65 dBA L_{eq1}	≥ 3 dBA L_{eq} Project increase	
		if ambient is > 65 dBA L_{eq1}	≥ 1.5 dBA L_{eq} Project increase	
		Vibration Level Threshold[4]	0.01 in/sec RMS	
Construction Noise and Vibration	Noise-Sensitive	Noise Level Threshold [5]	85 dBA L_{eq}	
		Vibration Level Threshold[4]	0.01 in/sec RMS	

Source: *Oleander Business Park Noise Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) August 17, 2020.
[1] FICON, 1992.
[2] Source: County of Riverside General Plan Noise Element, Table N-1.
[3] Source: County of Riverside General Plan Noise Element, Table N-2.
[4] Source: County of Riverside General Plan Noise Element, Policy N 16.3.
[5] Acceptable threshold for construction noise based on the Criteria for Recommended Standard: Occupational Noise Exposure prepared by the National Institute for Occupational Safety and Health.
"Daytime" = 7:00 a.m. to 10:00 p.m.; "Nighttime" = 10:00 p.m. to 7:00 a.m.

4.4.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.4.5.1 Introduction

Following is an analysis of potential noise impacts that could occur because of the Project. Of the CEQA threshold considerations presented at Section 4.4.4, and as substantiated in the Initial Study, the Project's potential impacts under the following topics are determined to be less-than-significant, and are not further discussed in this Section:

- 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 expose people residing or working in the project area to excessive noise levels;

- For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels;

- Railroad noise;

- Highway noise; or

- Other noise.

Please refer also to EIR Appendix A, Initial Study Checklist Section *Noise*.

4.4.5.2 Impact Statements

Following is an analysis of potential noise impacts that are expected to occur as a result of the Project. Noise levels will change both on-site and off-site if the Project is approved and implemented. The discussion of potential noise impacts is organized to reflect categories or types of noise sources, including:

- Construction-Source Noise;
- Vehicular-Source Noise;
- Operational/Area-Source Noise; and
- Vibration.

For each topical discussion, potential impacts are evaluated under applicable criteria established above at Section 4.4.4, *Standards of Significance*.

To assess the potential for long-term operational noise and short-term construction noise and vibration impacts, six receiver locations were identified for focused analysis, as shown at Figure 4.4-3 and described below.

R1: Located approximately 2,573 feet west of the Project site, R1 represents existing residential homes west of Day Street. A 24-hour noise measurement was taken near this location, L1, to describe the existing ambient noise environment.

R2: Location R2 represents the existing residential homes located west of the Project site at roughly 2,012 feet, on the west side of Day Street. A 24-hour noise measurement was taken near this location, L2, to describe the existing ambient noise environment.

R3: Location R3 represents the existing residential homes on the north side of Old Oleander Avenue at approximately 2,006 feet west of the Project site. A 24-hour noise measurement near this location, L3, is used to describe the existing ambient noise environment.

R4: Location R4 represents the existing residential homes located roughly 1,702 feet southwest of the Project site, east of Day Street. A 24-hour noise measurement near this location, L4, is used to describe the existing ambient noise environment.

R5: Located approximately 1,764 feet southwest of the Project site, R5 represents existing residential homes on the east side of Day Street. A 24-hour noise measurement was taken near this location, L4, to describe the existing ambient noise environment.

R6: Location R6 represents the existing residential homes located southeast of the Project site at roughly 1,282 feet on Redwood Drive. A 24-hour noise measurement was taken near this location, L6, to describe the existing ambient noise environment.

Source: Urban Crossroads, Inc.

applied planning inc

Figure 4.4-3
Sensitive Receiver Locations

CONSTRUCTION-SOURCE NOISE

Potential Impact: *Construction activities and associated noise would result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.*

Impact Analysis: Noise generated by the Project construction equipment will include a combination of trucks, power tools, concrete mixers, and portable generators that, when combined, can reach high levels. Construction is expected to occur in the following stages:

- Site Preparation;
- Grading;
- Building Construction;
- Architectural Coating;
- Paving; and
- Blasting.

The construction noise analysis was prepared using reference noise level measurements to describe the typical construction activity noise levels for each stage of Project construction. Please refer to Noise Impact Analysis Section 10. 2 for a listing of reference noise levels employed in the evaluation of construction-source noise.

Noise levels generated by heavy construction equipment can range from approximately 68 dBA to more than 80 dBA when measured at 50 feet. However, these noise levels diminish with distance from the construction site at a rate of 6 dBA per doubling of distance. For example, a noise level of 80 dBA measured at 50 feet from the noise source to the receiver would be reduced to 74 dBA at 100 feet from the source to the receiver, and would be further reduced to 68 dBA at 200 feet from the source to the receiver.

Based on the construction equipment reference noise levels and distance to the Project site, peak noise levels at the receiver locations have been developed, and are summarized at Table 4.4-3.

Table 4.4-3
Construction-Source Noise Levels (dBA L_{eq})

Location	Site Prep	Grading	Building Construction	Architectural Coating	Paving	Peak Noise Levels	Threshold	Threshold Exceeded
R1	45.3	39.2	33.9	33.2	37.4	45.3	85	No
R2	47.5	41.4	36.1	35.4	39.5	47.5	85	No
R3	47.5	41.4	36.1	35.4	39.5	47.5	85	No
R4	48.9	42.8	37.5	36.8	41.0	48.9	85	No
R5	48.6	42.5	37.2	36.5	40.6	48.6	85	No
R6	51.4	45.3	40.0	39.3	43.4	51.4	85	No

Source: *Oleander Business Park Noise Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) August 17, 2020.

As indicated at Table 4.4-3, peak received construction-source noise levels would range from 45.3 to 51.4 dBA Leq. These levels would not exceed the applicable threshold of 85 dBA Leq, as presented at Table 4.4-2. Please refer to Noise Impact Analysis Section 10.3 for a detailed analysis of received noise levels by construction activity.

Based on the preceding, the potential for Project construction activities to result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Construction activities and associated noise would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.*

Impact Analysis: As shown above at Table 4.4-3, peak noise levels associated with Project construction are expected to range from 45.3 to 51.4 dBA Leq at the nearby receiver locations. These levels would not exceed the applicable threshold of 85 dBA Leq. Additionally, as presented at previous Table 4.4-1, daytime ambient noise levels in the Project vicinity range from 54.5 to 59.8 dba Leq. Project construction noise would be indiscernible against ambient conditions and would not substantially add to ambient noise levels. As such, the potential for Project construction activities to result in a substantial temporary or periodic increase in ambient noise levels in the vicinity above levels existing without the Project is considered less-than-significant.

Level of Significance: Less-Than-Significant.

VEHICULAR-SOURCE NOISE

Potential Impact: *Vehicular source noise would result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.*

Impact Analysis: To assess the off-site transportation CNEL noise level impacts associated with the Project, noise contours were developed based on the Oleander Business Park Traffic Impact Analysis. Noise contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway. Noise contours were developed for the following traffic scenarios:

- Existing (2019) Without / With Project:
  This scenario refers to the Existing present-day noise conditions, without and with the proposed Project.

- Opening Year 2021 Without / With Project:
  This scenario below refers to the background noise conditions at future Year 2021 without and with the Project plus ambient growth, and includes all cumulative projects identified in the Traffic Impact Analysis.

Noise Impact Analysis Tables 7-1 through 7-4 present the noise contours developed for the above scenarios for all Study area roadways. Please refer to EIR Appendix E.

Based on the noise contours, Tables 4.4-4 and 4.4-5 present a comparison of noise conditions along Study Area roadways without and with development realized pursuant to the Project under the above-described scenarios.

Table 4.4-4
Existing Conditions
Traffic Noise Impacts Without and With Project

	Road	Segment	CNEL (dBA)[1]			Noise Sensitive Land Use?
			No Project	With Project	Project Addition	
1	Harvill Ave.	n/o Harley Knox Blvd.	59.4	61.2	1.8	No
2	Harvill Ave.	s/o Harley Knox Blvd.	72.1	72.1	0.1	No
3	Nandina Ave.	e/o Decker Rd.	n/a	60.0	n/a	No
4	Harley Knox Blvd.	e/o Decker Rd.	n/a	65.4	n/a	No
5	Harley Knox Blvd.	e/o Harvill Ave.	72.1	73.0	1.0	No
6	Harley Knox Blvd.	e/o I-215 NB Ramps	75.7	75.7	0.0	No
7	Oleander Ave.	e/o Decker Rd.	n/a	60.0	n/a	No

Source: *Oleander Business Park Noise Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) August 17, 2020.
[1] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use. Values rounded to the nearest one-tenth.
"n/a" = The roadway segment has nominal volumes based on the Traffic Impact Analysis under the given scenario which are not adequate for without and with Project off-site traffic noise evaluation.

Table 4.4-5
Opening Year Conditions
Traffic Noise Impacts Without and With Project

	Road	Segment	CNEL (dBA)[1]			Noise Sensitive Land Use?	Threshold Exceeded?
			No Project	With Project	Project Addition		
1	Harvill Ave.	n/o Harley Knox Blvd.	61.7	62.8	1.2	No	No
2	Harvill Ave.	s/o Harley Knox Blvd.	73.2	73.2	0.0	No	No
3	Nandina Ave.	e/o Decker Rd.	56.2	60.7	4.5	No	No
4	Harley Knox Blvd.	e/o Decker Rd.	64.0	67.7	3.7	No	No
5	Harley Knox Blvd.	e/o Harvill Ave.	73.9	74.6	0.6	No	No

Table 4.4-5
Opening Year Conditions
Traffic Noise Impacts Without and With Project

	Road	Segment	CNEL (dBA)[1]			Noise Sensitive Land Use?	Threshold Exceeded?
			No Project	With Project	Project Addition		
6	Harley Knox Blvd.	e/o I-215 NB Ramps	77.4	77.4	0.0	No	No
7	Oleander Ave.	e/o Decker Rd.	66.4	67.0	0.7	No	No

Source: *Oleander Business Park Noise Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) August 17, 2020.
[1] The CNEL is calculated at the boundary of the right-of-way of each roadway and the property line of the nearest adjacent land use. Values rounded to the nearest one-tenth.

As shown above, Project traffic would not result in increased noise levels that would exceed the thresholds presented at Table 4.4-2. As such, the potential for Project-related vehicular source noise to result in generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Vehicular-source noise would result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.*

Impact Analysis: As discussed previously (see Tables 4.4-4 and 4.4-5), Project traffic would not cause or result in increased noise levels that would exceed the County's threshold condition. As such, vehicular-source noise would not result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.

Level of Significance: Less-Than-Significant.

OPERATIONAL/AREA-SOURCE NOISE

Potential Impact: *Project operational noise would result in exposure of persons to, or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.*

Impact Analysis: To estimate the Project operational noise impacts, reference noise level measurements were collected from similar types of activities to represent the noise levels expected with the development of the proposed Project. It is important to note that the following projected noise levels assume the worst-case noise environment with the idling trucks, delivery truck activities, backup alarms, as well as loading and unloading of dry goods, roof-top air conditioning units, and parking lot vehicle movements all operating simultaneously. These noise levels will likely vary throughout the day.

Using the reference noise levels, it is possible to estimate the operational source noise levels generated at the Project site and the Project-related noise level increases that would be experienced at each of the sensitive receiver locations. Operational noise source locations within the Project site are illustrated at Figure 4.4-4. Please refer also to Noise Impact Analysis Appendix 9.1 for detailed calculations of the Project operational-source noise levels, and Noise Impact Analysis Section 9.2 for detailed description of the reference noise level sources and locations.

Operational noise levels that can be expected to be generated by the Project are presented at Table 4.4-6, below.

Table 4.4-6
Project Operational Noise Levels

Location	Noise Levels by Noise Source (dBA L_{eq})				Combined Operational Noise Levels (dBA L_{eq})
	Truck Unloading/ Docking Activity	Entry Gate & Truck Movements	Roof-Top Air Conditioning Units	Parking Lot Vehicle Movements	
R1	28.4	21.6	21.4	15.7	30.0
R2	30.4	23.6	23.1	17.2	32.0
R3	30.6	23.8	23.2	17.2	32.2
R4	31.7	25.1	24.2	18.2	33.3

Table 4.4-6
Project Operational Noise Levels

Location	Noise Levels by Noise Source (dBA L_{eq})				Combined Operational Noise Levels (dBA L_{eq})
	Truck Unloading/ Docking Activity	Entry Gate & Truck Movements	Roof-Top Air Conditioning Units	Parking Lot Vehicle Movements	
R5	30.9	24.8	24.1	18.0	32.7
R6	32.3	26.4	27.8	20.0	34.5

Source: *Oleander Business Park Noise Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) August 17, 2020.

To demonstrate compliance with local noise regulations, the Project-only operational noise levels are evaluated against exterior noise level thresholds based on the County of Riverside exterior noise level standards at nearby noise-sensitive receiver locations. As shown at Table 4.4-6, Project operational noise levels would range from 30.0 to 34.5 dBA Leq. These noise levels would not exceed the County of Riverside 65 dBA Leq daytime or 45 dBA Leq nighttime exterior noise level standards. It is specifically noted that the Project operational noise level calculations do not take credit for or account for any existing or planned noise barriers.

As such, the potential for Project operational noise to result in exposure of persons to, or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies is considered less-than-significant.

Level of Significance: Less-Than-Significant.

LEGEND:

- Roof-Top Air Conditioning Unit
- Parking Lot Vehicle Movements
- Distribution/Warehouse Activity
- Entry Gate & Truck Movement Activity

Source: Urban Crossroads, Inc.

Figure 4.4-4
Operational Noise Source Locations

Potential Impact: *Project operational noise would result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.*

Impact Analysis: To describe the Project operational noise level contributions, the Project operational noise levels were combined with the existing ambient noise levels measurements for the off-site receiver locations potentially impacted by Project operational noise sources. Tables 4.4-7 and 4.4-8 present the daytime and nighttime operational noise level increases associated with the Project.

Table 4.4-7
Daytime Noise Level Contributions

Location	Total Project Operational Noise Level	Measurement Location	Reference Ambient Noise Levels	Combined Project and Ambient	Project Increase	Threshold	Threshold Exceeded?
R1	30.0	L1	54.5	54.5	0.0	5.0	No
R2	32.0	L2	55.4	55.4	0.0	5.0	No
R3	32.2	L3	59.8	59.8	0.0	5.0	No
R4	33.3	L4	56.2	56.2	0.0	5.0	No
R5	32.7	L5	55.7	55.7	0.0	5.0	No
R6	34.5	L6	56.3	56.3	0.0	5.0	No

Source: *Oleander Business Park Noise Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) August 17, 2020.

Table 4.4-8
Nighttime Noise Level Contributions

Location	Total Project Operational Noise Level	Measurement Location	Reference Ambient Noise Levels	Combined Project and Ambient	Project Increase	Threshold	Threshold Exceeded?
R1	30.0	L1	46.3	46.4	0.1	5.0	No
R2	32.0	L2	47.2	47.3	0.1	5.0	No
R3	32.2	L3	59.2	59.2	0.0	5.0	No
R4	33.3	L4	53.9	53.9	0.0	5.0	No
R5	32.7	L5	49.4	49.5	0.1	5.0	No
R6	34.5	L6	50.8	50.9	0.1	5.0	No

Source: *Oleander Business Park Noise Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) August 17, 2020.

As indicated at Tables 4.4-7 and 4.4-8, Project contributions to the ambient noise environment would range from 0.0 to 0.1 dBA Leq at nearby receiver locations. This increase would not exceed the threshold conditions presented at previous Table 4.4-2. On this basis, the potential for Project operational noise to result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project is considered less-than-significant.

Level of Significance: Less-Than-Significant.

VIBRATION

Potential Impact: *The Project would result in exposure persons to, or generation of, excessive ground-borne vibration or ground-borne noise.*

Impact Analysis:

Construction

Vibration

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration from Project construction activities would cause only intermittent, localized intrusion. The proposed Project's construction activities most likely to cause vibration impacts are:

- Heavy Construction Equipment: Although all heavy mobile construction equipment has the potential of causing at least some perceptible vibration while operating close to buildings, the vibration is usually short-term and is not of sufficient magnitude to cause building damage.

- Trucks: Trucks hauling building materials to construction sites can be sources of vibration intrusion if the haul routes pass through residential neighborhoods on

streets with bumps or potholes. Repairing the bumps and potholes generally eliminates the problem.

Ground-borne vibration levels resulting from construction activities occurring within the Project site were estimated by data published by the Federal Transit Administration. Table 4.4-9 presents the expected Project-related vibration levels at the nearby receiver locations.

Table 4.4-9
Construction Vibration Levels

Location	Distance to Const. Activity	Receiver PPV Levels (in/sec)					Velocity Levels (in/sec) RMS	Threshold (in/sec) RMS	Threshold Exceeded?
		Small Bulldozer	Jack-hammer	Loaded Trucks	Large Bulldozer	Peak Vibration			
R1	2,573'	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.01	No
R2	2,012'	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.01	No
R3	2,006'	0.0000	0.0000	0.0001	0.0001	0.0001	0.0001	0.01	No
R4	1,702'	0.0000	0.0001	0.0001	0.0002	0.0002	0.0001	0.01	No
R5	1,764'	0.0000	0.0001	0.0001	0.0002	0.0002	0.0001	0.01	No
R6	1,282'	0.0000	0.0001	0.0002	0.0002	0.0002	0.0002	0.01	No

Source: *Oleander Business Park Noise Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) August 17, 2020.

As shown above, at distances ranging from 1,282 to 2,573 feet from Project construction activities, peak construction vibration velocity levels are estimated at 0.0002 in/sec RMS and will remain below the County of Riverside threshold of 0.01 in/sec RMS at all receiver locations.

Further, the FTA identifies construction vibration levels capable of building damage ranging from 0.12 to 0.5 in/sec PPV. The peak Project-construction vibration levels approaching 0.0002 in/sec PPV are below the FTA vibration levels for building damage at the residential homes near the Project site. Moreover, the impacts at the site of the closest sensitive receivers are unlikely to be sustained during the entire construction period, but will occur rather only during the times that heavy construction equipment is operating adjacent to the Project site perimeter.

Blasting

Blasting may be required for hard rock areas within the Project site during construction. The blasting contractor is required to obtain blasting permit(s) from the State, and to notify Riverside County Sheriff's Department within 24 hours of planned blasting events.

The maximum charge weight of blasts within the hard rock areas would depend on distance to nearby receivers, and range from 25 pounds at 200 feet, or 100 pounds at 400 feet, or 210 pounds at 600 feet.

The exact blasting locations are currently unknown. Therefore, to calculate the worst-case airblast and vibration levels, this analysis uses the closest receiver distance of 1,282 feet at receiver location R6. In addition, the worst-case maximum charge weight of 210 pounds at the worst-case blasting location of 1,282 feet from the potential blasting area limits.

At this distance, peak airblasts are estimated at 119.4 dB, with a vibration level of 0.19 in/sec PPV. Therefore, the worst-case airblast and vibration levels at the closest sensitive receiver location would not exceed the airblast and vibration level thresholds of 129 dB and 1.0 in/sec PPV, respectively.

Further, the worst-case airblast and vibration levels do not include any additional attenuation provided by the existing topography (e.g., berms) and/or barriers between the Project and the nearby receiver locations, and therefore, may overstate airblast and vibration levels generated by Project blasting activities. At greater distances to the remaining sensitive receiver locations the airblast and vibration levels would be further reduced due to the additional attenuation provided by the added distance and intervening topography and structures in the Project study area.

Operations

To assess the potential vibration impacts from truck haul trips associated with operational activities the County of Riverside threshold for vibration of 0.01 in/sec RMS is used. Truck vibration levels are dependent on vehicle characteristics, load, speed, and pavement conditions.

According to the FTA *Transit Noise Impact and Vibration Assessment*, trucks rarely create vibration that exceeds 70 VdB or 0.003 in/sec RMS (unless there are frequent potholes or similar inconsistent surfaces). Trucks transiting on site would be travelling at very low speeds over uniform improved paved areas. On this basis, delivery truck vibration impacts at nearby homes would not exceed the County of Riverside vibration threshold of 0.01 in/sec RMS, and therefore, would be less-than-significant.

Summary

Based on the preceding discussions, neither construction-related vibration and blasting impacts nor operational vibration levels would exceed the applicable thresholds. As such, the potential for the Project to result in exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels is considered less-than-significant.

Level of Significance: Less-Than-Significant.

4.5 HAZARDS/HAZARDOUS MATERIALS

4.5 HAZARDS/HAZARDOUS MATERIALS

Abstract

This Section identifies and addresses potential hazards and hazardous materials impacts that may result from the implementation and operation of the Oleander Business Park Project (Project). More specifically, the hazards and hazardous materials analysis presented here examines whether the Project would:

- *Result in an inconsistency with an Airport Master Plan;*
- *Require review by the Airport Land Use Commission; or*
- *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, result in a safety hazard for people residing or working in the project area.*

As supported by the analysis presented in this Section, potential hazards and hazardous materials impacts of the Project would be less-than-significant.

4.5.1 INTRODUCTION

The analysis presented in this Section addresses the potential impacts of hazards and/or hazardous materials associated with the construction and operation of the Project. The analysis considers potential hazards/hazardous conditions affecting the Project site; and also considers potential hazards resulting from the Project, including potential effects at off-site land uses.

Information presented in this Section is summarized in part from the following:

- Riverside County General Plan;
- Mead Valley Area Plan;
- *Phase I Environmental Site Assessment, 100-acre Vacant Land, SWC of Decker Road and Nandina Avenue, Riverside County, California* (Ardent Environmental Group, Inc.) January 7, 2019 (Phase I ESA, Draft EIR Appendix F);
- 2018 *Final Air Installations Compatible Use Zones Study, March Air Reserve Base, Riverside, California;*
- 2014 *March Air Reserve Base / Inland Port Airport Land Use Compatibility Plan*;
- March JPA General Plan; and
- *California Airport Land Use Planning Handbook* (Caltrans Division of Aeronautics) October 2011.

4.5.2 SETTING

The physical setting of the Project provided here serves as context for potential hazards affecting, or resulting from, the Project.

4.5.2.1 Project Location

The Project site is located west of Decker Road, between Nandina Avenue and Oleander Avenue within the Mead Valley area of Riverside County. Interstate 215 (I-215) exists in a north – south orientation approximately one-half mile easterly of the Project site. Please refer to also to EIR Section 3.0, *Project Description*, Figure 3.1-1, *Project Location*.

4.5.2.2 Existing Land Uses

The Project site comprises vacant, undeveloped property. To the north, south, and west of the Project site properties are also vacant, and undeveloped. Easterly of the Project site, across Decker Road, are warehouse/distribution center uses and vacant land. Existing land uses are also presented at Figure 3.1-1.

4.5.3 EXISTING HAZARDS/HAZARDOUS CONDITIONS

Information addressing and describing existing hazards/hazardous conditions affecting the Project site was obtained from a variety of sources including: historical fire insurance maps, historical aerial photographs, building permits and plans, historical city directories, topographic maps, property tax records, zoning/land use records, review of prior environmental documentation, and field reconnaissance.

4.5.3.1 Potential Project Site Hazards and Hazardous Conditions

The Project site has been vacant since at least 1938. No evidence or indication of recognized environmental conditions (RECs), historical-RECs (HRECs), controlled-RECs (CRECs), or conditions indicative of releases or threatened releases of hazardous substances at the site was identified as part of the Phase I ESA. The Phase I ESA noted the presence of general debris onsite, including small containers of waste oil, oil filters, and paint primer. This debris represents a de minimis environmental condition (Phase I ESA, p. 1).

4.5.3.2 Potential Vicinity Hazards and Hazardous Conditions

March Air Reserve Base/Inland Port Airport

The Project site is located approximately one mile southwesterly of March Air Reserve Base/Inland Port Airport (MARB/IPA), within the Airport Influence Area. Within the Airport Influence Area are three designated Compatibility Zones. The Project site is located within Compatibility Zone C2. Properties within these zones are subject to regulations governing such issues as land use, development intensity, density, height of structures, and noise. Operation of MARB/IPA could result in potential hazard/safety impacts affecting the Project site.

Other Off-site Properties

An environmental information database search, including federal, state, local, and tribal databases, was performed as part of the Phase I ESA. A review was conducted to determine whether vicinity properties have been reported as having experienced significant unauthorized releases of hazardous substances or other events with potentially adverse environmental effects that may affect the Project site. No vicinity properties were identified as being an environmental concern to the Project site.

4.5.4 HAZARDS/HAZARDOUS MATERIALS POLICIES AND REGULATIONS

4.5.4.1 County of Riverside General Plan

The County of Riverside General Plan Safety Element establishes policies addressing community health and safety, including potential hazards and hazardous materials concerns. Policies implemented by the County through its General Plan support prevention and education measures acting to minimize the occurrence and effects of hazards, emergencies and disasters; and include measures to ensure the County is able to respond appropriately under hazardous, emergency, or disaster conditions.

4.5.4.2 Mead Valley Area Plan

Area Plans within Riverside County establish focused policies and land use plans responding to specific aspects and attributes of localized County regions. The Project site is located in the Mead Valley Area Plan (MVAP).

4.5.4.3 Regulatory Context

In addition to the above-referenced General Plan/MVAP policies, federal, state, and local laws have been enacted to regulate and manage hazardous materials. Implementation of these laws and the associated management of hazardous materials are regulated independently of the CEQA process, through programs administered by various agencies at the federal, state, and local levels. An overview of regulatory agencies and certain key hazardous materials laws and regulations applicable to the Project, and to which the Project must conform, is provided below.

Federal

Overview

Several federal agencies regulate hazardous materials. These include the U.S. EPA, the United States Occupational Safety and Health Administration (USOSHA), and the United States Department of Transportation (USDOT). Applicable Federal Regulations are contained primarily in Titles 10, 29, 40, and 49 of the Code of Federal Regulations (CFR). Some of the major federal laws and issue areas include the following statutes and implementing regulations:

- Resources Conservation and Recovery Act (RCRA) - hazardous waste management;
- Hazardous and Solid Waste Amendments Act (HSWA) - hazardous waste management;
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) - cleanup of contamination;
- Superfund Amendments and Reauthorization Act (SARA) - cleanup of contamination; and
- Emergency Planning and Community Right-to-Know (SARA Title III) - business inventories and emergency response planning.

The U.S. EPA is the primary federal agency responsible for the implementation and enforcement of hazardous materials regulations. In most cases, enforcement of environmental laws and regulations established at the federal level is delegated to state and local environmental regulatory agencies.

The Federal Emergency Management Agency (FEMA) is responsible for ensuring the establishment and development of policies and programs for emergency management

at the federal, state, and local levels. This includes the development of a national capability to mitigate against, prepare for, respond to, and recover from a full range of emergencies.

Hazardous Waste Handling

The U.S. EPA has authorized the California Department of Toxic Substance Control (DTSC) to enforce hazardous waste laws and regulations in California. Requirements place "cradle-to-grave" responsibility for hazardous waste disposal on the shoulders of hazardous waste generators. Waste generators must ensure that their wastes are disposed of properly, and legal requirements dictate the disposal requirements for many waste streams (e.g., a ban on the disposal of many types of hazardous wastes in landfills).

Airforce Air Installation Compatibility Use Zone(s)

The March Air Reserve Base Airforce Air Installation Compatibility Use Zone (MARB AICUZ) facilitates and promotes establishment and development of compatible land uses which may be subject to aircraft noise and accident hazards. To these ends, the MARB AICUZ provides information concerning aircraft accident hazards to surrounding communities and acts to prevent incompatible development in areas affected by aircraft operations.

The 2018 MARB AICUZ Study maps and classifies hazards areas into various categories indicating the potential for these areas to be subject to aircraft crashes. These areas include: areas on or adjacent to the runway; clear zone areas under runway approach/departure paths; Accident Potential Zone (APZ) I; and Accident Potential Zone (APZ) II. Aircraft Noise Compatibility Zones are also identified in the Study.

State

Overview

The primary state agencies with jurisdiction over hazardous chemical materials management are the DTSC and the State Water Quality Control Board (SWQCB). Other

state agencies involved in hazardous materials management and oversight are the Department of Industrial Relations, California OSHA (Cal OSHA) implementation, Office of Emergency Services (OES - California Accidental Release Prevention Implementation), Air Resources Board (ARB), California Department of Transportation (Caltrans), State Office of Environmental Health Hazard Assessment (OEHHA - Proposition 65 implementation) and CalRecycle (formerly the California Integrated Waste Management Board, CIWMB). The enforcement agencies for hazardous materials transportation regulations are the California Highway Patrol (CHP) and Caltrans. Hazardous materials and waste transporters are responsible for complying with all applicable packaging, labeling, and shipping regulations.

Relevant hazardous materials management laws in California include, but are not limited to, the following statutes and implementation regulations:

- Hazardous Materials Management Act - business plan reporting;
- Hazardous Waste Control Act - hazardous waste management;
- Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) - release of and exposure to carcinogenic chemicals;
- Hazardous Substance Act - cleanup of contamination; and
- Hazardous Materials Storage and Emergency Response.

Airport operations, airport planning, airport land use compatibility, and associated hazards and safety concerns are regulated through the California State Aeronautics Act (SAA), Public Utilities Code (PUC), Section 21001 et seq. The Caltrans Division of Aeronautics is, in large part, responsible for administration of the SAA.

California Environmental Protection Agency

The California Environmental Protection Agency (CalEPA) has broad jurisdiction over hazardous materials management in the state. Within CalEPA, the DTSC has primary regulatory responsibility for hazardous waste management and cleanup. Enforcement of regulations has been delegated to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the Hazardous Waste Control Law.

Along with the DTSC, the SWQCB is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. SWQCB regulations are contained in Title 27 of the California Code of Regulations (CCR). Additional state regulations applicable to hazardous materials are contained in Title 22 of the CCR. Title 26 of the CCR is a compilation of those sections or titles of the CCR that are applicable to hazardous materials.

Department of Toxic Substances Control

The Resource Conservation and Recovery Act (RCRA) of 1976 is the principal federal law that regulates the generation, management, and transportation of hazardous materials and other wastes. The DTSC regulates hazardous waste in California primarily under the authority of the federal RCRA, and the California Health and Safety Code. Other laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup, and emergency planning. In addition, DTSC reviews and monitors legislation to ensure that the position reflects the DTSC's goals. From these laws, DTSC's major program areas develop regulations and consistent program policies and procedures. The regulations spell out what those who handle hazardous waste must do to comply with the laws.

California law provides the general framework for regulation of hazardous wastes by the Hazardous Waste Control Law (HWCL) passed in 1972. DTSC is the State's lead agency in implementing the HWCL. The HWCL provides for state regulation of existing hazardous waste facilities, which include "any structure, other appurtenances, and improvements on the land, used for treatment, transfer, storage, resource recovery, disposal, or recycling of

hazardous wastes," and requires permits for, and inspections of, facilities involved in generation and/or treatment, storage and disposal of hazardous wastes.

The oversight of hazardous materials release sites often involves several different agencies that may have overlapping authority and jurisdiction. The DTSC and SWQCB are the two (2) primary state agencies responsible for issues pertaining to hazardous materials release sites. Air quality issues related to remediation and construction at contaminated sites are also subject to federal and state laws and regulations that are administered at the local level.

Investigation and remediation activities that would involve potential disturbance or release of hazardous materials must comply with applicable federal, state, and local hazardous materials laws and regulations. The DTSC has developed standards for the investigation of sites where hazardous materials contamination has been identified or could exist based on current or past uses. The standards identify approaches to determine if a release of hazardous wastes/substances exists at a site and delineate the general extent of contamination; estimate the potential threat to public health and/or the environment from the release and provide an indicator of relative risk; determine if an expedited response action is required to reduce an existing or potential threat; and complete preliminary project scoping activities to determine data gaps and identify possible remedial action strategies to form the basis for development of a site strategy.

California Accidental Release Prevention Program (CalARP)

The CalARP program (CCR Title 19, Division 2, Chapter 4.5) covers certain businesses that store or handle more than a certain volume of specific regulated substances at their facilities. The list of regulated substances is found in Article 8, Section 2770.5 of the CalARP program regulations. The businesses that use a regulated substance above the noted threshold quantity must implement an accidental release prevention program, and some may be required to complete a Risk Management Plan (RMP). An RMP is a detailed engineering analysis of the potential accident factors present at a business and the mitigation measures that can be implemented to reduce this accident potential. The purpose of an RMP is to decrease the risk of an off-site release of a regulated substance

that might harm the surrounding environment and community. An RMP includes the following components: safety information, hazard review, operating procedures, training, maintenance, compliance audits, and incident investigation. The RMP must consider the proximity to sensitive populations located in schools, residential areas, general acute care hospitals, long-term health care facilities, and child day-care facilities, and must also consider external events such as seismic activity.

Caltrans Division of Aeronautics

The Caltrans Division of Aeronautics (Division) is, in large part, responsible for administration of the California State Aeronautics Act (SAA), Public Utilities Code (PUC), Section 21001 et seq. The purpose of the SAA "is to protect the public interest in aeronautics and aeronautical progress."[1] The SAA is the implementing statute requiring the formation of a county Airport Land Use Commission or comparable designated airport regulatory commission. The SAA at Section 21675. (a) (excerpted in pertinent part below) assigns the ALUC or other designated airport regulatory commission with the responsibility to prepare and adopt an Airport Land Use Compatibility Plan (ALUCP):

> 21675. (a) Each commission shall formulate an airport land use compatibility plan that will provide for the orderly growth of each public airport and the area surrounding the airport within the jurisdiction of the commission, and will safeguard the general welfare of the inhabitants within the vicinity of the airport and the public in general. The commission's airport land use compatibility plan shall include and shall be based on a long-range master plan or an airport layout plan, as determined by the Division of Aeronautics of the Department of Transportation, that reflects the anticipated growth of the airport during at least the next 20 years. In formulating an airport land use compatibility plan, the commission may develop height restrictions on buildings, specify use of land, and determine building standards, including soundproofing adjacent to airports, within the airport influence area. The

[1] *California Airport Land Use Planning Handbook* (Caltrans Division of Aeronautics) October 2011, p. vii.

> airport land use compatibility plan shall be reviewed as often as necessary in order to accomplish its purposes, but shall not be amended more than once in any calendar year.

The ALUCP developed for March Air Reserve Base (MARB) acts to ensure mutual compatibility of the Airport with surrounding land uses, thereby reducing potential airport/aircraft related hazards.

Regional

South Coast Air Quality Management District (SCAQMD)

The SCAQMD establishes Rules that regulate or control various air pollutant emissions and emissions sources, including hazardous emissions sources, within the South Coast Air Basin (Basin). The SCAQMD coordinates its actions with local, state, and federal government agencies, the business community, and private citizens to achieve and maintain healthy air quality for Riverside County.

Local

Riverside County Fire Department, Hazardous Materials Division

Under the California Unified Hazardous Waste and Hazardous Material Management Regulatory Program, (Chapter 6.11, Division 20, Section 25404 of the Health and Safety Code), hazards/hazardous materials management is addressed locally through the Certified Unified Program Agency (CUPA). The primary CUPA for the City of Moreno Valley is the County of Riverside Health Department, Environmental Health Division. In its CUPA capacity, Riverside County Department of Environmental Health Hazardous Materials Branch manages the following six hazardous material and hazardous waste programs:

- Hazardous Materials Release Response Plans and Inventory (Business Plan);
- California Accidental Release Program (CalARP);

- Underground Storage Tanks (UST);
- Aboveground Petroleum Storage Act (APSA)/Spill Prevention, Control, and Countermeasure Plan (SPCC Plan);
- Hazardous Waste Generation and Onsite Treatment; and
- Hazardous Materials Management Plans and Inventory Statements under Uniform Fire Code Article 80.

Riverside County Airport Land Use Compatibility Plan (ALUCP)

California law mandates preparation and adoption of airport land use compatibility plans (ALUCPs) for each public-use and military airport in the state (California Public Utilities Code (PUC) §21675). ALUCPs act 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 airports to the extent that these areas are not already devoted to incompatible uses" (PUC §21670(a)(2)).

In this regard, the Riverside County Airport Land Use Compatibility Plan for March Air Reserve Base/Inland Port Airport (MARB/IPA ALUCP) acts to ensure mutual compatibility of the MARB/IPA with surrounding land uses, thereby reducing potential airport/aircraft related hazards.

4.5.5 STANDARDS OF SIGNIFICANCE

Pursuant to the *CEQA Guidelines* as adopted and implemented by the County of Riverside, and for purposes of this EIR, implementation of the Project may result in or cause potentially significant hazards/hazardous materials impacts if it 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;

- Impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan;

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-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, create a significant hazard to the public or the environment;

- Result in an inconsistency with an Airport Master Plan;

- Require review by the Airport Land Use Commission;

- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area;

- For a project within the vicinity of a private airstrip, or heliport, would the project result in a safety hazard for people residing or working in the project area; or

- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.[2]

[2] The Project site is not located within or proximate to a Very High Fire Hazard Severity Zone (VHFHSZ) State Responsibility Area (SRA), or within or proximate to lands otherwise classified as VHFHSZ. Please refer also to EIR Section 4.12, *Wildfire*.

4.5.6 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.5.6.1 Introduction

The following discussions focus on areas where it has been determined that the Project may result in potentially significant hazards and hazardous materials impacts, pursuant to comments received through the NOP process, and based on the analysis presented within this Section and included within the EIR Initial Study.

As discussed within the Initial Study (EIR Appendix A), the potential for the Project to result in the following conditions was determined to be potentially significant, and these potential impacts are discussed further within this Section.

- Result in an inconsistency with an Airport Master Plan;
- Require review by the Airport Land Use Commission; or
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.

The remaining CEQA hazards/hazardous materials considerations were determined within the Initial Study to be less-than-significant. These potential impacts are therefore not substantively discussed further within this Section. Please refer also to EIR Section 1.5, *Impacts Considered Previously but Not Found to Be Potentially Significant*, and Initial Study Checklist Section, *Hazards and Hazardous Materials*.

4.5.6.2 Impact Statements

Potential Impact: *Result in an inconsistency with an Airport Master Plan.*

Impact Analysis: The Project site is located approximately one mile southwesterly of March Air Reserve Base/Inland Port Airport. An Airport Master Plan has not yet been created for March Inland Port Airport. Absent an Airport Master Plan, the March JPA General Plan establishes the long-term vision to guide the future development of properties located within the March JPA Planning Area. As shown at Figure II-1 of the March JPA General Plan, the Project site is not located within the General Plan Planning Area, and as such is not subject to the provisions presented therein. The Oleander Business Park Project would not conflict or obstruct implementation of the General Plan in any way.

It is assumed that the future Airport Master Plan would be developed consistent with the land uses and boundaries presented within the existing General Plan. As such, the potential for the Project to result in an inconsistency with an Airport Master Plan is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Require review by the Airport Land Use Commission.*

Impact Analysis: Riverside County ALUC review is necessary primarily for projects that include legislative actions such as a General Plan Amendment, Specific Plan Amendment, or Zone Change. The Oleander Business Park Project would not require any such amendments. Since the Project is consistent with the existing Riverside County land use designations of the site, it would also be considered consistent with the land uses assumed by the 2014 Riverside County ALUCP for March ARB/IPA (March ARB/IPA ALUCP).

The Project Applicant has submitted the Project plans to the ALUC for that agency's independent review. Review and conditional approval of the Project is documented in *Airport Land Use Commission (ALUC) Development Review* (Riverside County Airport Land Use Commission) September 19, 2019 (EIR Appendix F). Conditions, revisions or limitations required by the ALUC would be incorporated in the Project prior to approval by the County.

Based on the preceding, the potential for the Project to result in potentially significant hazards/hazardous impacts associated with or resulting from or associated with review by the ALUC is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.*

Impact Analysis: The Project site lies within the area regulated under the March ARB/IPA ALUCP and the 2018 MARB AICUZ. The compatibility zones and associated criteria set forth in the March ARB/IPA ALUCP provide noise and safety compatibility protection equivalent to or greater than correlating criteria presented in the 2018 MARB AICUZ (March ARB/IPA ALUCP, p. 1). The analysis presented herein reflects the more stringent criteria established under the March ARB/IPA ALUCP.

When an ALUC establishes development standards in an ALUCP to prevent airport noise and safety hazards, they are indirectly setting development standards for local government because local government general and specific plans (and therefore their implementing standards) must be consistent with the ALUCP (Section 21670.1(c)(2)(D) and Government Code Section 65302.3(a)), unless the conclusion of the overrule process allows otherwise (*California Airport Land Use Planning Handbook*, p. viii).

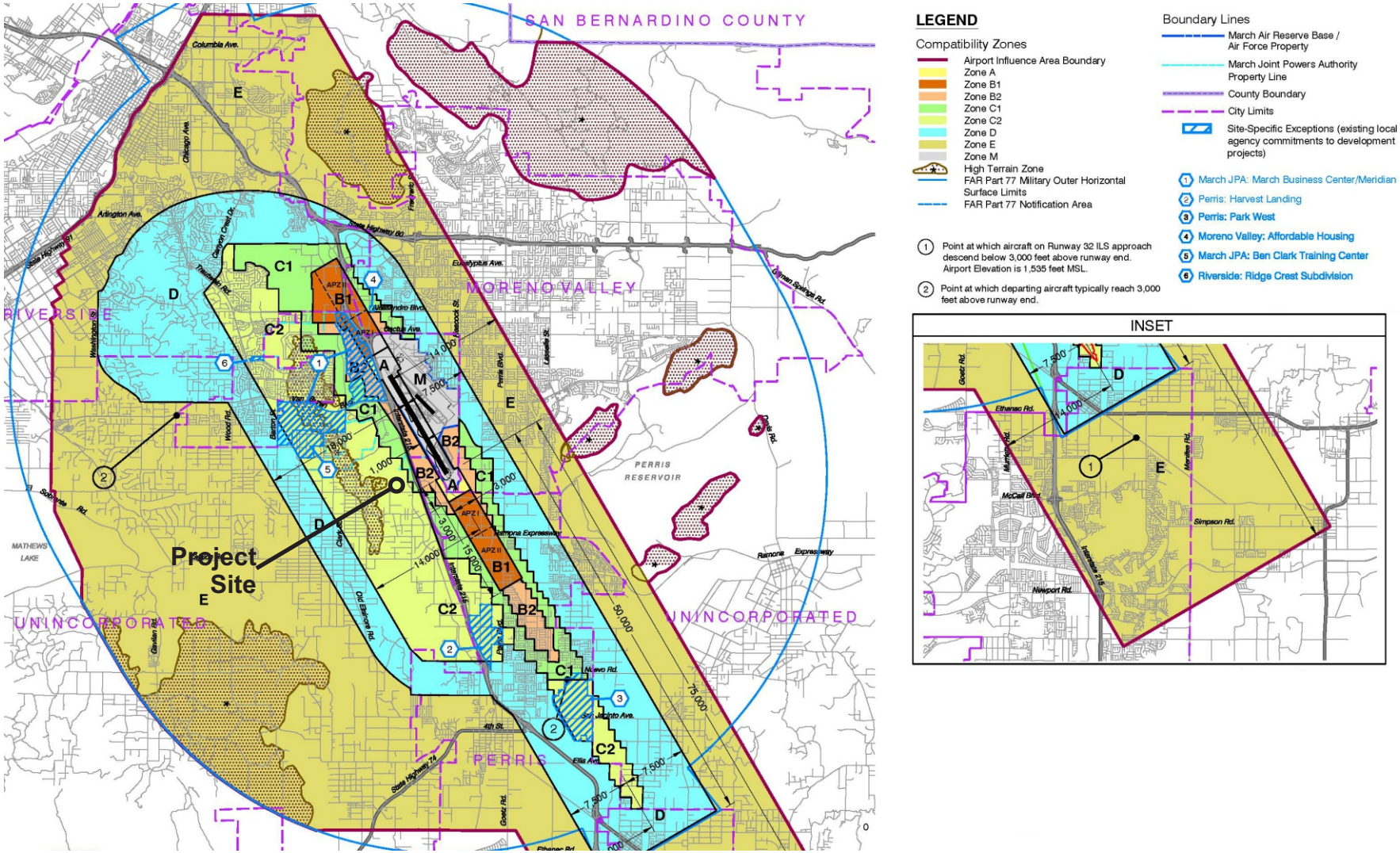
Under the Riverside County ALUCP for March ARB/IPA, the Project site is overlain by Compatibility Zone C2 (please refer to Figure 4.5-1). As shown at Figure 4.5-2, *Basic Compatibility Criteria*, highly noise-sensitive outdoor residential uses and hazards to flight are prohibited within Zone C2. Also, children's schools are discouraged, airspace review is required for objects greater than 70 feet tall, and the MARB must be notified of any land use having an electromagnetic radiation component. Zone C2 is identified as a flight zone corridor, which means that the site lies within a designated path of overhead aircraft. Within this compatibility zone, the ALUCP indicates that the maximum number of persons per acre should not exceed an average of 200, or a maximum of 500 persons on any given acre. The ALUCP also specifies certain review, notification, and disclosure requirements for new land uses within Zone C2.

The Riverside County ALUC has reviewed the Project and determined the Project to be consistent with the March Air Reserve Base/Inland Port Airport ALUCP, subject to conditions. Additionally, Federal Aviation Administration (FAA) airspace review has been completed for the Project, and the FAA has issued *No Hazard to Air Navigation Determinations* for all Project facilities (please refer to EIR Appendix F, Airport Compatibility Documentation).

The Project would comply with all ALUC conditions and requirements established through the ALUC review process, including but not limited to compliance with applicable provisions of the March ARB/IPA ALUCP. Consistency with the ALUCP demonstrates that the Project would not result in or create safety hazard related to or affecting March ARP/IPA facilities or operations. The Project does not otherwise propose or require facilities or uses that would potentially conflict with airport/airfield operations, or that would result in or contribute to airport/airfield hazards. There are no other airports or airfields that would affect or be affected by the Project.

Based on the preceding analysis, the potential for the Project to result in a safety hazard for people residing or working in the Project area is considered less-than-significant.

Level of Significance: Less-Than-Significant.



Source: March Air Reserve Base/Inland Port ALUCP

appliedplanning inc

Figure 4.5-1
MARB/IPA Compatibility Map

Zone	Locations	Density / Intensity Standards: Residential (d.u./ac) [1]	Other Uses (people/ac) [2]: Average [5]	Other Uses (people/ac) [2]: Single Acre [6]	Req'd Open Land	Additional Criteria: Prohibited Uses [3]	Additional Criteria: Other Development Conditions [4]
M	Military					› No ALUC authority	
A	Clear Zone [7]	No new dwellings allowed	0	0	All Remaining	› All non-aeronautical structures › Assemblages of people › Objects exceeding FAR Part 77 height limits › All storage of hazardous materials › Hazards to flight [8]	› Electromagnetic radiation notification [9] › Avigation easement dedication and disclosure [4, 7]
B1	Inner Approach/ Departure Zone	No new dwellings allowed [10]	25 (APZ I) 50 (APZ II and outside APZs) [11]	100 100	Max. 50% lot coverage within APZs [12]	› Children's schools, day care centers, libraries › Hospitals, congregate care facilities, hotels/ motels, restaurants, places of assembly › Bldgs with >1 aboveground habitable floor in APZ I or >2 floors in APZ II and outside of APZs [13] › Hazardous materials manufacture/storage [14] › Noise sensitive outdoor nonresidential uses [15] › Critical community infrastructure facilities [16] › Hazards to flight [8] › Uses listed in AICUZ as not compatible in APZ I or APZ II [17]	› Locate structures maximum distance from extended runway centerline › Sound attenuation as necessary to meet interior noise level criteria [18] › Zoned fire sprinkler systems required › Airspace review req'd for objects >35 ft. tall [19] › Electromagnetic radiation notification [9] › Avigation easement dedication and disclosure [4]
B2	High Noise Zone	No new dwellings allowed [10]	100	250	No Req't	› Children's schools, day care centers, libraries › Hospitals, congregate care facilities, hotels/ motels, places of assembly › Bldgs with >3 aboveground habitable floors › Noise-sensitive outdoor nonresidential uses [15] › Critical community infrastructure facilities [16] › Hazards to flight [8]	› Locate structures max. distance from runway › Sound attenuation as necessary to meet interior noise level criteria [18] › Aboveground bulk storage of hazardous materials discouraged [14, 20] › Airspace review req'd for objects >35 ft. tall [19] › Electromagnetic radiation notification [9] › Avigation easement dedication and disclosure [4]
C1	Primary Approach/ Departure Zone	≤3.0	100	250	No Req't	› Children's schools, day care centers, libraries › Hospitals, congregate care facilities, places of assembly › Noise-sensitive outdoor nonresidential uses [15] › Hazards to flight [8]	› Critical community infrastructure facilities discouraged [16, 20] › Aboveground bulk storage of hazardous materials discouraged [14, 20] › Sound attenuation as necessary to meet interior noise level criteria [18] › Airspace review req'd for objects >70 ft. tall [19] › Electromagnetic radiation notification [9] › Deed notice and disclosure [4]
C2	Flight Corridor Zone	≤ 6.0	200	500	No Req't	› Highly noise-sensitive outdoor nonresidential uses [15] › Hazards to flight [8]	› Children's schools discouraged [20] › Airspace review req'd for objects >70 ft. tall [19] › Electromagnetic radiation notification [9] › Deed notice and disclosure [4]
D	Flight Corridor Buffer	No Limit	No restriction [21]		No Req't	› Hazards to flight [8]	› Major spectator-oriented sports stadium, amphitheaters, concert halls discouraged [21] › Electromagnetic radiation notification [9] › Deed notice and disclosure [4]
E	Other Airport Environs	No Limit	No Restriction [21]		No Req't	› Hazards to flight [8]	› Disclosure only [4]
*	High Terrain	Same as Underlying Compatibility Zone			Not Applicable	› Hazards to flight [8] › Other uses restricted in accordance with criteria for underlying zone	› Airspace review req'd for objects >35 ft. tall [19] › Avigation easement dedication and disclosure [4]

Source: March Air Reserve Base/Inland Port ALUCP

Figure 4.5-2
MARB/IPA Compatibility Criteria

4.6 GEOLOGY AND SOILS

4.6 GEOLOGY AND SOILS

Abstract

This Section addresses the potential for the Project to result in substantial geotechnical hazards or soils-related impacts. More specifically, this analysis presented here focuses on whether the Project would result in, or be subjected to, any of the following:

- *Be subject to seismic-related ground failure, including liquefaction;*
- *Be subject to strong seismic ground shaking;*
- *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 ground subsidence;*
- *Create cut or fill slopes greater than 2:1 or higher than 10 feet; or*
- *Be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2019), creating substantial risks to life or property.*

Information and analysis presented in this Section are summarized from: Geotechnical Investigation, Mead Valley Business Park, SWC Nandina Avenue and Decker Road, Unincorporated Riverside County (Perris Area), California *(Southern California Geotechnical) June 13, 2019 (Project Geotechnical Investigation).*

The Project Geotechnical Investigation substantiates the following conclusions:

- *No active faults are known to traverse the site and the site is not located within an Alquist-Priolo Earthquake Fault Zone.*

- *The subject site is underlain at shallow depth by dense bedrock; therefore, liquefaction is not considered to be a significant design concern for this project.*

- *The proposed remedial grading will diminish the potential for collapse, hydroconsolidation, slope instability and/or settlement to tolerable limits.*

- *Laboratory testing performed on a representative sample of the near-surface materials indicate that they possess a very low expansion potential.*

- *The existing alluvial/older alluvial soils, as well as a portion of the bedrock, are not considered suitable for support of the new structure and will require remedial grading.*

The Project Geotechnical Investigation recommends the following actions:

- *Initial site preparation should include stripping of any surficial vegetation and organic soils.*

- *In general, it is recommended that the overexcavation extend to a depth of at least 3 feet below existing grade, and to a depth of at least 3 feet below proposed pad grade, whichever is greater.*

- *Remedial grading should be performed within the proposed building areas in order to remove all existing alluvial/older alluvial soils, and a portion of weathered bedrock.*

- *Within the influence zones of the new foundations, the overexcavation should extend to a depth of at least 2 feet below proposed foundation bearing grade.*

- *The overexcavation should include the entire pad area. The intent of the grading recommendations is to overexcavate the bedrock and replace it as a compacted fill to a depth of at least 3 feet in cut areas and to overexcavate all alluvial soils prior to fill placement in fill areas. This will facilitate future building activities with respect to excavation of shallow foundations and utilities in cut areas.*

- *In order to reduce the settlement potential of the newly placed fill soils to acceptable levels and avoid excessive differential settlements, fill soils placed at depths greater than 10 feet below proposed pad grade within the building pads should be compacted to at least 95 percent of the ASTM D-1557 maximum dry density.*

The Project Geotechnical Investigation conclusions and recommendations in total are incorporated by reference. As supported by the analysis presented in this Section, potential geology and soils impacts of the Project are determined to be less-than-significant based on compliance with recommendations of the Project Geotechnical Investigation, provisions of the California Building Code (CBC) and County Conditions of Approval.

The County has reviewed the Project Geotechnical Investigation and has determined the Investigation satisfies the requirement for a geologic/geotechnical study for Planning/CEQA purposes. Please refer to Conditions of Approval, County Geologic Report No. 190024 "Geotechnical Investigation, Two Proposed Commercial/Industrial Buildings, Mead Valley Business Park, SWC Nandina Avenue and Decker Road, Unincorporated Riverside County (Perris Area), California," (County Conditions of Approval Memo) dated June 13, 2019, included at EIR Appendix G.

Additional relevant geotechnical/soils source information is provided in Response to County of Riverside Geotechnical Report Review: Review Comments #3, County Geologic Report No. 2085, Commercial/Industrial Development, NWC Oleander Avenue and Decker Road, Riverside County, California (*Southern California Geotechnical) December 10, 2008.*

4.6.1 INTRODUCTION

This Section examines underlying soil conditions and geologic characteristics of the Project area, and evaluates related impacts potentially affecting design, construction, and operation of the Project. The subsequent discussions provide an assessment of potential seismologic hazards, notably faults and primary and secondary earthquake hazards which may affect the Project. Influences such as topography and soil types are also discussed as these factors substantively influence potential erosion and landslide hazard characteristics of the Project site.

4.6.2 SETTING

Geotechnical Conditions

The following paragraphs discuss the geotechnical conditions encountered at the site during the field investigation conducted as part of the Project Geotechnical Investigation.

Alluvium

Native alluvium was encountered at the ground surface, extending to depths of 1 to 4½± feet below existing site grades. The alluvium generally consists of loose to medium dense silty fine medium sands with trace amounts of coarse sand content and trace fine root fibers.

Older Alluvium

Older alluvium was encountered at either the ground surface or beneath the alluvium extending to depths of 1 to 10± feet beneath the existing site grades. The older alluvium generally consists of loose to very dense silty fine to medium sands with trace clay content.

Bedrock

Val Verde Tonalite bedrock was encountered beneath the alluvial and older alluvial soils. The bedrock consists of dense to very dense, light gray brown fine to coarse grained tonalite. These materials are generally weathered and friable throughout the depths explored at the site. However, auger refusal conditions were encountered at depths of 8½ and 13½± feet on very dense tonalite bedrock materials. In addition, excavator refusal conditions were encountered at depths ranging from 2½ to 11± feet on very dense tonalite bedrock material at most of the trench locations. Tonalite bedrock materials extend to at least the maximum depth explored of 30± feet below the existing site grades.

Groundwater

Groundwater was not encountered at any of the borings. Based on the lack of any water within the borings, and the moisture contents of the recovered soil samples, the static groundwater table is considered to have existed at a depth in excess of 30± feet below existing site grades, at the time of the subsurface investigation.

Available groundwater data was reviewed in order to determine regional groundwater depths. Recent water level data was obtained from the California Department of Water Resources website, http://www.water.ca.gov/waterdatalibrary/. The nearest monitoring well on record is located approximately 1.65 miles southeast of the site. Water level readings within this monitoring well indicate a high groundwater level of 72± feet (February 2015) below the ground surface.

Geologic Conditions

Regional geologic maps indicate that the majority of the site are underlain by Cretaceous Val Verde Formation tonalite and a small portion of the northeastern area of the site is underlain by Cretaceous granitic dike rock. The Val Verde Formation is described as gray, weathered, relatively homogeneous, massive, medium to coarse grained tonalite. The granitic dike rock is described as composed of mainly quartz and alkali feldspars with textures that are coarse grained and equigranular granitic but can range from aplitic to pegmatitic.

Bedrock materials were encountered at all of the boring and trench locations extending from beneath the alluvial and older alluvial soils to depths of at least 30± feet. Based on the bedrock encountered at the boring and trench locations, it is our opinion that the near-surface alluvium and older alluvium throughout the site are underlain by tonalite bedrock of the Val Verde Formation. The bedrock is weathered, friable, and consists of fine to coarse grained tonalite. Refusal conditions at most of the trench locations were encountered at depths ranging from 2½ to 11± feet.

4.6.3 COUNTY OF RIVERSIDE REGULATIONS

The County of Riverside implements General/Area Plan Goals and Policies addressing geology, soils, and seismic conditions through established development permit review processes. These processes provide for the completion of development-specific geotechnical investigations where appropriate, and that requirements and recommendations of these investigations are incorporated in construction plans, are followed through during construction processes, and are functionally complete before buildings are occupied and/or infrastructure systems or other improvements are accepted. To the satisfaction of the County, recommendations and requirements of the

final Project Geotechnical Investigation(s) would be incorporated in the final Project design and construction. Applicable provisions of the California Building Code (CBC) are incorporated throughout development design and implementation.

4.6.4 STANDARDS OF SIGNIFICANCE

Appendix G of the *CEQA Guidelines* indicates a Project will have potentially significant geology and soils impacts if it would result in, or be subjected to:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death;
- Be subject to rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;
- Be subject to seismic-related ground failure, including liquefaction;
- Be subject to strong seismic ground shaking;
- 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, collapse, or rockfall hazards;
- 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 ground subsidence;
- Be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard;
- Change topography or ground surface relief features;
- Create cut or fill slopes greater than 2:1 or higher than 10 feet;

- Result in grading that affects or negates subsurface sewage disposal systems;

- Result in substantial soil erosion or the loss of topsoil;

- Be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2019), creating substantial risks to life or property;

- Have soils incapable of adequately supporting use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water;

- Change deposition, siltation, or erosion that may modify the channel of a river or stream or the bed of a lake;

- Result in any increase in water erosion either on or off site; or

- Be impacted by or result in an increase in wind erosion and blowsand, either on or off site.

4.6.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

Following is an analysis of potential geology and soils impacts that could occur because of the Project. Of the CEQA threshold considerations presented at Section 4.6.4, and as substantiated in the Initial Study, the Project's potential impacts under the following topics are determined to be less-than-significant, and are not further discussed in this Section:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death;

- Be subject to rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault;

- 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, collapse, or rockfall hazards;

- Be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard;

- Change topography or ground surface relief features;

- Result in grading that affects or negates subsurface sewage disposal systems;

- Result in substantial soil erosion or the loss of topsoil;

- Have soils incapable of adequately supporting use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water;

- Change deposition, siltation, or erosion that may modify the channel of a river or stream or the bed of a lake;

- Result in any increase in water erosion either on or off site; or

- Be impacted by or result in an increase in wind erosion and blowsand, either on or off site.

Please refer also to EIR Appendix A, Initial Study Checklist Section *Geology and Soils*.

4.6.5.1 Impact Statements

Potential Impact: *Be subject to seismic-related ground failure, including liquefaction.*

Impact Analysis: Liquefaction and seismically-induced settlement or ground failure are generally associated with strong seismic shaking in areas where groundwater tables are at relatively shallow depths (within 50 feet of the ground surface) and/or when the area is underlain by loose, cohesionless deposits.

The Riverside County GIS system indicates that the Project site is not located within an area of liquefaction susceptibility. Additionally, as previously mentioned, the subsurface exploration conducted as part of the Project Geotechnical Investigation included eight borings at a maximum depth of approximately 30 feet. Groundwater was not encountered during any of the borings. Groundwater data within two miles of the Project site indicates a high groundwater level of approximately 72 feet below ground surface (February 2015).

Based on the underlying bedrock, depth to groundwater, and lack of moisture content in the soil samples taken onsite, the Project Geotechnical Investigation concluded that liquefaction would not be a significant concern at the Project site. As such, the potential for the Project to be subject to seismic-related ground failure, including liquefaction, is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Be subject to strong seismic ground shaking.*

Impact Analysis: Based on information presented in the Project Geotechnical Investigation, the Project site is not located within an Alquist-Priolo Earthquake Fault Zone, or adversely affected by known earthquake faults or other seismic hazards. Further, appropriate measures which reduce the effects of seismic events and potentially

adverse geology and soils conditions at the Project site are broadly identified in the CBC as implemented by the County of Riverside.

The Project Geotechnical Investigation provides recommendations and performance standards for the following design and development components/attributes:

- Investigation Section 6.1 Seismic Design Considerations
- Investigation Section 6.2 Geotechnical Design Considerations
- Investigation Section 6.3 Site Grading Recommendations
- Investigation Section 6.4 Construction Considerations
- Investigation Section 6.5 Foundation Design and Construction
- Investigation Section 6.6 Floor Slab Design and Construction
- Investigation Section 6.7 Retaining Wall Design and Construction
- Investigation Section 6.8 Pavement Design Parameters

Through established Site Plan, Building Permit, and Certificate of Occupancy requirements, the County will verify that required design and construction measures are incorporated throughout Project development and are functionally implemented in the completed structures and facilities. It is anticipated that any site-specific geologic constraints which may be encountered during Project implementation will be addressed by compliance with the recommendations of the final Project Geotechnical Investigation(s), and existing County/CBC seismic design regulations, standards, and policies.

Short of a catastrophic event, design of structures in accordance with the final Project Geotechnical Investigation(s), the CBC, and current seismic engineering practices is sufficient to reduce potential effects of ground shaking at the Project site below the level of significance.

Level of Significance: Less-Than-Significant.

Potential Impact: *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 ground subsidence.*

Impact Analysis: According to Riverside County GIS, the site is not located within a subsidence hazard area. As a standard condition of Project approval, the Project would be required to comply with the site-specific recommendations contained in the final Project Geotechnical Investigation, including recommendations related to site preparation and compaction, that would minimize potential hazards in this regard. Based on compliance with the recommendations, the potential for the Project to be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Create cut or fill slopes greater than 2:1 or higher than 10 feet.*

Impact Analysis: The Project would involve slopes higher than 10 feet. The Project Geotechnical Investigation includes recommendations to ensure the stability of newly constructed slopes. As a standard condition of Project approval, the Project would be required to comply with the site-specific recommendations contained in the final Project Geotechnical Investigation, including recommendations related to site preparation, soil compaction, and manufactured slope design that would minimize potential hazards associated with manufactured slopes. Based on compliance with the recommendations, the potential for the Project to result in significant impact related to slopes is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Be located on expansive soil, as defined in Section 1803.5.3 of the California Building Code (2019), creating substantial risks to life or property.*

Impact Analysis: Unmitigated effects of expansive or otherwise unstable soils may adversely affect roadway subgrades, concrete slabs-on-grade, and building foundations. In the event of a severe earthquake in the vicinity, structural foundations and floors may be damaged if constructed in, or over, expansive or unstable soils.

A soil's Expansion Index (EI) is defined by its potential to swell when wet or saturated. Based on testing conducted as part of the Project Geotechnical Investigation, the near surface site soils are generally expected to possess a "non-expansive" to "very low" expansion potential (EI of 0 to 2). Additionally, any site-specific geologic constraints which may be encountered during Project implementation will be addressed by compliance with the recommendations of the final Project Geotechnical Investigation(s), and existing County/CBC seismic design regulations, standards, and policies.

Based on the EI of on-site soils and compliance with the recommendations set forth within the Project Geotechnical Investigation, the potential for the Project to be located on expansive soils is considered less-than-significant.

Level of Significance: Less-Than-Significant.

4.7 HYDROLOGY AND WATER QUALITY

4.7 HYDROLOGY AND WATER QUALITY

Abstract

This Section of the EIR addresses potential impacts of the Project related to hydrology and water quality. The analysis presented herein focuses on the potential for the Project to:

Water Quality Impacts

- *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site;*
- *Violate any water quality standards or waste discharge requirements;*
- *Create or contribute runoff water that would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;*
- *Otherwise substantially degrade water quality; or*
- *Include new or retrofitted stormwater Treatment Control Best Management Practices (BMPs) (e.g., water quality treatment basins, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g., increased vectors or odors).*

Floodplain Impacts

- *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site;*
- *Change absorption rates or the rate and amount of surface runoff; or*
- *Change the amount of surface water in any water body.*

As supported by the analysis presented in this Section, the above-noted potential hydrology/water quality impacts are determined to be less-than-significant.

Additionally, as substantiated in the Initial Study (EIR Appendix A), the Project's potential impacts under the following topics were previously determined to have no impact, or impacts would be less-than-significant. On this basis, the following topics are not further discussed here:

Water Quality Impacts

- *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of the pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);*
- *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map; or*
- *Place within a 100-year flood hazard area structures which would impede or redirect flood flows.*

Floodplain Impacts

- *Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam (Dam Inundation Area).*

Please also refer also to EIR Appendix A, Initial Study Checklist Section Hydrology and Water Quality.

4.7.1 INTRODUCTION

Information presented in this Section has been summarized or excerpted from: *Preliminary Hydrology Report for Sares-Regis Industrial Development, County of Riverside California* (Michael Baker International) July 2019 (Project Hydrology Report); and *Project Specific Water Quality Management Plan, Oleander Business Park* (Michael Baker International) March 25, 2019 (Project Water Quality Management Plan).

The Project Hydrology Report and Project Water Quality Management Plan (WQMP) are provided at EIR Appendix H. Additional source and background information presented in this Section was obtained from the California State Water Resources Control Board (SWRCB), the Santa Ana Regional Water Quality Control Board (SARWQCB), County of Riverside General Plan (General Plan), and the Riverside County Flood Control and Water Conservation District (RCFCWCD).

4.7.2 SETTING

4.7.2.1 Regional Hydrology

The Project site and surrounding region lie within the Santa Ana Hydrologic Basin Planning Area (Basin Planning Area). The Santa Ana River (River) is the dominant hydrologic feature within the region, draining an approximately 2,650-square-mile area generally defined by the San Gabriel and San Bernardino Mountains to the north and the Santa Margarita River Watershed to the south. Within this drainage area, the River flows southwesterly from the San Bernardino Mountains toward the San Bernardino and Chino valleys, through the Santa Ana Mountains, to the Orange County coastal plain/Huntington Beach and the River's mouth at the Pacific Ocean. Runoff from the Project site and surrounding areas drain generally to Canyon Lake and Lake Elsinore.

4.7.2.2 Surface Water

Surface water quality within the Basin Planning Area is regulated by the Santa Ana SARWQCB. The SARWQCB Basin Plan (Basin Plan) establishes water quality standards for all ground and surface waters within the Santa Ana Region (Region). The Region includes the upper and lower Santa Ana River Watersheds, the San Jacinto River Watershed, and several other small drainage areas.

4.7.2.3 Groundwater

The Project site overlies the Perris North Groundwater Basin Management Zone (Basin Management Zone).[1] During 2017, depth to groundwater within the Basin Management Zone ranged from approximately 11.1 feet to 186.4 feet below ground surface (bgs).[2] Groundwater was not encountered in subsurface explorations conducted as part of the Project Geotechnical Investigation.[3]

4.7.2.4 Water Courses/Flooding

The Project site is located in the San Jacinto River Watershed. There are no designated U.S. Geological Survey (USGS) blue line streams within the Project site.[4] The Project does not propose or require activities that would affect any off-site blueline streams. The Project site is not located in a designated floodplain area.[5]

---

[1] Eastern Municipal Water District. (n.d.). *2015 Urban Water Management Plan*. p. 6-11. Retrieved from https://www.emwd.org/post/urban-water-management-plan

[2] Eastern Municipal Water District. (n.d.). West San Jacinto Groundwater Management Area 2017 Annual Report. P. 18. Retrieved from https://board.emwd.org/Citizens/Detail_LegiFile.aspx?Frame=&MeetingID=1595&MediaPosition=&ID=3345&CssClass=

[3] *Geotechnical Investigation, Mead Valley Business Park, SWC Nandina Avenue and Decker Road, Unincorporated Riverside County (Perris Area), California* (Southern California Geotechnical), June 13, 2019 (EIR Appendix G).

[4] Project Hydrology Report, *Existing Conditions*, n.p.

[5] Riverside County Parcel Report, Assessor Parcel Numbers (APNs) 295310012, 295310013, 295310014, 295310015, retrieved January 9, 2019.

Stormwater Management and Flood Control

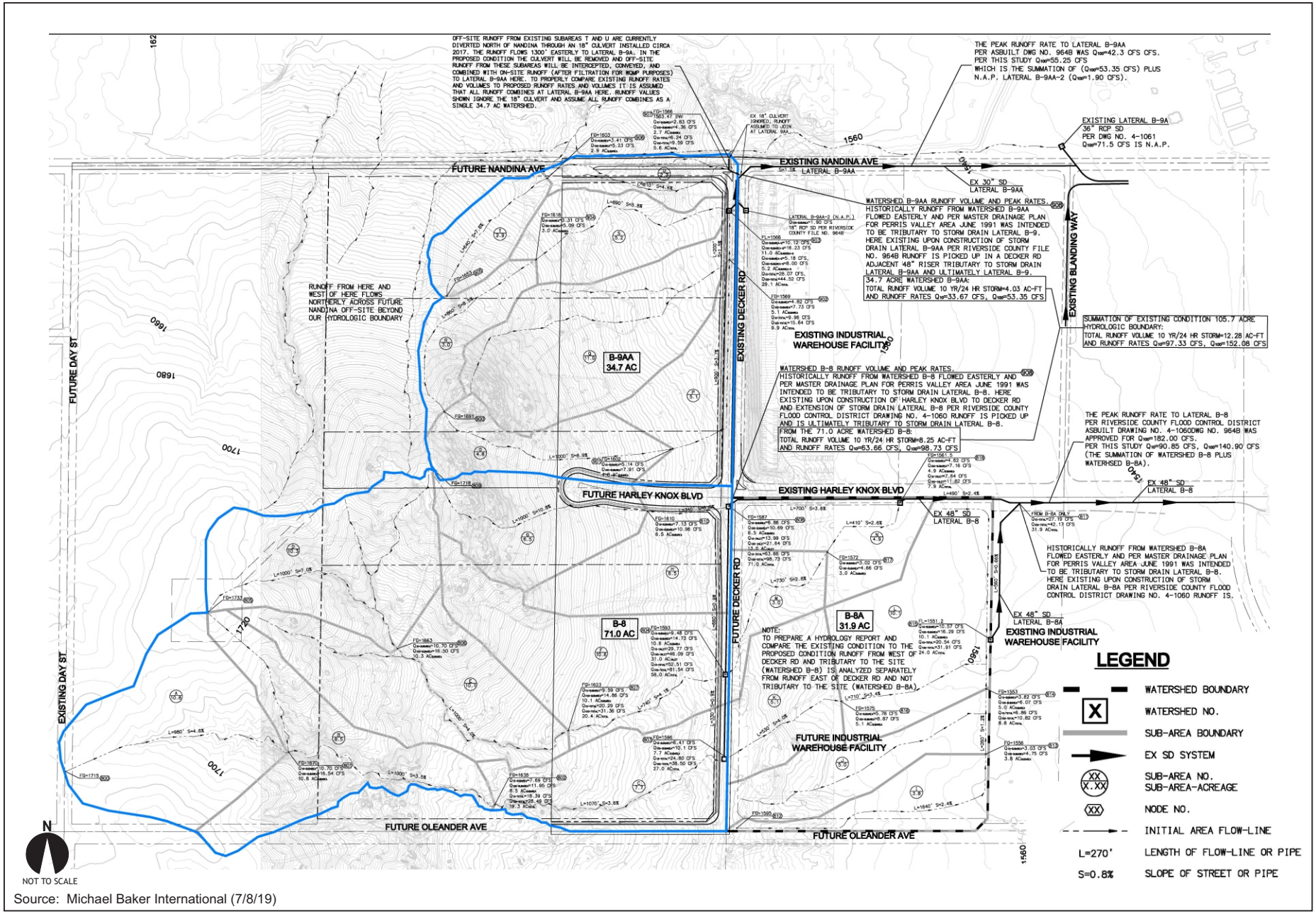
With respect to stormwater management and flood control, the Project site and surrounding areas are under the jurisdiction of the RCFCWCD. The RCFCWCD provides the following services and regulates the following conditions:

- Identification of flood hazards and problems;
- Regulation of floodplains and development;
- Regulation of drainage and development;
- County Watercourse and Drainage Planning;
- Education for Flood Prevention & Safety;
- Construction of Flood Control Structures and Facilities;
- Flood Warning and Early Detection; and
- Maintenance and operation of completed structures.[6]

4.7.2.5 Project Site Hydrology

Under existing conditions, the Project site drains generally easterly within three Watershed areas. The Watershed areas evaluated in the Project Hydrology Study are apportioned and named based on the storm drain lateral that each Watershed is tributary to. For example, Project Hydrology Study Watershed B-9AA comprises that area that is tributary Lateral B-9. Descriptions of the Project Hydrology Study Watershed areas are summarized below. The Project Hydrology Study Watershed areas are depicted at Figure 4.7-1, *Existing Hydrology Condition*. Note that total acreage of the Project Hydrology Study Watershed areas includes off-site properties that would contribute to Project stormwater discharges. The total Project Hydrology Study Watershed acreage is therefore greater than the Project site acreage as described at EIR Section 3, *Project Description*.

[6] Riverside County Flood Control and Water Conservation District. (2019). District Overview. Retrieved from http://www.floodcontrol.co.riverside.ca.us/DistrictOverview.aspx



Source: Michael Baker International (7/8/19)

applied planning inc

Figure 4.7-1
Existing Hydrology Condition

Project Site and Off-Site Areas Contributing to Project Site Stormwater Discharges

- **Watershed B-9AA** comprises approximately 34.7 acres located northwesterly of the intersection of Decker Road and Harley Knox Boulevard. The existing runoff rates from Watershed B-9AA are: Q10=33.67 CFS and Q100=53.35 CFS.[7] Hydrograph analysis of the 10-year/24-hour storm event indicates that the total stormwater discharge from Watershed B-9AA is 4.03 acre-feet (Project Hydrology Study, *Existing Conditions*, n.p.).

- **Watershed B-8** comprises approximately 71.0 acres beginning near the intersection of existing Day Street and future Oleander Avenue extending easterly to future Decker Road. The existing runoff rates from Watershed B-8 are: Q10=63.66 CFS and Q100=98.73CFS. Hydrograph analysis of the 10-year/24-hour storm event shows that the total stormwater discharge from Watershed B-8 is 8.25 acre-feet (Project Hydrology Study, *Existing Conditions*, n.p.).

Summary

Under existing conditions, stormwater discharges from the Project site and off-site contributing areas for the 10-year/24-hour storm event total approximately 12.28 acre-feet. Peak runoff totals are: Q10=97.33 CFS and Q100=152.08CFS.

Off-site Areas Tributary to the Project Site

- **Watershed B-8A** comprises approximately 31.9 acres located easterly of the Project site, at the southeast corner of Harley Knox Boulevard and future Decker Road. This Watershed would not be developed as part of the Project but is analyzed because the Project site Watershed B-8 is tributary to it. The existing runoff rates from Watershed B-8A alone are: Q10=27.19 CFS and Q100=42.17 CFS. When stormwater discharges from Project Watershed B-8 are added, the total stormwater discharge received at Lateral B-8 downstream from Watershed B-8A are: Q10=90.85 CFS, Q100=140.90 CFS.

[7] $Q_{\#\#}$ = Peak runoff rate expressed in cubic feet per second (CFS) for a given design year storm event. For example, Q_{10} = Peak runoff rate for a 10-year storm event, Q_{100} = Peak runoff rate for a 100-year storm event.

4.7.3 HYDROLOGY/WATER QUALITY POLICIES AND REGULATIONS

Federal, state, and local policies and regulations that act to reduce potential hydrologic impacts and/or act to protect and preserve water quality are summarized below.

4.7.3.1 Federal Water Pollution Control Act, Federal Clean Water Act (CWA)

The principal law governing pollution of the nation's surface waters is the Federal Water Pollution Control Act, or Clean Water Act (CWA). The CWA requires states to adopt water quality standards. Moreover, the CWA states that discharge of pollutants into waters of the United States from any point source is unlawful unless the discharge complies with the National Pollution Discharge Elimination System Permit (NPDES Permit).

The NPDES is a national program established under Section 402 of the CWA. The CWA establishes the framework for regulating municipal and industrial stormwater discharges under the NPDES program. In California, the NPDES program is administered through the state's nine Regional Water Quality Control Boards, including the Santa Ana Regional Water Quality Control Board (SARWQCB, Regional Board). The SARWQCB is responsible for determining compliance with the water quality requirements of the CWA.

Non-point construction-source pollutants are regulated by the SARWQCB through the General Construction Activity Stormwater NPDES Permit (General Permit). Construction activities that are subject to provisions of the General Permit include clearing, grading, and disturbances to the ground such as stockpiling or excavation that result in soil disturbances.

The Project would be required to implement and comply with applicable provisions of the CWA.

4.7.3.2 State of California

The CWA allows the Environmental Protection Agency (EPA) to delegate its NPDES system permitting authority to states with an approved regulatory program. The CWA authorizes discharge of pollutants into California waters by issuance of NPDES Permits.

The California Porter-Cologne Water Quality Act establish applicable water quality objectives for ground and surface waters in the state. In general, protection and maintenance of surface water quality is the combined responsibility of the applicable Regional Water Quality Control Board (RWQCB), water supply and wastewater management agencies and County governments. The Project would be required to comply with applicable Porter-Cologne water quality protection policies and mandates.

4.7.3.3 Water Quality Control Plan for the Santa Ana Region (Basin Plan)

The Water Quality Control Plan for the Santa Ana Region (Basin Plan) describes existing water quality of conditions and establishes water quality goals and policies. The Basin Plan is also the basis for the Regional Board's regulatory programs. To this end, the Basin Plan establishes water quality standards for all the ground and surface waters of the region. The term "water quality standards," includes both the beneficial uses of specific water bodies and the levels of quality which must be met and maintained to protect those uses. The Basin Plan includes an implementation plan describing the actions by the Regional Board and others that are necessary to achieve and maintain target water quality standards.

The Basin Plan has been in place since 1995, with updates in 2008, 2011, 2016; and proposed updates for 2019. The Basin Plan supports the public health and welfare by maintaining or enhancing water quality and furthering potential beneficial uses of the water.

Please refer also to the Basin Plan, available at:
http://www.waterboards.ca.gov/rwqcb8/water_issues/programs/basin_plan/index.shtml.

4.7.3.4 Riverside County Flood Control & Water Conservation District

The SARWQCB has issued an areawide NPDES Municipal Separate Storm Sewer System Permit (NPDES Permit) to the Riverside County Flood Control & Water Conservation District (the Principal Permittee), the County of Riverside and the Cities of Beaumont, Calimesa, Canyon Lake, Corona, Hemet, Lake Elsinore, Moreno Valley, Menifee, Norco, Perris, Riverside, San Jacinto and Wildomar (Permittees). Entities regulated under the NPDES Permit must implement plans and programs to control and treat construction-source and post-construction stormwater pollutant discharges in compliance with CWA requirements. In general, provided dischargers implement required construction-source and post-construction stormwater pollutant control plans and programs, the discharger is deemed to comply with provisions of the CWA and the NPDES Permit.

Construction Stormwater Pollution Prevention Plan Required

Requirements of the NPDES Permit include a mandate that all dischargers develop and implement a Stormwater Pollution Prevention Plan (SWPPP) addressing construction-source stormwater pollutant discharges. SWPPP requirements include the following:

- All pollutant sources shall be identified;
- BMPs shall be implemented in order to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site during construction;
- A maintenance schedule for BMPs installed during construction shall be implemented; and
- BMPs shall be described for control of discharges from waste handling and disposal areas and methods of on-site storage and disposal of construction materials and construction waste.

Under the provisions of the SWPPP, an effective combination of erosion and sediment control for all disturbed areas during the rainy season must be implemented. The SWPPP must include a description of the erosion control practices. The SWPPP is required to include descriptions of the BMPs to reduce pollutants in stormwater discharges subsequent to construction activities. Typical BMPs that would be implemented under the Project SWPPP would include, but would not be limited to:

- Silt Fences;
- Check Dams;
- Gravel Bag Berms;
- Street Sweeping and Vacuuming;
- Sand Bag Barriers;
- Storm Drain Inlet Protection;
- Wind Erosion Control;
- Stabilized Construction Entrance/Exit; and
- Entrance/Outlet Tire Wash.

Water Quality Management Plan (WQMP) Required

In compliance with The *Riverside County Stormwater/Urban Runoff Management And Discharge Controls Ordinance* (County Ordinance No. 754 and amendments), and provisions of the Santa Ana Watershed Protection Program, the Project would be required to implement a Water Quality Management Plan (WQMP) to control and treat post-construction stormwater pollutant discharges. To these ends, a preliminary Project-Specific WQMP (Project WQMP, WQMP) has been developed and is provided at EIR Appendix H. The Project WQMP identifies a range of recommended structural and non-structural pollutant source control and treatment BMPs to be implemented.

The Project WQMP structural source control BMPS and operational source control BMPS are summarized below at Table 4.7-1. The Project WQMP is subject to review and approval by the County. Please refer also to the Project WQMP, EIR Appendix H.

Table 4.7-1
Permanent and Operational Source Control Measures

Potential Sources of Runoff Pollutants	Structural Source Control BMPs	Operational Source Control BMPs
On-site Storm Drain Inlets	Mark all inlets with the words "Only Rain Down the Storm Drain" or similar. Catch Basin markers may be available from the Riverside County Flood Control and Water Conservation District, call 951.955.1200 to verify.	Maintain and periodically repaint or replace inlet markings. Provide stormwater pollution prevention information to new site, owners, lessees, or operators. See applicable operational BMPs in Fact Sheet SC- 44, "Drainage System Maintenance," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com. Include the following in lease agreements: "Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains."
Need for Indoor and Structural Pest Control	Doors will always remain closed.	Provide Integrated Pest Management (IPM) information to owners, lessees, and operators.
Landscape/Outdoor Pesticide Use	State that all final landscape plans will accomplish all of the following: Preserve existing native trees, shrubs, and ground cover to the maximum extent possible. Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to stormwater pollution. Where landscaped areas are used to retain or detain stormwater, specify plants that are tolerant of saturated soil conditions. Consider using pest-resistant plants, especially adjacent to hardscape. To ensure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.	Maintain landscaping using minimum or no pesticides. See applicable operational BMPs in "What you should know for…Landscaping and Gardening" at http://rcflood.org/stormwater/. Provide IPM information to new owners, lessees and operators.

Table 4.7-1
Permanent and Operational Source Control Measures

Potential Sources of Runoff Pollutants	Structural Source Control BMPs	Operational Source Control BMPs
Refuse Areas	Refuse will be handled with Refuse Areas that will have covered receptacles. These are located on the west side of the project adjacent to truck parking. Signs will be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar.	There will be adequate number of receptacles for the Project site. Receptacles will be inspected regularly. Repair or replacement of leaky receptacles, as needed. Receptacles will be covered at all times. Dumping of liquid or hazardous wastes is strictly prohibited. "No hazardous materials" signs will be posted at refuse areas. Litter will be inspected and picked up daily. Spill control materials will be available on-site. See Fact Sheet SC-34, "Waste Handling and Disposal" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com
Industrial Processes	All process activities to be performed indoors. No processes to drain to exterior or to storm drain system.	See Fact Sheet SC-10, "Non-Stormwater Discharges" in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com. See the brochure "Industrial & Commercial Facilities Best Management Practices for: Industrial, Commercial Facilities" at http://rcflood.org/stormwater/.
Loading Docks		Move loaded and unloaded items indoors as soon as possible. See Fact Sheet SC-30, "Outdoor Loading and Unloading," in the CASQA Stormwater Quality Handbooks at www.cabmphandbooks.com.
Plazas, Sidewalks, and Parking Lots		Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect washwater containing any cleaning agent or degreaser and discharge to the sanitary sewer not to a storm drain.

Source: *Preliminary Hydrology Report for Sares-Regis Industrial Development, County of Riverside California* (Michael Baker International) July 2019.

Low Impact Development (LID) Bioretention/Biotreatment BMPs

The Project WQMP recommends Low Impact Development (LID) Bioretention/Biotreatment BMPs to control and treat stormwater discharges from the Project site. Project LID Bioretention/Biotreatment BMPs would conform to design criteria and performance standards presented in *Water Quality Management Plan, A Guidance Document for the Santa Ana Region of Riverside County* (Santa Ana Regional Water Quality Control Board) October 22, 2012 (WQMP Guidance Document) Section 3.4.2

Types of LID BMPs. Implementation of LID measures act to minimize potential stormwater pollutant discharges under post-development conditions.

Please refer also to:
http://rcflood.org/downloads/NPDES/Documents/SA_WQMP/SantaAnaWQMPGuidance.pdf.

The Project would also be required to comply with applicable provisions of the Statewide Industrial General Permit 2014-0057-DWQ. The Statewide Industrial General Permit (IGP) implements applicable federal regulations addressing industrial activities that discharge stormwaters to waters of the United States.

Please refer also to:
https://www.waterboards.ca.gov/water_issues/programs/stormwater/igp_20140057dwq.shtml.

4.7.3.5 Riverside County

Riverside County Ordinance No. 754, the *Riverside County Stormwater/Urban Runoff Management and Discharge Controls Ordinance*, promotes future, health, safety, and general welfare of the County residents by:

> A. Reducing pollutants in stormwater discharges to the maximum extent practicable;
>
> B. Regulating illicit connections and discharges to the storm drain system; and
>
> C. Regulating non-stormwater discharges to the storm drain system. The intent of this ordinance is to protect and enhance the water quality of County watercourses, water bodies, groundwater, and wetlands in a manner pursuant to and consistent with applicable requirements contained

> in the Federal Clean Water Act, Title 33 U.S.C.§§ 1521 et seq.), Porter-Cologne Water Quality Control Act (California Water Code §§ 1300 et seq.), any applicable state of federal regulations promulgated thereto, and any related administrative orders or permits issued in connection therewith. (Ordinance No. 754, p. 1).

Ordinance No. 754 requires that new development "control stormwater runoff so as to prevent any deterioration of water quality that would impair subsequent or competing uses of the water" (Ordinance No. 754, p. 4). To these ends, Ordinance No. 754 identifies categories of available stormwater control and treatment BMPs that may be required in support of the Ordinance Purpose and Intent. As provided under the Ordinance, "[t]he Director of TLMA [Transportation Land Management Agency] shall identify the BMP's that may be implemented to prevent such deterioration and shall identify the manner of implementation" (Ordinance No. 754, p. 4).

Additionally, the Project Applicant would be required to pay County Development Impact Fees (DIF) pursuant to County Ordinance No. 659 and amendments. A portion of the DIF collected for development projects in the Mead Valley Area Plan is assigned to area master plan flood control improvements. These master plan flood control improvements provide an area wide stormwater management system in support of land uses and development envisioned under the County General Plan.

4.7.4 PROJECT DRAINAGE IMPROVEMENTS

4.7.4.1 Overview

The Project Hydrology Study (EIR Appendix H) demonstrates that stormwater discharges from the developed Project site would be adequately conveyed by existing and proposed stormwater management systems. In this regard, the Project Hydrology Study concludes that . . "[r]unoff rates are reduced or limited to the existing runoff rates to the tributary storm drain system. Hydraulic calculations show that the existing down-

stream storm drain system is sufficiently sized to convey proposed runoff . . ." (Project Hydrology Study *Conclusion*, n.p.)

4.7.4.2 Project Stormwater Management System Concept

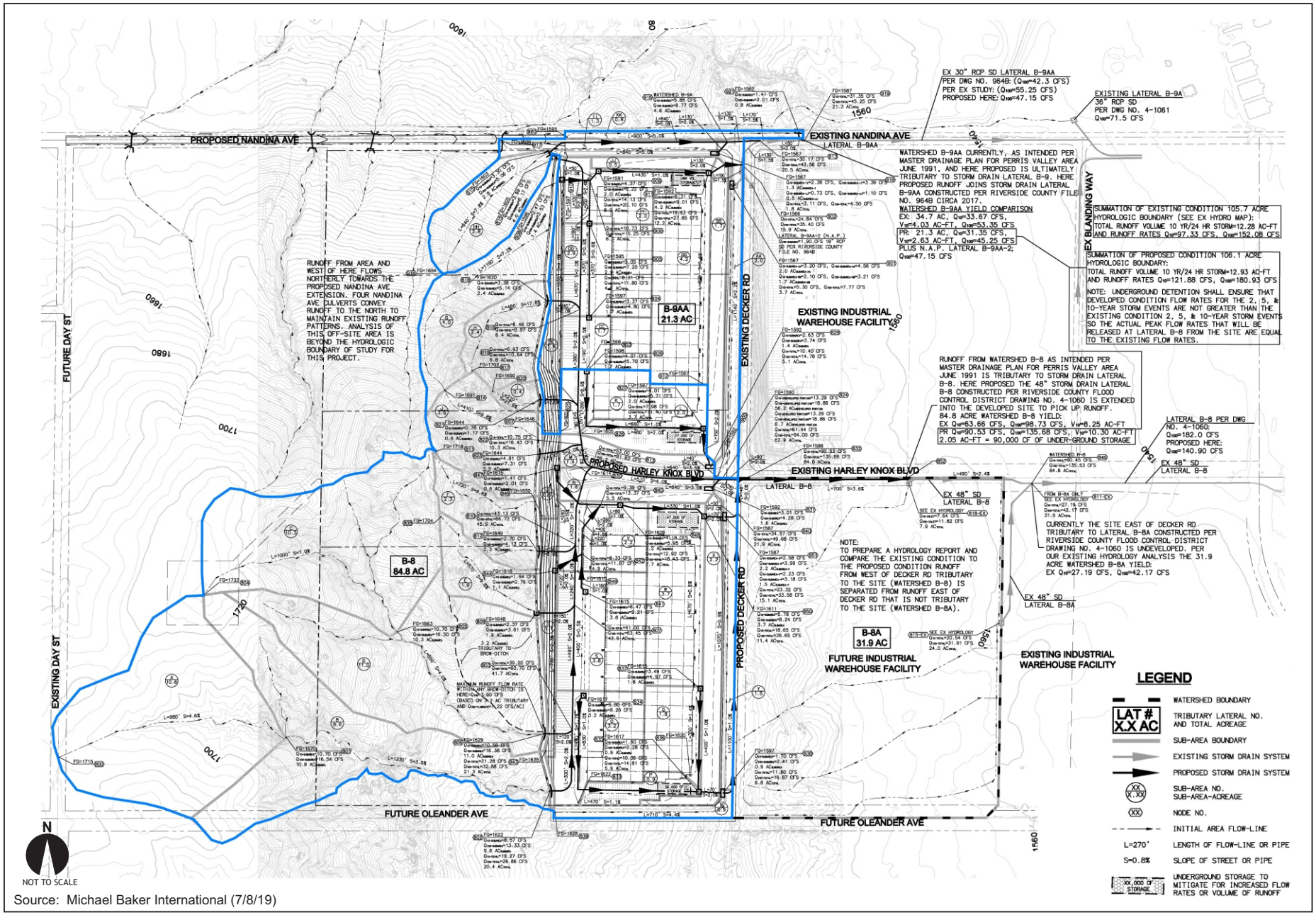
The Project would implement a system of storm drains and stormwater treatment areas, and would provide connections to the existing adjacent off-site storm drain system. For analysis purposes, the Project site under post-development conditions is apportioned into three primary Watersheds described below:

Watershed B-8: Approximately 84.8 acres generally comprising westerly undeveloped areas and southerly portions of the developed Project site extending to proposed Decker Road.

Watershed B-9AA: Approximately 21.3 acres comprising developed areas of the Project site located northerly of proposed Harley Knox Boulevard easterly of Watershed B-8 extending to proposed Decker Road. Watershed B-9AA also includes the 2.8-acre Watershed Sub-area HH, located upstream and northwesterly of developed portions of the Project site.

Watershed B-8A: Approximately 31.9 acres, located easterly of the Project site, at the southeast corner of Harley Knox Boulevard and future Decker Road. As under existing conditions, this Watershed would not be developed as part of the Project but is analyzed because the Project site is tributary to it.

Post-development Watershed areas, primary Project stormwater management system components, and Project stormwater management system performance are summarized below. Please refer also to Figure 4.7-2, *Proposed Hydrology Condition*.



Source: Michael Baker International (7/8/19)

applied planning inc

Figure 4.7-2
Proposed Hydrology Condition

Post-development drainage patterns would respect the tributary drainage areas and drainage patterns depicted on the Master Drainage Plan for Perris Valley Area June 1991 (see: http://www.floodcontrol.co.riverside.ca.us/MDPMapReports.aspx). The Project storm drains would convey developed runoff to the existing downstream storm drain systems. Project storm drains would be of High Density Polyethylene (HDPE) or Reinforced Concrete Pipe (RCP) composition. Off-site flows would not be mixed with on-site flows prior to water quality treatment of on-site flows. Final design and construction of the Project stormwater management system would be subject to County review and approval, and would be required to conform to County of Riverside criteria and performance standards.

Street-side Catch Basins[8]: Two catch basins are proposed along Harley Knox Boulevard and two catch basins are proposed along Decker Road southerly of Harley Knox Boulevard. These four catch basins would convey stormwater discharge to existing Lateral B-8 in Harley Knox Boulevard. Additionally, three catch basins are proposed near the intersection of Nandina Avenue and Decker Road. These three catch basins would convey stormwater discharge via Project storm drain extensions to existing Lateral B-9AA in Nandina Avenue.

Runoff from Undeveloped Project Areas: The 2.8-acre post-development Watershed Sub-area HH, located upstream and northwesterly of developed portions of the Project site, would be intercepted at an inlet structure near Nandina Avenue and then conveyed by Project storm drains existing to Lateral B-9AA located in Nandina Avenue.

Stormwater discharges from approximately 56.2 acres of undeveloped areas located westerly and upstream of the developed Project site (a portion of post-development

[8] Catch basins have a grated inlet, with an underground box connecting to a drainage pipe that slopes away from the basin. Water and solids enter the box through the grate, solids settle to the bottom while water drains out of the pipe. Catch basins maintain proper drainage and capture debris, which helps downstream drainage systems from becoming clogged.

Watershed B-8) would be intercepted by brow ditches[9] at the westerly Project grading limits. This stormwater discharge would be reintroduced via Project storm drains into the existing 48-inch RCP storm drain Lateral B-8 located in Harley Knox Boulevard.

Runoff from the undeveloped westerly areas of the Project site would be conveyed primarily by existing natural earthen gullies as concentrated flow. Inlet structures would be positioned along the westerly limits of the developed portions of the Project site to intercept these concentrated flows.

Where stormwater discharge from undeveloped areas would be conveyed by sheet-flow, brow ditches along the westerly limits of the developed portions of the Project site are proposed to capture stormwater discharge. Hydrologic calculations performed as part of the Project Hydrology Study demonstrate that the maximum flow rate expected in any brow ditch would be Q100=3.9 CFS (Project Hydrology Study *Proposed Conditions*, n.p.).

To facilitate maintenance of the above-noted drainage inlets and brow ditches, an access road would be constructed along the westerly edge of the developed Project site.

Under existing conditions, a portion of the stormwater discharges from undeveloped westerly areas of the Project site flow northerly across the unimproved Nandina Avenue alignment. The Project would construct Nandina Avenue along the northerly Project site boundary. As part of the Nandina Avenue roadway improvement, culverts would be constructed along the southerly edge of Nandina Avenue to intercept stormwater discharge at points of concentration. Intercepted stormwater discharges would be conveyed to the northerly side of Nandina Avenue, thereby maintaining existing drainage patterns.

2:1 Slope to be Constructed at the Westerly Edge of the Developed Project Area: A 2:1 slope would be cut in the existing bedrock along the westerly edge of the developed Project area. For hydrologic analytic purposes, this slope has been evaluated as a

[9] Brow ditches are designed and constructed to convey relatively minor surface drainage runoff. Brow ditches are typically private facilities.

"Commercial/Industrial" cover type. At the bottom of this slope, an intercepting v-ditch would be constructed. This v-ditch would convey any intercepted stormwater discharge to the on-site storm drain system.

Post-Development Watershed B-9AA: Runoff from post-development Watershed B-9AA (approximately 21.3 acres) would be conveyed via Project storm drains to existing 30-inch RCP Lateral B-9AA at the intersection of Nandina Avenue and Decker Road.

When compared to existing conditions, peak stormwater discharges and total stormwater discharges to receiving facilities/areas would be reduced under post-development conditions. A summary of existing and post-development conditions is presented below:

- Existing Condition: 10-year/24-hour stormwater discharge volume=4.03 acre-feet; Q10=33.67 CFS, Q100=53.35 CFS.

- Post-development Condition: 10-year/24-hour stormwater discharge volume=2.63 acre-feet; Q10=31.35 CFS, Q100=45.25 CFS.

Based on the preceding, underground storage to reduce volume and rate of stormwater discharges from post-development Watershed B-9AA is not anticipated. In the event that engineering analyses conducted as part of the Project final designs determine differently, underground storage systems would be provided to ensure that stormwater discharge volumes and rates from post-development Watershed B-9AA would not exceed existing conditions. Final designs of any required underground storage facilities would be subject to County review and approval.

Post-Development Watershed B-8: Runoff from post-development Watershed B-8 (approximately 84.8 acres) would be conveyed by a Project storm drain that would connect easterly to the existing 48-inch RCP Lateral B-8 located in Harley Knox Boulevard.

When compared to existing conditions, total stormwater discharges and peak stormwater discharges to receiving facilities/areas would be increased under post-development conditions. A summary of existing and post-development conditions is presented below:

- Existing Condition: 10-year/24-hour stormwater discharge volume=8.25 acre-feet; Q10=63.66 CFS, Q100=98.73 CFS.
- Post-development Condition: 10-year/24-hour stormwater discharge volume=10.30 acre-feet; Q10=90.53 CFS, Q100=135.68 CFS.

Increased stormwater discharges under post-development conditions would be reduced to levels not exceeding existing conditions by utilizing underground storage. Preliminary sizing of required underground storage facilities is based on the difference between the post-development 10-year/24-hour stormwater discharge volume and the existing 10-year/24-hour stormwater discharge volume. Underground storage necessary to reduce post-development discharges would therefore be: 10.30 acre-feet – 8.25 acre-feet=2.05 acre-feet, or 89,300 Cubic Feet (CF). The Project Hydrology Study indicates that 90,000 CF of underground storage would be provided, adequate to accommodate the 89,300 CF requirement. Final location(s) and design(s) of proposed underground storage facilities would be subject to County review and approval.

Developed stormwater from post-development Watershed B-8 would be routed through the proposed underground storage areas. Release of stormwater discharges from the proposed underground storage facilities would be controlled so as not to exceed the existing condition (Q10=63.66 CFS, Q100=98.73 CFS) (Project Hydrology Study *Proposed Conditions*, n.p.).

Post-Development Watershed B-8A: Under existing conditions, stormwater discharges from the Project Watershed B-8 is tributary to and contributes to stormwater discharges from easterly adjacent Watershed B-8A. Under post-development conditions, stormwater discharges from Project site Watershed B-8 would be intercepted and

conveyed to the existing 48-inch RCP Lateral B-8 that currently terminates easterly of Decker Road in Harley Knox Boulevard. Runoff from the developed Project site would therefore no longer be tributary to or contribute to stormwater discharges affecting Watershed B-8A, and the total stormwater discharge rates from Watershed B-8A would be reduced when compared to existing conditions.

The existing stormwater management infrastructure serving Watershed B-8A was designed to convey all developed on-site and received off-site stormwater discharges, including stormwater discharges currently received from the westerly adjacent Project site Watershed B-8. The existing stormwater management infrastructure serving Watershed B-8A is assumed to be sufficiently sized to convey the reduced stormwater discharges that would occur under Project post-development conditions. A summary of existing and post-development conditions is presented below:

- Existing Condition: Q10=90.85 CFS, Q100=140.90 CFS.

- Post-development Condition: Q10=27.19 CFS, Q100=42.17 CFS.

4.7.3.4 Receiving Storm Drain System

The Project would construct storm drains that would connect to the existing Perris Valley Master Drainage Plan (MDP) storm drain system serving the area. Under post-development conditions, Project stormwater discharges from Watershed B9-AA would be conveyed to MDP Lateral B-9AA; Project stormwater discharges from Watershed B-8 would be conveyed to MDP Lateral B-8. Characteristics and capacities of the receiving storm drain system are summarized below.

Lateral B-9AA is a 30-inch (2.5 feet diameter) RCP located within Nandina Avenue along the northerly Project boundary. Per County File No. 964B, Q100=42.3 CFS for Lateral B-9AA. File No. 964B does not however indicate the design capacity for Lateral B-9AA. To determine if Lateral B-9AA has sufficient capacity to accept Project stormwater discharges, existing Lateral B-9AA flow rates and storm drain flow depths were

compared to calculated flow rates and storm drain flow depths that would occur with the addition of Project stormwater discharges. Normal depth calculations show that in the existing condition with Q100=55.25 CFS, the 2.5 feet diameter Lateral B-9AA storm drain runs at 2.36 feet deep when using the minimum pipe slope of 1.5%.

Under post-development conditions, discharges to and depth of flow in Lateral B-9AA would be reduced when compared to existing conditions. More specifically, normal depth calculations show that under post-development conditions with Q100=47.15 CFS, the 2.5 foot diameter pipe would run at 1.92 feet deep when using the minimum pipe slope of 1.5%. On this basis, Lateral B-9AA is sufficiently sized to convey the Project stormwater discharges.

Lateral B-8 is a 48-inch RCP located in Harley Knox Boulevard easterly of the Project site. Per Riverside County Drawing No. 4-1060, Q100=182.0 CFS for Lateral B-8. Under post-development conditions, Project stormwater discharge to Lateral B-8 would be Q100=140.90 CFS which is less than the County's Q100=182.0 CFS for Lateral B-8. Lateral B-8 is therefore sufficiently sized to convey the Project stormwater discharges.

4.7.5 STANDARDS OF SIGNIFICANCE

Consistent with the standards of significance outlined in the *CEQA Guidelines* as implemented by Riverside County, hydrology/water quality impacts would be considered potentially significant if the Project would:

Water Quality Impacts

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site;

- Violate any water quality standards or waste discharge requirements;

- Create or contribute runoff water that would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;

- Otherwise substantially degrade water quality;

- Include new or retrofitted stormwater Treatment Control Best Management Practices (BMPs) (e.g., water quality treatment basins, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g., increased vectors or odors);

- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of the pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);

- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map; or

- Place within a 100-year flood hazard area structures which would impede or redirect flood flows.

Floodplain Impacts

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site;

- Change absorption rates or the rate and amount of surface runoff;

- Change the amount of surface water in any water body; or

- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam (Dam Inundation Area).

4.7.6 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.7.6.1 Introduction

The following discussions address environmental topics and issues where it has been determined pursuant to the EIR Initial Study/NOP processes, that the Project may result in or cause potentially significant hydrology/water quality impacts. As substantiated in the Initial Study (EIR Appendix A), the Project's potential impacts under the following topics are determined to have no impact or impacts would be less-than-significant, and are not further substantively discussed here:

Water Quality Impacts

- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of the pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map; or
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows.

Floodplain Impacts

- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam (Dam Inundation Area).

Please also refer to Initial Study Checklist Section *Hydrology and Water Quality*.

4.7.6.2 Impact Statements

Water Quality Impacts

Potential Impact: *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site.*

Impact Analysis: Post-development drainage patterns would respect the tributary drainage areas and drainage patterns depicted on the Master Drainage Plan for Perris Valley Area June 1991. The Project does not propose or require alteration of any streams or rivers.

Developed stormwaters would be conveyed by storm drains connecting to the existing MDP storm drain system and would not be discharged to areas subject to erosion. Stormwaters from the Project site would therefore not be discharged in a manner that cause or result in substantial erosion. The Project SWPPP and WQMP, discussed subsequently, would ensure that substantial erosion and/or siltation would not otherwise occur under post-development conditions.

Based on the preceding, the potential for the Project to substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site would be less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Violate any water quality standards or waste discharge requirements; or otherwise substantially degrade water quality.*

Impact Analysis:

Project SWPPP and Compliance with Regulatory Requirements Address Construction-Source Water Quality Impacts

During site preparation activities, any existing groundcover would be removed from the site, exposing the Project area to increased wind and water erosion potentials. Further, construction site runoff may carry increased loads of sediment, heavy metals and petroleum hydrocarbons (from machinery) which could degrade water quality. In accordance with NPDES requirements, the Project Applicant would be required to prepare and implement a construction activities erosion control plan to alleviate potential sedimentation and stormwater discharge contamination impacts of the Project.

The Applicant would also be responsible for compliance with the General Construction NPDES permit from the SARWQCB by filing a Notice of Intent to Commence Construction Activities. Under the General Construction Permit, discharge of materials other than stormwater is prohibited. The General Construction Permit stipulates further that the Applicant shall prepare, retain at the construction site, and implement a SWPPP which identifies the sources of sediments and other pollutants that affect the quality of stormwater discharge, and implement practices to reduce sediment and other pollutants to stormwater discharge. SWPPP requirements include identification of construction and post-construction BMPs that would act to reduce sediments and other pollutants.

Implementation of the Project SWPPP and compliance with applicable NPDES and SARWQCB requirements would ensure that potential construction-source water quality impacts of the Project are reduced below the level of significance.

Project WQMP and Compliance with Regulatory Requirements Address Post-Construction Water Quality Impacts

Over the life of the Project, contaminants such as oil, fuel and grease that are spilled or left behind by vehicular traffic, collect and concentrate on paved surfaces. During storm events, these contaminants are washed into the storm drain system and may potentially degrade receiving water quality. Stormwater runoff from paved surfaces within the developed Project area could carry a variety of urban wastes, including greases and oils and small amounts of metals which are common by-products of vehicular travel. In addition, storm runoff will likely contain residual amounts of fertilizers and plant additives washed off from landscaped areas.

Recognizing the potential hazards of such urban runoff, the EPA has issued regulations which require municipalities to participate in the NPDES program. As part of this program, the SARWQCB has issued an NPDES permit for urban runoff to the RCFCWCD, and the County has been established as a co-permittee. Compliance with the provisions specified in the NPDES permit ensures proper management and disposal of urban runoff from the Project.

To ensure adequate and appropriate treatment of stormwater discharges, the Project stormwater management system concept and associated WQMP would incorporate treatment systems to remove potential pollutants of concern from developed stormwater discharges onsite prior to release to the master plan drainage system. More specifically, the Project WQMP would provide volume-based underground storage areas and MWS bio-filtration facilities. Additionally, self-treating landscape areas would be constructed along the Project perimeter. Please refer also to Project WQMP Section D: *Implement LID BMPs* for specific water quality treatment systems and facilities to be implemented by the Project. The Project WQMP would be designed, constructed, operated and maintained in conformance with design criteria and performance standards presented in the Santa Ana Regional Water Quality Control Board WQMP Guidance Document.

The Project would also be required to comply with applicable provisions of the Statewide IGP. The Statewide IGP implements applicable federal regulations addressing industrial activities that discharge stormwaters to waters of the United States.

Based on the preceding, the potential for the Project to violate any water quality standards or waste discharge requirements; or otherwise substantially degrade water quality would be less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Create or contribute runoff water that would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.*

Impact Analysis: The Project incorporates necessary drainage and stormwater management systems, and would comply with stormwater system design, construction, and operational requirements mandated under the County Code as well as regulations established by other agencies such as the SARWQCB and RCFCWCD. The Project stormwater management system incorporates storm drains sized to accept and convey calculated maximum stormwater discharges. More specifically, as discussed in the Project Hydrology Report, and summarized in this Section, stormwater discharges from the Project stormwater management system would not exceed existing conditions. Receiving MPD storm drains are adequately sized and configured to accept developed stormwater discharges from the Project site.

Final design, configuration, and locations of proposed drainage system improvements would be reviewed and approved by the County and RCFCWCD, prior to, or concurrent with, application for grading permits.

As substantiated previously under the topic "Violate any water quality standards or waste discharge requirements; or otherwise substantially degrade water quality," the

Project would implement BMPs that act to treat and control stormwater pollutants. The Project would therefore not be a source of substantial additional sources of polluted runoff.

Based on the preceding, the potential for the Project to create or contribute runoff water that would exceed the capacity of the existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff would be less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Include new or retrofitted stormwater Treatment Control Best Management Practices (BMPs) (e.g., water quality treatment basins, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g., increased vectors or odors).*

Impact Analysis: The Project does not propose or require Treatment Control BMPs the operation of which could result in significant environmental effects. More specifically, Treatment Control BMPs implemented by the Project would comprise underground storage areas, followed by bio-filtration utilizing a Modular Wetlands System (MSW). Treatment Control BMPs implemented by the Project would conform to design criteria and performance standards presented in *Water Quality Management Plan, A Guidance Document for the Santa Ana Region of Riverside County* (Santa Ana Regional Water Quality Control Board) October 22, 2012 (WQMP Guidance Document) Section 3.4.2 *Types of LID BMPs*.

There is the potential that vegetation in and around MSW areas or elsewhere within the Project site could provide food or cover for bird species that could interfere with operations of proximate March Air Base. The Project would be required to comply with Airport Land Use Commission (ALUC) conditions of approval addressing vegetation in and around MSW areas or elsewhere in the Project site that could provide food or cover

for bird species. Normal maintenance activities for bio-filtration areas and MSWs would further minimize potential effects related to vectors and odors.

Based on the preceding, the potential for the Project to include new or retrofitted stormwater Treatment Control BMPs, the operation of which could result in significant environmental effects is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Floodplain Impacts

Potential Impact: *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site.*

Impact Analysis: The Project stormwater management concept would maintain the subject site's existing prevalent west – east trending drainage pattern. The Project does not propose or require alteration of any streams or rivers. The Project stormwater management system described herein would ensure that additional stormwaters generated by the Project would not exceed the capacity of the receiving storm drain system or otherwise result in flooding on-site or off-site.

Please refer also to previous discussions under the topics:

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site; and

- Create or contribute runoff water that would exceed the capacity of the existing or planned stormwater drainage systems.

The same measures and requirements previously discussed under the above-noted topic would act to preclude potential flooding impacts or would reduce these potential impacts to levels that would be less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Change absorption rates or the rate and amount of surface runoff.*

Impact Analysis: New impervious surfaces and structures implemented by the Project would increase the rate and amount of surface runoff developed within the Project site. However, the Project stormwater management system described herein acts to preclude or minimize potential adverse effects of additional generated stormwater runoff. Please refer also to previous discussions under the topics:

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site; and

- Create or contribute runoff water that would exceed the capacity of the existing or planned stormwater drainage systems.

The same measures and requirements previously discussed under the above-noted topics would act to preclude potential impacts related to change in absorption rates and amount of surface runoff that would result from the Project, or would reduce these potential impacts to levels that would be less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Change the amount of surface water in any water body.*

Impact Analysis: Runoff from the Project site would be conveyed south/southwesterly toward Lake Elsinore, which is located approximately 14 miles southwesterly of the Project site. As discussed previously, the Project stormwater management system would be designed to ensure that the historical drainage characteristics of the Project site and surrounding areas would not be substantially altered. Additionally, stormwater discharges from the Project site would not exceed existing conditions and would therefore not substantially add to the amount of surface water in any water body. The Project does not propose elements or operations that would substantially reduce the amount of surface water in any water body. Please refer also to previous discussions under the topics:

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site; and

- Create or contribute runoff water that would exceed the capacity of the existing or planned stormwater drainage systems.

Based on the preceding, the potential for the Project to change the amount of surface water in any water body is considered less-than-significant.

Level of Significance: Less-Than-Significant.

4.8 UTILITIES AND SERVICE SYSTEMS

4.8 UTILITIES AND SERVICE SYSTEMS

Abstract

This Section of the EIR addresses the Project's potential impacts to utilities and service systems. Specifically, this analysis examines whether the Project would:

- *Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects;*
- *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed;*
- *Require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, the construction of which would cause significant environmental effects;*
- *Result in a determination by the wastewater treatment provider that serves or may service the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;*
- *Conflict with any adopted energy conservation plans.*

As detailed subsequently, the Project would not result in significant impacts in these regards. Please refer also to EIR Appendix A, Initial Study Checklist Sections Public Services*, and* Utilities and Service Systems.

4.8.1 INTRODUCTION

For each of the utilities and service systems discussed in this Section, existing service conditions are described; any additional improvements required to accommodate the Project are identified; and any resulting or associated impacts and required mitigation are discussed.

The analysis is based on physical and operational attributes of the Project as presented in the Project Description (EIR Section 3.0); and information presented within the Riverside County General Plan, and County EIR No. 521 prepared for the Riverside County General Plan Update.

This EIR evaluates likely maximum impacts associated with all Project actions and operations including, but not limited to, construction and operation of utilities and service systems distribution and conveyance lines. Construction and operation of the Project utilities and service systems distribution and conveyance lines described in this Section would not result in conditions or environmental impacts not already considered and addressed elsewhere in this EIR.

4.8.2 EXISTING CONDITIONS

4.8.2.1 Water and Water Treatment Services

Riverside County water supplies are comprised of both imported and local water resources. The two primary sources of imported water are the State Water Project (SWP) and the Colorado River. Sources of local water supplies include surface water, groundwater, recycled water, stormwater and desalinated and other remediated supplies.

The Metropolitan Water District of Southern California (MWD) is the largest water district in the State. MWD provides wholesale water service to its 26 member agencies. MWD's two member agencies in Riverside County, Eastern Municipal Water District (EMWD) and Western Municipal Water District (WMWD), both provide wholesale and retail water services in their respective territories.

Municipal water service would be provided to the developed Project site by EMWD. The Project would connect to existing EMWD water system lines located in adjacent rights-of-way.

All potable water distributed within the County is treated to remove contaminants in compliance with State and federal drinking water standards. Approximately 75 percent of EMWD's potable water demand is supplied by imported water from MWD. Potable imported water is delivered directly from MWD's two large filtration plants and then EMWD's microfiltration plants in Hemet and Perris remove particulate contaminants to achieve the applicable potable water standards.

4.8.2.2 Wastewater Conveyance and Treatment

The Project site is located at the interface of EMWD and WMWD Wastewater Service Areas. Both EMWD and WMWD sewer mainlines are located in adjacent Nandina Avenue, along the Project site northerly boundary. Because both service provider options are available to the Project, wastewater conveyance and treatment services for the Project may be provided by EMWD and/or WMWD.

The Project would construct wastewater service lines connecting to existing EMWD/WMWD sewer mainlines. Existing EMWD/WMWD sewer mainlines may be realigned or otherwise modified as part of the Project. All proposed connections to sewer lines, and proposed sewer realignments and modifications would conform to purveyor standards and requirements, and would be subject to review and approval by the affected purveyor(s).

It is anticipated that wastewater generated by the Project would be conveyed to and treated at the EMWD Perris Valley Regional Water Reclamation Facility (PVRWRF) and/or the WWMD Western Water Recycling Facility (WWRF).

4.8.3 STANDARDS OF SIGNIFICANCE

Consistent with the standards of significance outlined in the *CEQA Guidelines*, public services and utility impacts resulting from implementation of the Project could be

considered potentially significant if they caused or resulted in any of the following conditions:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

    - Fire Services;
    - Sheriff Services;
    - Schools;
    - Libraries; or
    - Health Services.

- Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects;

- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed;

- Require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, the construction of which would cause significant environmental effects;

- Result in a determination by the wastewater treatment provider that serves or may service the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;

- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs;

- Comply with federal, state, and local statutes and regulations related to solid wastes including the CIWMP (County Integrated Waste Management Plan);

- Impact the following facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects:

    - Electricity;
    - Natural gas;
    - Communications systems;
    - Storm water drainage;
    - Street lighting;
    - Maintenance of public facilities, including roads; or
    - Other governmental services.

- Conflict with any adopted energy conservation plans.

4.8.4 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.8.4.1 Introduction

Following is an analysis of potential impacts that could occur because of the Project. Of the CEQA threshold considerations presented at Section 4.8.3, and as substantiated in the Initial Study, the Project's potential impacts under the following topics are determined to be less-than-significant, and are not further discussed in this Section:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

    - Fire Services;
    - Sheriff Services;

  - Schools;
  - Libraries; or
  - Health Services.

- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs;

- Comply with federal, state, and local statutes and regulations related to solid wastes including the CIWMP (County Integrated Waste Management Plan);

- Impact the following facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects:

  - Electricity;
  - Natural gas;
  - Communications systems;
  - Storm water drainage;
  - Street lighting;
  - Maintenance of public facilities, including roads; or
  - Other governmental services.

Please refer also to Initial Study Checklist Sections *Public Services* and *Utilities and Service Systems*.

4.8.4.2 Impact Statements

Potential Impact: *Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects.*

Impact Analysis: EMWD provides potable water treatment for all customers within the EMWD Service Area (Service Area). Water quality of all potable water deliveries within the Service Area meets or surpasses all regulated drinking water standards[1] and water treatment is not considered a substantive constraint on water supplies. Additionally, as summarized in the 2015 UWMP, "[t]here are no known water quality concerns that will significantly impact water supply reliability. Water supplies will be managed to protect water quality to the greatest extent possible, and treatment will be implemented if necessary" (2015 UWMP, p. 7-8).

The Project proposes conventional light industrial facilities and does not require water treatment beyond that provided by EMWD. No additional or non-standard treatment is required to specifically meet the Project's water demands.

The Applicant would be required to pay water service connection fees established by EMWD to support the maintenance and planned improvement of water treatment facilities. The EMWD, as a regional water treatment provider, would determine when and in what manner treatment facilities would be constructed and/or upgraded to meet increasing demands of areawide development, including the incremental demands of the Project.

Based on the preceding, the potential for the Project to require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, the construction of which would cause significant environmental effects.*

[1] *Your 2018 Water Quality Consumer Confidence Report* (EMWD) p. 2, et al.
see also: https://www.emwd.org/sites/default/files/file-attachments/emwd_2018_ccr_final_web.pdf

Impact Analysis: Wastewater treatment and conveyance services for the Project would be provided by EMWD and/or WMWD. The Project would construct wastewater service lines connecting to existing EMWD/WMWD sewer mainlines. Existing EMWD/WMWD sewer mainlines may be realigned or otherwise modified as part of the Project. All proposed connections to sewer lines, and proposed sewer realignments and modifications would conform to purveyor standards and requirements, and would be subject to review and approval by the affected purveyor(s).

The composition of wastewater produced by the Project would be typical of other light industrial uses currently operating within EMWD/WMWD service areas, and would not require alteration of EMWD/WMWD wastewater treatment practices or facilities. No additional or non-standard treatment is required to specifically meet the Project's wastewater treatment demands.

The Applicant would be required to pay sewer connection fees established by EMWD/WMWD to support the maintenance and planned improvement of wastewater treatment facilities. EMWD/WMWD, as regional wastewater treatment providers, would determine when and in what manner treatment facilities would be constructed and/or upgraded to meet increasing demands of areawide development, including the incremental demands of the Project.

Based on the preceding, the potential for the Project to require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.*

Impact Analysis: Water service to the Project would be provided by EMWD. The Project would connect to existing EMWD water system lines located in adjacent rights-of-way.

EMWD's 2015 Urban Water Management Plan (UWMP) was prepared in response to Water Code Sections 10610 through 10656 of the Urban Water Management Planning Act, and includes detailed information about EMWD's water demand, supply and reliability for the next 25 years.

A Water Supply Assessment (WSA) has been prepared for the proposed Project, the results of which are included in EIR Appendix I. Summarizing the findings of the WSA, Table 4.8-1 compares the water demands associated with the Project to those assumed within the 2015 UWMP.

Table 4.8-1
Anticipated and Projected Water Demand

	Average Daily Demand (gpd)	Annual Demand (million gallons, mg)	Annual Demand (acre-feet, af)
Oleander Business Park Project	54,150	19.8	60.7
2015 UWMP Estimates	216,602	79.11	242.79

Source: *Water Supply Assessment Report, Mead Valley Project* (EMWD) July 11, 2019.

As summarized at Table 4.8-1, the Project's annual demand of 60.7 af is well below the demand assumed for the site within the 2015 UWMP. As stated on page 24 of the WSA, "EMWD has determined that it will be able to provide adequate water supplies to meet the potable water demand for this project as part of its existing and future demands." Further, within the 2015 UWMP, EMWD determined that they have the ability to meet all projected demand through 2040, even under a repeat of historic multiple-year drought scenarios.

EMWD has provided a conditional "Will-Serve" letter indicating availability of water supplies and water service to the Project. Provision of water service by EMWD is contingent on the Applicant's compliance with EMWD rules and regulations. The Applicant would comply with additional EMWD requirements for water service

including, but not limited to, plan check review and approval, facility construction, inspection, jurisdictional annexation, and payment of financial participation charges.

Based on the preceding analysis, sufficient supplies to meet the anticipated demand for the Project exist. No new or expanded entitlements would be needed to serve the Project. Impacts in this regard are considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Result in a determination by the wastewater treatment provider that serves or may service the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.*

Impact Analysis: Wastewater treatment service will be provided to the Project site by EMWD and/or WMWD. Wastewater generated by the Project would be collected and conveyed to the PVRWRF and or the WWRF. The PVRWRF currently has a capacity to treat 22 million gallons of wastewater per day (mgd) and a planned capacity to expand to 100 mgd. Estimated daily influent flow for this facility is 13.8 mgd.[2] The current WWRF wastewater treatment capacity is 3.0 mgd.[3] Estimated year 2020 average daily influent flow for the WWRF is 2.0 mgd.[4]

Based on the current PVRWRF capacity/demand estimates, the PVRWRF has an approximately 8.2 mgd residual treatment capacity. Conservatively assuming the entire Project water demand (54,150 gpd) would translate to wastewater treatment demand, the Project wastewater treatment demand would comprise approximately 0.66 percent of PVRWRF estimated 8.2 mgd residual capacity. It therefore appears that there is available PVRWRF wastewater treatment capacity available to serve the Project without the need for additional or expanded wastewater treatment facilities.

[2] https://www.emwd.org/sites/main/files/file-attachments/pvrwrffactsheet.pdf
[3] https://www.wmwd.com/187/Western-Water-Recycling-Facility-WWRF
[4] WWMD 2015 Urban Water Management Plan Update, p. 6-15.

Based on the current WWRF capacity/demand estimates, the WWRF has an approximately 1.0 mgd residual treatment capacity. Conservatively assuming the entire Project water demand (54,150 gpd) would translate to wastewater treatment demand, the Project wastewater treatment demand would comprise approximately 5.4 percent of WWRF estimated 1.0 mgd residual capacity. It therefore appears that there is available WWRF wastewater treatment capacity available to serve the Project without the need for additional or expanded wastewater treatment facilities.

EMWD has provided a conditional "Will-Serve" letter indicating availability of wastewater treatment service for the Project. Provision of wastewater service by EMWD is contingent on the Applicant's compliance with EMWD rules and regulations. The Applicant would comply with additional EMWD requirements for wastewater service including, but not limited to, plan check review and approval, facility construction, inspection, jurisdictional annexation, and payment of financial participation charges. Should the Project ultimately request connection to WMWD wastewater services, a Will-Serve letter from that agency would be required prior to the issuance of building permits. The Project would be required to comply with WMWD requirements for wastewater service.

The Applicant would pay applicable sewer connection and service fees, providing funds available for EMWD/WMWD wastewater system expansion and maintenance, acting to offset the Project's incremental demands for wastewater collection and treatment services.

Based on the preceding discussion, the Project's potential to exceed current or anticipated wastewater treatment capacities or require the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects, is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Conflict with any adopted energy conservation plans.*

Impact Analysis:

Primary energy providers for the Project facilities would be:

- Southern California Gas Company, SoCalGas (natural gas); and
- Southern California Edison, SCE (electricity).

Additionally, energy would also be consumed by Project-generated traffic. Fuel demands of all vehicles accessing the Project site would be met through area commercial fuel providers.

The Project would comply with, or surpass, standards established under the California Code Title 24, Part 6 (the California Energy Code) and California Green Building Standards Code (CALGreen; CCR, Title 24, Part 11). CALGreen standards promote progressive design elements that have positive environmental impacts while encouraging sustainable construction practices. The Project would not conflict with any adopted energy conservation plans. There are no known or probable related projects that would interact with effects of the Project and thereby result in potentially significant cumulative energy impacts.

Energy consumption of vehicles accessing the Project are a product of vehicle fuel efficiencies and vehicle trip lengths (vehicle miles traveled, VMT). Vehicle fuel efficiencies are regulated at the state and federal levels. All vehicles accessing the Project site would be required by law to comply with applicable state and federal fuel efficiency standards. Vehicle trip lengths and VMT are reduced to the extent feasible through Project Transportation Demand Management measures. Additionally, the Project proposes warehouse and manufacturing uses located proximate to patrons, and employees, and readily accessible from regional and local roadways. In this manner, the Project at its current location acts generally to reduce vehicle miles VMT within the region and associated consumption of energy resources.

The types and categories of vehicle accessing the Project and related VMT are typical for the proposed light industrial uses in the suburban context of the Project site. Under future conditions, average fuel economies of vehicles accessing the Project site can be expected to improve as older, less fuel-efficient vehicles are removed from circulation; and in response to fuel economy and emissions standards imposed on newer vehicles entering the circulation system.

Based on the preceding, the Project would not conflict with any adopted energy conservation plans. Please refer also to the discussions presented at EIR Section 4.11, *Energy*.

Level of Significance: Less-Than-Significant.

4.9 BIOLOGICAL RESOURCES

4.9 BIOLOGICAL RESOURCES

Abstract

This Section identifies and addresses potential impacts to biological resources resulting from the Project. More specifically, the analysis presented here examines whether the Project would:

- *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan;*

- *Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12);*

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

- *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;*

- *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;*

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

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

As supported by the analysis presented in this Section, with application of proposed mitigation measures, the Project's potential impacts to biological resources would be less-than-significant.

4.9.1 INTRODUCTION

Following are discussions of existing biological resources characteristic of the Project area, with focused consideration on species of special interest known to occur, or that could potentially occur on the Project site. Potential impacts to biological resources are identified, and mitigation of potentially significant impacts is proposed. Information presented in this Section is summarized and excerpted from: *Biological Report for the Oleander Business Park Project Site* (Harmsworth Associates) November 2019 (Biological Report); *Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis for the Oleander Business Park Project* (Harmsworth Associates) November 2019 (MSHCP Analysis); *Burrowing Owl Survey Report for the Oleander Business Park Project Site* (Harmsworth Associates) April 2020 (Burrowing Owl Report); and *Jurisdictional Survey and MSHCP Riparian/Riverine/Vernal Pools Evaluation* (Ecological Sciences, Inc.) December 17, 2019 (Jurisdictional Survey); collectively, the Project Biological Resources Assessments. The Project Biological Resources Assessments are presented in their entirety at EIR Appendix J.

4.9.2 SETTING

4.9.2.1 Overview

The Project Biological Resources Assessments evaluate potential impacts to biological resources that could occur within developed portions of the Project site, as well as potential impacts that could occur within adjacent off-site areas that would be disturbed in conjunction with utility and roadway improvements to be constructed as part of the Project. Areas subject to disturbance by the Project have been significantly impacted due to years of human activities, including trash disposal, and creation and use of off-road trails and footpaths. The Project site lies within a region that experiences a Mediterranean type climate, with hot dry summers, relatively cool winters and sparse rains. Annual precipitation for the region averages 13.3 inches, and average annual temperature ranges from 50˚ to 79˚ F.

Available literature and resource databases were reviewed as a means of preliminarily evaluating the potential occurrence of sensitive plant and animal species within the Project site and vicinity. Resources consulted included:

- California Natural Diversity Data Base (CNDDB) for the USGS 7.5′ quadrangle which comprised the study area: Steele Peak and neighboring quads for pertinent data;

- California Native Plant Society Inventory of rare and endangered vascular plants of California (Tibor 2001; CNPS On-line Inventory);

- Special Animals (including California Species of Special Concern), CDFW, Natural Heritage Division, August 2019;

- Special Vascular Plants, Bryophytes, and Lichens List, CDFW, Natural Heritage Division, August 2019;

- State and Federally Listed Endangered, Threatened and Rare Plants of California, CDFW, Natural Heritage Division, August 2019;

- State and Federally Listed Endangered and Threatened Animals of California, CDFW, Natural Heritage Division, August 2019; and

- Other published literature (Chesser et. al. 2013, Sibley 2000, Small 1994, Moyle et al. 1995, Jennings and Hayes 1994, Stebbins 1985, Webster et al. 1980, Burt and Grossenheider 1976).

Subsequent to literature/database reviews, field surveys of the Project site and surrounding area were conducted.

Plant Communities/Habitat Types

The Project site has been significantly impacted due to years of disking, dumping and disturbance. Currently the site evidences one vegetation community/land type - fiddleneck field. This vegetation type describes areas dominated by annual and herbaceous species that occur on upland slopes, broad valleys, oceanbluffs, grazed or recently burned hills and fallow fields. These areas are often associated with areas of historic grazing, disking, and off-road recreational vehicle use. Soils are generally deep, well-drained sand to fine sandy loam. Holland (1986) classified this habitat type as non-native grasslands and wildflower fields.

During the field reconnaissance, a large proportion of the site was covered by the non-native, annual herb stork's bill (*Erodum cicutarium*) which is a common co-dominant non-native species found in fiddleneck field vegetation of western Riverside County (Sawyer *et al.* 2008). A second common native plant found on-site was broad scaled palmer's goldenbush (*Ericameria palmeri* var. *pachylepis*). This species has been documented to form a vegetation type, palmer's goldenbrush scrub, that occurs in this part of western Riverside County (Klein and Evens 2005). Some areas within the fiddleneck fields vegetation on site resemble palmer's goldenbrush scrub, though are best described as fiddleneck field vegetation. The non-native annual brome grasses (*Bromus madritensis* and

Bromus diandrus), were found in abundance across the fiddleneck fields. A thin patch of cane cholla (*Cylindropuntia california* var. *parkeri*) was found on the northern boundary of the Project site.

Plant Inventory

Plant species within the Project site consisted of species associated with open and disturbed habitats. A total of 27 vascular plant species, representing 13 families were observed. Of these, 15 were native species and the remaining 12 species were exotic. The most represented family was Asteraceae (9 species).

Special-Status Plant Species

There are no historic site records for any special-status plant species on-site (CNDDB 2019). Review of the CNDDB, the CNPS Inventory of Rare and Endangered Vascular Plants of California (Tibor 2001, CNPS 2019), and field survey results indicate the potential for, though unlikely, presence of certain special-status species. A complete listing of all special-status plant species identified as having the potential to occur on-site is presented at Table 2 of the Biological Report.

One special-status plant was observed on the Project site during the 2019 site surveys, San Diego tarweed/Paniculate tarplant (*Deinandra paniculata*). It is widespread in loamy soils in Riverside County (Roberts *et al.* 2004). On-site San Diego tarweed occurred in relatively high numbers, with over 1,200 individual plants being counted during the dedicated mapping activity. The greatest densities were found on the northern and southern ends of the site. Relatively few were found on the relatively higher elevation western boundary of the site.

San Diego tarweed/Paniculate tarplant is noted in the California Natural Diversity Database (CNDDB) as having the following classifications: no federal or State listing as a threatened or endangered species, a Heritage Rank of G4/S4, and a California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) of 4.2. The Heritage Rank includes Global (G) and State (S) ranks, ranging from G1 to G5 and S1 to S5, respectively. State programs such as the CNDDB develop the State and Global ranks collaboratively

with states/provinces containing the species. The three main categories that are taken into consideration when assigning an element rank are rarity, threats, and trends. Within these three categories, various factors are considered including:

- Range extent, area of occupancy, population size, number of occurrences and number of good occurrences.
- Overall threat impact as well as intrinsic vulnerability (if threats are unknown).
- Long-term and short-term trends.

The San Diego tarweed's rank of G4/S4 is defined as "Apparently Secure — Uncommon but not rare; some cause for long-term concern due to declines or other factors" at both the Global and State levels. The CRPR Rank of 4.2 is used for "Plants of limited distribution – a watch list; moderately threatened in California." CRPR ranks range from 1 to 4, with 4 being the least at-risk designation in the database. The CNDDB actively inventories, tracks, and maps CRPR Rank 1 and 2 plants only; Rank 3 and 4 plants are tracked only at the U.S. Geological Survey quadrant level and the county level.

Wildlife Overview

Wildlife at the study area consisted of common species and species associated with open, disturbed habitats. The most abundant species detected during the site visit were birds such as American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*) and house finch (*Carpodacus mexicanus*). A total of 38 wildlife species were detected during the site visits, including four reptile, 29 bird and five mammalian species. Please refer to Appendix D of the Biological Report (EIR Appendix J) for a complete listing of all wildlife species detected on-site during the field reconnaissance.

Special-Status Wildlife Species

Based on a review of CNDDB (2019), published literature and field surveys and assessments, a number of special status wildlife species were identified as potentially occurring on-site, including some species with historic records from the Project vicinity. Please refer to Table 3 of the Biological Report (EIR Appendix J) for a complete listing of all wildlife species potentially occurring on-site.

Two special-status wildlife species were observed on the Project site during the 2019 site surveys; California horned lark (*Eremophila alpestris actia*) and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*).

Additionally, the site is located within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The MSHCP is a comprehensive, multi-jurisdictional habitat conservation plan that focuses on the conservation of species and their associated habitats. Pursuant to Section 6.3.2 of the Western Riverside County MSHCP, focused surveys for burrowing owl (*Athene cunicularia*) are required at the Project site.

These special-status wildlife species are discussed below.

California horned lark (*Eremophila alpestris actia*)

California horned lark (*Eremophila alpestris actia*) occur in open areas with little or no ground cover, such as grassland or ruderal vegetation and disturbed areas within scrub habitats. A few California horned larks were observed foraging along dirt roads on-site several times and they are presumed to nest on-site.

San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)

San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) occur in open areas with little or no ground cover, such as grassland or ruderal vegetation and disturbed areas within scrub habitats. A few San Diego black-tailed jackrabbit were observed on-site.

Burrowing owl (*Athene cunicularia*)

Burrowing owls (*Athene cunicularia*) occur in shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), prairies, coastal dunes, desert floors, and some artificial, open areas as a yearlong resident. They require large open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows. As a critical habitat feature, they require the use of rodent or other burrows for roosting and nesting cover. They can also use pipes, culverts, and nest boxes (USFWS 2003, Haug et al. 1993, Zeiner et al. 1990).

Wildlife movement corridors and linkages

The terms "wildlife corridors" and "linkages" are based upon fundamental ecological concepts, but can be easily misinterpreted because: 1) universally accepted definitions of these terms have not been established; 2) each term can be interpreted using different time scales (i.e., daily, seasonal, annual and evolutionary) and spatial scales (i.e., microclimate, local, community, and landscape) which changes their meaning; 3) the areas and values change from species to species; and 4) the understanding of how these processes work is on-going and conclusions are subject to revision. The following definitions are intended to provide a working understanding of corridors and linkages and are summarized from several sources (SCWP 2003, USCA9D 1990, Barrett and Livermore 1983, Beier 1993).

Wildlife corridors are areas which animals can use to move from one patch of suitable habitat to another. These areas would be expected to have the least habitat fragmentation relative to surrounding areas. A wildlife corridor establishes connectivity for animals to move, live, reproduce and respond to functional ecological processes during the course of a year to several years. The quality and functionality of a particular wildlife corridor varies from species to species.

Wildlife crossings are generally small, narrow wildlife corridors that allow wildlife to pass through an obstacle or barrier such as a roadway to reach another patch of habitat. Wildlife crossings are manmade and include culverts, drainage pipes, underpasses, tunnels, and, more recently, crossings created specifically for wildlife movement over or under highways.

Both wildlife crossings and wildlife corridors function to prevent habitat fragmentation that would result in the loss of species that require large contiguous expanses of unbroken habitat and/or that occur in low densities.

Linkages are areas that provide for long term movement or interaction of wildlife to maintain natural evolutionary and ecological patterns. Linkages are fundamental for gene flow and large-scale ecological processes. These areas are usually defined by the

zones of "least resistance" for the genes of a given species to move or "flow" between core reserve populations.

No wildlife corridors or linkages are known at the Project site. Much of the vicinity is developed and it is unlikely that the site is of any significance to wildlife movement.

Wetlands and streambeds

Several ephemeral drainages cross the site in a west to east direction. All drainages are typical ephemeral washes, only conveying water during and immediately following large storm events. Water only stays in the system for short periods after large storm events and does not occur at all in smaller storms. The rest of the time these drainages are completely dry. No wetlands occur on-site.

In general, the on-site drainages consisted of a series of narrow (generally 1 – 2 feet wide), sandy channels that run in a west to east direction. In some portions the channel banks were poorly defined with no clear banks. The substrate was sandy and was dry at the time of the site survey. In general, the channels were devoid of vegetation and any vegetation that was present consisted of vegetation similar to the adjacent upland areas. As discussed in the Jurisdictional Survey (EIR Appendix J), on-site drainages do not comprise jurisdictional areas.

4.9.3 EXISTING POLICIES AND REGULATIONS

4.9.3.1 Federal Endangered Species Act/California Endangered Species Act

The United States Congress passed the federal Endangered Species Act (ESA) in 1973 to protect those species that are endangered or threatened with extinction. The State of California enacted a similar law, the California Endangered Species Act (CESA) in 1984. The state and federal Endangered Species Acts are intended to operate in conjunction with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend. The United States Fish and Wildlife Service (USFWS) is responsible for implementation of ESA, while the CDFW implements CESA. During

Project review, each agency is given the opportunity to comment on the potential of the Project to affect listed plants and animals.

4.9.3.2 State of California, Department of Fish and Wildlife

The CDFW has jurisdiction under Section 1600 *et seq.* of the California Fish and Game Code over fish and wildlife resources of the State. Under Section 1602, a private party must notify the CDFW if a project will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds, except when the department has been notified pursuant to Section 1601." If an existing fish or wildlife resource may be substantially adversely affected by the activity, the CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the initiating party, they may enter into an agreement with the CDFW identifying the approved activities and associated mitigation measures.

4.9.3.3 Army Corps of Engineers

Pursuant to Section 404 of the Clean Water Act, the Army Corps of Engineers (Corps) regulates the discharge of dredged and/or fill material into waters of the United States.

4.9.3.4 Regional Water Quality Control Board

Section 401 of the Clean Water Act requires any applicant for a Section 404 permit to obtain certification from the State that the discharge (and the operation of the facility being constructed) will comply with the applicable effluent limitation and water quality standards. In California, this 401 certification is obtained from one of the State's nine Regional Water Quality Control Boards. The Corps cannot issue a Section 404 permit until a 401 certification is issued or waived.

4.9.3.5 County of Riverside

The County has recognized the importance of its biological resources within the Multipurpose Open Space Element of the General Plan. The Project would be implemented consistent with applicable County of Riverside General Plan Policies.

4.9.3.6 Western Riverside Multiple Species Habitat Conservation Plan

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is a comprehensive, multi-jurisdictional, long-term effort to conserve plant and animal species, including endangered and threatened species, and associated habitats on more than 1.2 million acres in western Riverside County.

The MSHCP covers all of 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.

4.9.3.7 Other Statutes, Codes, and Policies

In addition to ESA and CESA listings, plant and wildlife species receive consideration during the CEQA review processes, as discussed below.

Species of Special Concern

Species of Special Concern are generally defined as those California species whose numbers, reproductive success, or habitat may be threatened. Potential impacts to Species of Special Concern receive consideration under CEQA review.

CNPS-Listed Plants

The California Native Plant Society (CNPS) maintains a list of plant species native to California with minimal populations, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Potential impacts to populations of CNPS-listed plants receive consideration under CEQA review.

Raptors and Migratory Birds

Raptors (birds of prey), migratory birds, and other avian species are protected by state and federal laws. The federal Migratory Bird Treaty Act (MBTA) prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the California Fish and Game Code states

that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Potential impacts to raptors and migratory birds receive consideration under CEQA review.

4.9.4 STANDARDS OF SIGNIFICANCE

CEQA has identified the following significance thresholds relative to biological resources. If the Project would result in any one of the following, its impacts to biological resources would be considered significant.

- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan;

- Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12);

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

- 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;

- 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;

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

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

4.9.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.9.5.1 Introduction

All CEQA topics concerning the Project's potential impacts to biological resources are discussed below. Please refer also to EIR Appendix A, Initial Study Checklist Section, *Biological Resources*.

4.9.5.2 Impact Statements

Potential Impact: *Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan; Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*

Impact Analysis: The Project site is located within the Western Riverside County MSHCP. No Cell or Cell Group is located within the site. No part of the Project site is required for conservation or reserve assembly under the MSHCP.

The MSHCP does, however, require focused burrowing owl surveys of the Project. Such surveys have been completed and are discussed subsequently.

There are no other known applicable local ordinances protecting biological resources. The Project's potential to conflict with any provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, other approved local, regional, or state

conservation plan, or local policies or ordinances protecting biological resources is therefore considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12); Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Wildlife Service.*

Impact Analysis:

Special-Status Plant Species

One special-status plant species (San Diego tarweed/Paniculate tarplant [*Deinandra paniculate*]) was observed at the Project site. Although San Diego tarweed species is of limited distribution in California, it is known to be fairly common where it does occur. The species does not have a federal or state listing as a threatened or endangered species, and has a low ranking for risk on both the CNDDB's Heritage Rank and the CNPS Rare Plant Rank. As such, the Biological Report concluded that impacts to this species would be less-than-significant and no mitigation is required.

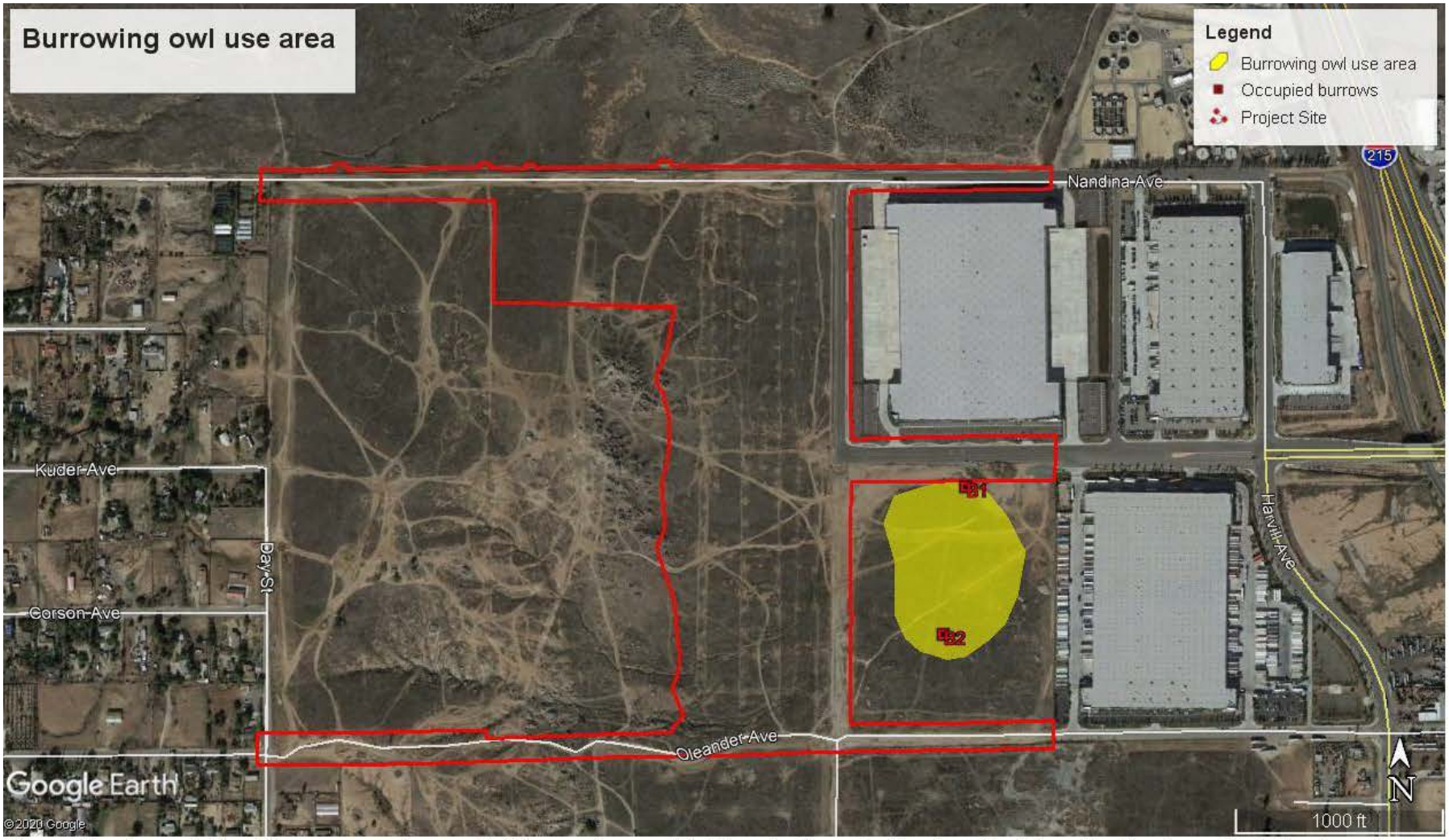
Special-Status Wildlife Species

Two special-status wildlife species, the California horned lark (*Eremophila alpestris actia*) and the San Diego black-tailed jackrabbit (*Lepus californicus bennettii*) have been documented on-site. Both of these species are covered species under the Western Riverside County MSHCP; preserved open spaces under this plan provide sufficient habitat for these species. The Project's required compliance with all measures in the MSHCP plan, including payment of appropriate fees, fulfills all required mitigation measures for these species.

Consistent with MSHCP requirements, springtime focused surveys for the burrowing owls were conducted. Focused burrowing owl surveys were conducted following MSHCP burrowing owl survey instructions (County of Riverside 2006). The burrowing owl survey area consisted of all areas that could be disturbed during Project construction activities (developed building areas and all areas disturbed by infrastructure construction), and also included a buffer area extending 150 meters beyond construction areas.

Occupied and unoccupied burrows large enough to potentially support burrowing owls were mapped. Mapped locations typically represent multiple burrows or one burrow with multiple entrances. None of the burrows within the areas that could be disturbed during Project construction activities showed any evidence of owl occupancy. There were no artificial or man-made structures suitable for burrowing owl nesting (such as debris piles, old pipes) located within the Project site.

A single burrowing owl located within the above-noted 150-meter buffer area was detected during the survey. The owl was not located within areas that would be disturbed by Project construction activities. The owl was located on a private parcel situated southerly adjacent to Harley Knox Boulevard. The owl identified as part of the survey activities because of the owl's location fell within the County's mandated survey 150-meter buffer area. Location of the observed owl is presented at Figure 4.9-1. This owl was unpaired and no nesting behavior was detected. The owl was easy to detect as it was outside its burrow during all survey days. Potential disturbance to this owl could occur as the result of construction activities occurring with Harley Knox Boulevard. No other burrowing owl was detected during the survey and no owl occurred within the Project construction areas. Project construction activities could disturb the owl observed within the 150-meter buffer area. This is a potentially significant impact.



N
NOT TO SCALE

Source: Harmsworth Associates

applied planning inc

Figure 4.9-1
Burrowing Owl Use Area

Nesting Birds

Impacts to nesting birds are prohibited under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code. Project construction activities could disturb nesting birds. This is a potentially significant impact.

Jurisdictional Areas

No jurisdictional areas exist within, or would otherwise be significantly affected by the Project. Potential impacts to jurisdictional areas are therefore considered less-than-significant.

Level of Significance Before Mitigation: Potentially Significant for impacts to above-noted special status species and nesting birds.

Mitigation Measures:

4.9.1 Limits of the Project site shall be clearly marked by stakes or other means to ensure that off-site areas are not disturbed by Project construction activities.

4.9.2 A biological monitor shall be on-site during all ground disturbance activities, and shall halt any such activities if, in his or her professional opinion, such activities will result in the take of a protected species.

4.9.3 General Avoidance/Protection of Burrowing Owls: No more than 72 hours prior to any site disturbances, a pre-construction survey for the burrowing owl shall be conducted. If absence of this species is confirmed, Project work can proceed.

4.9.4 Protection of Observed Owl(s). One burrowing owl was observed during focused April 2020 springtime surveys. This owl was observed at the location indicated at EIR Figure 4.9-1. If this owl is still present at the time construction activities are initiated along Harley Knox Boulevard, a sound barrier/wall shall be installed along the edge of the work area along Harley Knox Boulevard. The sound barrier/wall shall be a minimum of 10 feet in height, and a minimum of 200 feet in length. The barrier/wall shall be located adjacent to the Harley Knox Boulevard

right-of-way southerly edge and shall be roughly centered opposite the primary burrow (B1, as indicated at EIR Figure 4.9-1). The barrier/wall shall be composed of hay bales, plywood or similar materials or combinations of materials. The sound barrier/wall shall be installed prior to start of construction and remain in place until construction is completed in the vicinity of the owl. Should the owl relocate closer to Decker Road, or another project location, a sound barrier/wall shall be installed adjacent to the potentially affected location. The owl shall be monitored during construction activity to ensure no impacts occur to the owl.

4.9.5 Avoidance of Nesting Migratory Birds: If possible, all vegetation removal activities shall be scheduled from August 1 to February 1, which is outside the general avian nesting season. This would ensure that no active nests would be disturbed and that removal could proceed rapidly. If vegetation is to be cleared during the nesting season, all suitable habitat will be thoroughly surveyed within 72 hours prior to clearing for the presence of nesting birds by a qualified biologist (Project Biologist). The Project Biologist shall be approved by the County and retained by the Applicant. The survey results shall be submitted by the Project Applicant to the County Planning Department. If any active nests are detected, the area shall be flagged and mapped on the construction plans along with a minimum 300-foot buffer, with the final buffer distance to be determined by the Project Biologist. The buffer area shall be avoided until, as determined by the Project Biologist, the nesting cycle is complete or it is concluded that the nest has failed. In addition, the Project Biologist shall be present on the site to monitor the vegetation removal to ensure that any nests, which were not detected during the initial survey, are not disturbed.

Level of Significance After Mitigation: Less-Than-Significant.

Potential Impact: *Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.*

Impact Analysis: Due to disturbance and development of vicinity properties, the Biological Report concluded that the site is unlikely to be of any significance to wildlife movement or migratory wildlife corridors. Nor does the site function as a wildlife nursery. Impacts to potential nesting migratory species are addressed through the EIR

mitigation measures. On this basis, the potential for the Project to 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 is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *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.*

Impact Analysis: Riparian habitat or other sensitive natural communities do not exist within the Project site. Under existing conditions, some surface drainage may sheet flow off the Project site. This sheet flow appears to be conveyed off site, which ultimately leads to broad swales located east of the site. The Project area is generally not conducive to the development of wetland resources because of intensive agricultural uses and/or routine discing activities (Jurisdictional Survey, p. 15). Further, the Project does not propose or require facilities or operations that would have an adverse effect on any off-site riparian habitat or other sensitive natural communities. This impact is therefore considered less-than-significant.

Level of Significance: Less-Than-Significant.

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

Impact Analysis: The Biological Report found no federally protected wetlands within the Project site. Under existing conditions, some surface drainage may sheet flow off the Project site. This sheet flow appears to be conveyed off site, which ultimately leads to broad swales located east of the site. The Project area is generally not conducive to the development of wetland resources because of intensive agricultural uses and/or routine

discing activities (Jurisdictional Survey, p. 15). Further, the Project would have no adverse effect on any off-site federally protected wetlands. As such, the potential for the Project to have a substantial adverse effect on any federally protected wetlands is considered less-than-significant.

Level of Significance: Less-Than-Significant.

4.10 CULTURAL RESOURCES/ TRIBAL CULTURAL RESOURCES

4.10 CULTURAL RESOURCES/ TRIBAL CULTURAL RESOURCES

Abstract

This Section examines the potential for implementation of the Project to impact cultural and historic resources in the Project area. Of primary concern are the protection of historic cultural resources, and conservation of known or currently unknown (buried or undiscovered) archaeological and paleontological resources that may be present in locations proposed for future development. Specifically, this analysis seeks to determine whether the Project would result in any of the following:

- *Alter or destroy an historic site;*
- *Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5;*
- *Alter or destroy an archaeological site;*
- *Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations, Section 15064.5;*
- *Restrict existing religious or sacred uses within the potential impact area;*
- *Directly or indirectly destroy a unique paleontological resource, or site, or unique geologic feature;*

- *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*

- *Cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c). of Public Resources Code Section 5024.1 for the purpose of this paragraph, the lead agency shall consider the significance to a California Native Tribe.*

As supported by the analysis presented in this Section, as mitigated, the Project's potential to impact cultural/tribal resources is determined to be less-than-significant.

4.10.1 INTRODUCTION

Cultural resources can be of scientific, aesthetic, educational, archaeological, architectural, or historical significance to the community. The following discussions identify and classify the significance of prehistoric and/or historic cultural/tribal resources which may exist on the subject site, and assess the Project's potential to impact such resources.

Information contained within this Section is based on information and conclusions presented within the following studies:

- *Phase I Archaeological Assessment, Assessor's Parcel Nos. 295-310-012 TO -015, Tentative Parcel Map 36034, Sares-Regis Project, Mead Valley Area, Riverside County, California* (CRM TECH) May 19, 2008.

- *Phase II Archaeological Testing and Evaluation Program, Tentative Parcel Map No. 36034, Sares-Regis Project, Mead Valley Area, Riverside County, California* (CRM TECH) December 5, 2008.

- *Paleontological Resources Assessment Report, Assessor's Parcel Nos. 295-310-012 TO -015, Tentative Parcel Map 36034, Sares-Regis Project, Mead Valley Area, Riverside County, California* (CRM TECH) May 19, 2008.

- *Update and Addendum to Phase I and Phase II Cultural Resource Studies, Oleander Business Park Project (Formerly Sares-Regis Project; TTM 36034) Mead Valley Area, Riverside County, California, Plot Plan No. 190011; CRM TECH Contract No. 3468* (CRM TECH) December 6, 2019.

In order to protect the location of sensitive cultural resources identified as part of the Project Cultural Resources Investigations, and consistent with disclosure restrictions of Section 6254 of the Government Code, the above reports have not been included within this EIR. Upon request, copies of the above reports are available to qualified individuals through the County of Riverside Planning Department.

4.10.2 SETTING

Prehistoric Context

It is widely acknowledged that human occupation in what is now the State of California began 8,000-12,000 years ago. In order to understand Native American cultures before European contact, archaeologists have devised chronological frameworks that attempt to correlate the observable technological and cultural changes in the archaeological record to distinct periods. Unfortunately, none of these chronological frameworks has been widely accepted, and none has been developed specifically for the so-called Inland Empire region of southern California, the nearest ones being for the Colorado Desert and Peninsular Ranges area and for the Mojave Desert.

Since results from archaeological investigations in this region have yet to be synthesized into an overall chronological framework, most archaeologists tend to adhere to the following general chronology:

- Early Hunting Stage (ca. 10000-6000 B.C.), which was characterized by human reliance on big game animals, as evidenced by large, archaic-style projectile points and the relative lack of plant-processing artifacts;

- Millingstone Horizon (ca. 6000 B.C.-A.D. 1000), when plant foods and small game animals came to the forefront of subsistence strategies, and from which a large number of millingstones, especially heavily used, deep-basin metates, were left;

- Late Prehistoric Period (ca. A.D. 1000-1500), during which a more complex social organization, a more diversified subsistence base - as evidenced by smaller projectile points, expedient milling stones and, later, pottery - and regional cultures and tribal territories began to develop;

- Protohistoric Period (ca. A.D. 1500-1700s), which ushered in long-distance contact with Europeans and led to the historic period.

Ethnohistoric Context

The area around the Perris Valley has long been a part of the homeland of the Luiseño Indians, a Takic-speaking people whose territory extended from present-day Riverside to Escondido and Oceanside. The name of the group derived from Mission San Luis Rey, which held jurisdiction over most of the traditional Luiseño territory during the mission period.

Anthropologists have divided the Luiseño into several autonomous lineages or kin groups, which represented the basic political unit among most southern California Indians. Each Luiseño lineage possessed a permanent base camp, or village, on the valley floor and another in the mountain regions for acorn collection. Luiseño villages were made up of family members and relatives, where chiefs of the village inherited their rank and each village owned its own land. Villages were usually located in sheltered canyons or near year-round sources of freshwater, always near subsistence resources.

Nearly all resources of the environment were exploited by the Luiseño in a highly developed seasonal mobility system. The Luiseño people were primarily hunters and gatherers. They collected seeds, roots, wild berries, acorns, wild grapes, strawberries, wild onions, and prickly pear cacti, and hunted deer, elks, antelopes, rabbits, wood rats, and a variety of insects. Bows and arrows, atlatls or spear throwers, rabbit sticks, traps, nets, clubs, and slings were the main hunting tools. Each lineage had exclusive hunting and gathering rights in their procurement ranges. These boundaries were respected and only crossed with permission.

It is estimated that when Spanish colonization of Alta California began in 1769, the Luiseño had approximately 50 active villages with an average population of 200 each, although other estimates place the total Luiseño population at 4,000-5,000. Some of the villages were forcefully moved to the Spanish missions, while others were largely left intact. Ultimately, Luiseño population declined rapidly after European contact because of diseases such as smallpox and harsh living conditions at the missions and, later, on the Mexican ranchos, where the Native people often worked as seasonal ranch hands.

After the American annexation of Alta California, the large number of non-Native settlers further eroded the foundation of the traditional Luiseño society. During the latter half of the 19th century, almost all of the remaining Luiseño villages were displaced, their occupants eventually removed to the various reservations. Today, the nearest Native American groups of Luiseño heritage live on the Soboba, Pechanga, and Pala Indian Reservations.

Historic Context

The present-day Perris Valley region received its first European visitors during the early and mid-1770s, shortly after the beginning of Spanish colonization of Alta California in 1769. However, no Europeans are known to have settled in what is now Riverside County until 1818-1819, when Leandro José Serrano established a cattle ranch in the nearby Temescal Valley on land belonging to Mission San Luis Rey. The Perris and San Jacinto Valleys, meanwhile, became part of the loosely defined Rancho San Jacinto, a vast cattle ranch under Mission San Luis Rey, the name of which was first mentioned in mission records in 1821.

In 1821, Mexico gained independence from Spain, which ushered in, for the mission system, a period of turmoil and ultimately the process of secularization. Beginning in 1834, former mission ranchos throughout Alta California were surrendered to the Mexican government, and subsequently divided and granted to various prominent citizens of the province. On the land considered to be part of Rancho San Jacinto, the Mexican authorities made three large land grants during the 1840s, San Jacinto Viejo, San Jacinto Nuevo y Potrero, and El Sobrante de San Jacinto. As elsewhere in southern California during the rancho period, cattle raising was the most prevalent economic activity on these and other nearby land grants, until the influx of American settlers eventually brought an end to this lifestyle in the second half of the 19th century. The Project area, however, was not included in any of the land grants, and thus remained unclaimed when California was annexed by the United States in 1848.

In 1870, the U.S. government sold several massive tracts of land, each measuring more than 10,000 acres, in the vicinity of present-day Riverside, Perris, and Moreno Valley, marking the beginning of a period of large-scale land speculation and town building in the region's history. In 1882-1883, the Perris Valley received a major boost in its early development when the California Southern Railway was constructed through the area, to be connected to the Santa Fe Railroad's nationwide system a few years later. In a scenario repeated frequently in the American West, a string of towns soon emerged along the railroad line.

The town of Perris was founded in 1886, and named in honor of Frederick Thomas Perris, the California Southern Railway's chief engineer and superintendent of construction. Closer to the Project location, another settlement named Val Verde came into being in 1893-1894, also near the location of a railroad station. In 1927-1929, Henry Upton, a Los Angeles land developer, purchased many hundreds of acres in the Project vicinity and created a series of subdivisions. One of these was named Mead Acres, after a Mr. Mead, the previous owner of the land. Throughout the rest of the historic period, the area remained rural in character and experienced little growth. In 1930, the Val Verde post office was permanently discontinued, and all evidence of the settlement are gone.

A short distance to the north of the Project area, the U.S. Army built an aviation facility in 1918, which was originally named Alessandro Aviation Field but soon renamed March Field. In 1940, a second military facility, an army anti-aircraft artillery camp named Camp Haan, was established in the same area. It remained in service for five years before being merged into March Field, then known as March Army Air Base, in 1945. Two years later, the base was re-designated March Air Force Base to reflect the establishment of the Air Force as an independent branch of the U.S. armed forces. After serving in that capacity for 46 years, the base was deactivated in 1993, and subsequently transformed into a much-downsized air reserve base.

4.10.3 PROJECT SITE BACKGROUND

The following discussions summarize the research and surveys (previously listed at Section 4.10.1) that have been conducted for the Project site.

Phase I Archaeological Assessment (2008)

The 2008 Phase I study included a record search, historic research, Native American Consultation, and field survey. The Phase I study identified prehistoric (i.e., Native American) archaeological sites, consisting primarily of milling features on bedrock outcrops, within the Project area. Additionally, during consultation with the Pechanga Band of Luiseño Indians, it was learned that the archaeological sites within the Project area might represent a use-area or even a portion of the Native American village of *Qaxáalku*, the exact location of which was not revealed. Representatives of the Tribe also called attention to the possibility that human remains could be present on the property. The Phase I study concluded that further archaeological investigation was required for the site, and recommended a Phase II Archaeological Testing and Evaluation Program be conducted (see below).

Phase II Archaeological Testing and Evaluation Program, 2008 (2008 Phase II Study)

Archaeological finds identified as part of the 2008 Phase II Study are listed at Table 4.10-1.

Table 4.10-1
Archaeological Finds Located Within the Project Site

Site	Description	Site	Description
33-005367	4 bedrock milling features	33-017076	1 bedrock milling feature
33-005368	1 bedrock milling feature	33-017077	1 bedrock milling feature
33-005373	1 bedrock milling feature; 1 mano	33-017078	9 bedrock milling features
33-005380	1 bedrock milling feature	33-017079	3 bedrock milling features
33-005394	1 bedrock milling feature	33-017080	25 bedrock milling features; 1 scraper
33-011075	1 bedrock milling feature	33-017081	1 bedrock milling feature
33-011076	1 bedrock milling feature	33-017098	11 bedrock milling features; 1 mano
00-017075	1 bedrock milling feature	33-017099	7 bedrock milling features

Source: *Archaeological Testing and Evaluation Program, Tentative Parcel Map No. 36034, Sares-Regis Project, Mead Valley Area, Riverside County, California* (CRM TECH) December 5, 2008.

The 2008 Phase II Study notes that it is important to look at the larger picture by reviewing records of sites located within a larger area, to be able to see what notable activities were occurring in the prehistoric past. Results of an extended records search revealed that among the rocky hills that bound Mead Valley and surround the Project site, a dense cluster of numerous prehistoric sites have been previously recorded as a result of various studies.

The great majority of these are bedrock milling features with few or no artifacts present. Some of the larger sites in the area are known to contain dozens of bedrock milling features, as well as chipped-stone and groundstone tools and debitage, culturally rich midden soils, rock shelters, pictographs (painted images on boulders), petroglyphs (pecked images on boulders), and a special type of petroglyph called cupules, which are small, circular pecked depressions attributed to girls' or boys' (or possibly both) puberty ceremonies.

These larger, more complex sites, often referred to as "habitation sites" by archaeologists, were located near springs and contain the quantities and types of artifacts and features that indicate they were possibly permanent or semi-permanent campsites where a number of daily activities and some ceremonies occurred. Luiseño village sites were typically centered near reliable water sources such as year-round springs, creeks, or rivers; on nearly level ground that provided a good view of the surrounding area; preferably where good quality granite boulders were available for milling use; and where food resources were available close-by.

The 2008 Phase II Study determined that the Project site itself does not fit the description of a desirable permanent village location. This is mainly because of the lack of a reliable year-round water source on the property today, and in the past. Rather, it appears to be an appropriate location for seasonal food procurement and processing, being that boulder outcrops, small rodents, and edible or seed-bearing plants are prolific in the area. The Mead Valley grasslands would have also, undoubtedly, provided seasonal insect and bird populations that prehistoric Native Americans would have exploited.

Within a five-mile radius of the site there are several reliable springs, or were at least, in prehistoric times, located in areas that would have once provided a desirable environment for permanent village settlement. Therefore, it is highly likely that the Project site was exploited for its resources by inhabitants of one or more permanent or semi-permanent settlements located within several miles in any direction.

Of the 16 archaeological finds listed at Table 4.10-1, the 2008 Phase II Study concluded that only one (Site 33-017080) qualifies as a historical resource. The archaeological data gathered from Site 33-017080 has added some valuable information to knowledge about prehistoric lifeways in the Mead Valley area. The recovered artifacts, the milling features present at this site, and the buried features encountered during the excavations suggest that this site was occupied temporarily as a seasonal floral and faunal resource procurement encampment where daily activities such as tool-making, food collecting and processing, and cooking took place. The site was centrally located among a large group of bedrock milling sites that contained little or no cultural deposit. This suggests that Site 33-017080 may have operated as a temporary habitation center surrounded by food resources and milling stations, situated some distance away from a larger, permanently settled village. The information provided helps to set a possible scenario for prehistoric settlement and site distribution patterns in the Mead Valley area. Because the site has yielded information important to the study of prehistory, it meets Criterion 4 for listing in the California Register.

As stated within the 2008 Phase II Study, pursuant to PRC §21083.2, impacts to archaeological resources, when it cannot be prevented by avoiding, capping, or designating the site as conservation easement, needs to be mitigated to a less-than-significant level, most commonly through excavation, or data recovery.

Archaeological monitoring was recommended during all grading and other earthmoving activities due to the site's potential to contain additional subsurface cultural deposits.

Paleontological Resources Assessment Report (2008)

The Project site consists of buried or outcropping igneous rock with soils developed in-place from the decomposition of these rocks, both of which are low in sensitivity for fossil remains. The Paleontological Resources Assessment Report concluded that earth-moving activities within the Project site would be unlikely to unearth any significant paleontological resources, and no paleontological monitoring would be necessary at this location.

Update and Addendum to Phase I and Phase II Cultural Resource Studies (2019)

Due to the age of the 2008 reports discussed above, a 2019 Update was prepared. In addition to the site covered in the previous reports, the 2019 Update includes investigation of potential impacts related to disturbance of the adjacent rights-of-way.

The 2019 field survey of the Project site was conducted by the Project archaeologist, with the assistance of Native American monitors from the Soboba Band of Luiseño Indians and the Pechanga Band of Luiseño Indians.

During the field survey, 15 of the 16 sites previously recorded within the Project site were found to be extant today, with no significant changes observed in their conditions. The one exception was 33-005394, a small site consisting of a single granitic boulder with a grinding slick. The location of the site is now occupied by the intersection of Nandina Avenue and Decker Road, both of which became paved roads between 2016 and 2018. Site 33-005394, therefore, has evidently been removed. No new, previously undiscovered potential resources were identified within the Project site.

Given the demonstrated sensitivity of the Project location for prehistoric cultural remains, the 2019 Update reiterates the recommendation 2008 Phase II Study for archaeological monitoring of all earth-moving operations within the Project site to ensure the timely processing and, if necessary, protection of inadvertent findings of any subsurface cultural deposits. Additionally, pursuant to the Project Conditions of Approval and the Mitigation Measures presented herein, sites of potential significance that cannot be avoided during Project construction will be relocated to a permanent open space area predetermined and

designated on a confidential map. Before construction activities are allowed to start and using professional archaeological methods, any visible artifacts shall be recovered and recorded, photo documentation of each feature in situ shall occur.

4.10.4 EXISTING POLICIES AND REGULATIONS

4.10.4.1 Federal

National Historic Preservation Act

The National Historic Preservation Act (NHPA) requires federal agencies to consider the effects of their undertakings on historic properties. Historic properties are cultural resources (e.g., archeological sites, historic built environment features, or Native American sites) that are listed, or determined to be eligible for listing, on the National Register of Historic Places. The implementing regulations of this mandate, found in the Code of Federal Regulations (36 CFR 800), outline an involved consultative process known as the Section 106 process. The Section 106 process requires a project lead federal agency to consult with the State Historic Preservation Officer.

American Indian Religious Freedom Act

The American Indian Religious Freedom Act, passed in 1978, serves to protect and preserve the traditional religious rights of American Indians, Eskimos, Aleuts, and Native Hawaiians. Before the Act was passed, certain federal laws interfered with the traditional religious practices of many American Indians.

Native American Graves Protection and Repatriation Act of 1990

The Native American Graves Protection and Repatriation Act establishes a federal policy of respect for, and protection of, Native American religious practices. It also has provisions for allowing limited access to Native American religious sites. The Act provides for the repatriation of certain items from the federal government and certain museums to the native groups to which they once belonged. The Act defines "cultural items," "sacred objects," and "objects of cultural patrimony" and establishes a means for determining

ownership of these items. However, the provisions for repatriation only apply to items found on federal lands.

Executive Order 13007 and Executive Order 13084

Executive Order 13007 requires federal agencies with land management responsibilities to allow access to and use of Indian sacred sites on public lands, and to avoid adversely affecting these sites. Executive Order 13084 reaffirms the government-to-government relationship between the federal government and recognized Indian tribes, and requires federal agencies to establish procedures for consultation with tribes. These executive orders only apply to projects that include federal undertakings.

4.10.4.2 State

CEQA and the California Register of Historical Resources

Historical resources are recognized as part of the environment under the California Environmental Quality Act (CEQA). The California Register of Historical Resources (California Register) is the authoritative guide for the State's historical resources, and properties included in the California Register are considered significant for the purposes of CEQA. The California Register includes resources listed, or formally determined eligible for listing, on the National Register of Historic Places, and some California State Landmarks and Points of Historical Interest. Properties of local significance designated under a local preservation ordinance (local landmarks or landmark districts), or that have been identified in a local historical resources inventory, may be eligible for listing in the California Register and are presumed to be significant resources for the purposes of CEQA unless a preponderance of evidence indicates otherwise (PRC § 5024.1, 14 CCR § 4850).

An archaeological site may be considered a historical resource if it is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California (PRC § 5020.1(j)), or if it meets the criteria for listing on the California Register (14 CCR § 4850).

The *CEQA Guidelines* direct lead agencies to evaluate an archaeological site to determine if it meets the criteria for listing in the California Register. If it does, potential adverse impacts must be considered. If an archaeological site is not a historical resource, but meets the definition of a "unique archaeological resource" as defined in PRC §21583.2, then it should be treated in accordance with the provisions of that section.

Substantial adverse change includes demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired (PRC § 5020.1(q)). While demolition and destruction would constitute significant impacts, it is sometimes more difficult to assess when change, alteration, or relocation results in a substantial adverse change. The *CEQA Guidelines* provide that a project that alters those physical characteristics of a historical resources that convey its significance (i.e., its character-defining features), can be considered to materially impair the resource's significance.

California Native American Graves Protection and Repatriation Act (2001)

The California Health and Safety Code, Division 7, Part 2, Chapter 5 (Sections 8010-8030) contains broad provisions for the protection of Native American cultural resources. The California Native American Graves Protection and Repatriation Act establishes policy to ensure that California Native American human remains and cultural items are treated with respect and dignity. The Act also provides the mechanism for disclosure and return of these items held by publicly funded agencies and museums in California. Additionally, the Act outlines the mechanism by which California Native American Tribes not recognized by the federal government may file claims for human remains and cultural items held in agencies or museums.

California Public Resources Code

The California Public Resources Code contains several sections applicable to the preservation of cultural resources and human remains. These sections detail procedures to be followed whenever Native American remains are found, and delineate the unauthorized disturbance or removal of archaeological, historical, paleontological resources, or human remains as an act punishable by law (Sections 5020, 5097.5, 5097.9-5097.996, 7050.5, 7051). As matter of law, the Project would comply with applicable

provisions of the California Public Resources Code addressing preservation and protection of cultural resources and human remains.

California Code of Regulations

Under Title 14, Division 3, Section 4308, no person shall remove, injure, disfigure, deface, or destroy any object of archeological or historical interest or value.

Assembly Bill 52 (AB 52) Tribal Cultural Resources

Enacted as of July 1, 2015, AB 52 established a new category of resources under CEQA called "tribal cultural resources" that considers the tribal cultural values in addition to the scientific and archaeological values when determining impacts and mitigations. The Bill was built on the concept that California Native American Tribes have the expertise "with regard to tribal history and practices" to identify significant cultural resources. To this end, AB 52 requires early consultation in the CEQA process to ensure that local and Tribal governments, public agencies, and project proponents have information available, early in the CEQA environmental review process, for the purpose of identifying and addressing potential adverse impacts to tribal cultural resources.

AB 52 requires that the lead agency contact (in writing) all culturally affiliated tribes that could be affected by a project, within 14 days of deeming a development application complete. The notice commences a 30-day period for the tribe to request consultation. Upon receipt of a request consultation, the lead agency has an additional 30 days to begin the consultation process. AB 52 states that the consultation concludes when either "1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal resource, or 2) a party, acting on good faith and after a reasonable effort, concludes that mutual agreement cannot be reached." AB 52 notes that the consultation can be ongoing throughout the CEQA process.

The County has complied with notification requirements and has initiated consultation, as required under AB 52. Formal notification was provided to potentially affected tribes on May 17, 2019. Please refer also to AB 52 Correspondence provided at EIR Appendix L.

4.10.5 STANDARDS OF SIGNIFICANCE

Consistent with the standards of significance outlined in the County of Riverside *CEQA Guidelines*, Project-related impacts to cultural resources would be considered potentially significant if they cause or result in any of the following:

- Alter or destroy an historic site;
- Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5;
- Alter or destroy an archaeological site;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations, Section 15064.5;
- Disturb any human remains, including those interred outside of formal cemeteries;
- Restrict existing religious or sacred uses within the potential impact area;
- Directly or indirectly destroy a unique paleontological resource, or site, or unique geologic feature;
- 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
- Cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code section 21074 as either a site, feature,

place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c). of Public Resources Code Section 5024.1 for the purpose of this paragraph, the lead agency shall consider the significance to a California Native Tribe.

For the purposes of CEQA, an "important archaeological, historical, or paleontological resource" is defined as follows.

A) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources.

B) A resource included in a local register of historical resources, or identified as significant in an historical resource survey, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.

C) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the California Register of Historical Resources, including the following:

1) A resource is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.

2) A resource is associated with the lives of persons important in our past.

3) A resource embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values, or has yielded, or may be likely to yield, information important in prehistory or history.

4.10.6 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.10.6.1 Introduction

The following analysis is focused on areas where it has been determined that the Project may result in potentially significant impacts, based on the analysis included within the Initial Study. In this regard, as substantiated in the Initial Study, the Project's potential to disturb any human remains, including those interred outside of formal cemeteries was previously determined to be less-than-significant. Please refer to EIR Appendix A, Initial Study Checklist Section *Cultural Resources*. All other potential cultural resources impacts of the Project are discussed below.

4.10.6.2 Impact Statements

Potential Impact: *Would the Project alter or destroy an historic site; or cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5;*

Impact Analysis: As detailed previously at Section 4.10.3, the 2008 Phase II Study concluded that Site 33-017080, located within the Project site, qualifies as a historical resource. The 2019 Update to the 2008 Phase II Study confirms and reiterates this finding. The archaeological data gathered from Site 33-017080 has added some valuable information to knowledge about prehistoric lifeways in the Mead Valley area. The recovered artifacts, the milling features present at this site, and the buried features encountered during the excavations suggest that this site was occupied temporarily as a seasonal floral and faunal resource procurement encampment where daily activities such

as tool-making, food collecting and processing, and cooking took place. The site was centrally located among a large group of bedrock milling sites that contained little or no cultural deposit. This suggests that Site 33-017080 may have operated as a temporary habitation center surrounded by food resources and milling stations, situated some distance away from a larger, permanently settled village. The information provided helps to set a possible scenario for prehistoric settlement and site distribution patterns in the Mead Valley area. Because the site has yielded information important to the study of prehistory, it meets Criterion 4 for listing in the California Register.

Pursuant to PRC §21083.2, impacts to archaeological resources, when they cannot be prevented can be mitigated through data recovery. As a result of the field recordation of the bedrock milling features, coupled with the collection and analysis of a substantial amount of surface and subsurface cultural materials from the site, the 2008 Phase II Study successfully gathered sufficient information as to constitute adequate mitigation of Project effects to Site 33-017080. The 2008 Phase II Study concluded that future impacts to Site 33-017080 would be less-than-significant.

No other historical resources would be affected by the Project. Based on the preceding discussion, the potential for the Project to alter or destroy a historic site or cause a substantial adverse change in the significance of a historic resources as defined in California Code of Regulations, Section 15064.5 is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Would the Project alter or destroy an archaeological site; or cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations, Section 15064.5 or restrict existing religious or sacred uses within the potential impact area?*

Impact Analysis: Several archaeological finds have been identified within the Project site (please refer to Table 4.10-1, presented within Section 4.10.3, *Project Site Background*). Any milling sites or artifacts that may be affected by the Project would be documented,

relocated, and protected pursuant to Mitigation Measure 4.10.2 (following). Additionally, any temporary staging and storage of construction equipment, construction materials, and soils stockpiling would be located so as not to affect any known resources. There are no known or potential religious or sacred uses within the potential impact area that would be potentially affected by the Project.

Notwithstanding the preceding, there is the potential for the area in general to contain additional as yet unknown subsurface cultural deposits that could be disturbed by Project development. This is a potentially significant impact.

Level of Significance: Potentially Significant.

Mitigation Measures:
The 2008 Phase II Study and the 2019 Update to the 2008 Phase II Study recommended archaeological monitoring during all grading and other earthmoving activities. The County has formalized these recommendations and has included additional cultural resources impact mitigation requirements as part of the Project Conditions of Approval, restated below as Mitigation Measures. These same Mitigation Measures will be implemented as means of mitigation for potential impacts to Tribal Cultural Resources as discussed subsequently.

4.10.1 Prior To Grading Permit Issuance: CULTURAL SENSITIVITY TRAINING
The Project Archaeologist and a representative designated by the Tribe shall attend the pre-grading meeting with the contractors to provide Cultural Sensitivity Training for all Construction Personnel. Training will include a brief review of the cultural sensitivity of the Project and the surrounding area; what resources could potentially be identified during earthmoving activities; the requirements of the monitoring program; the protocols that apply in the event unanticipated cultural resources are identified, including who to contact and appropriate avoidance measures until the find(s) can be properly evaluated; and any other appropriate protocols. This is a mandatory training and all construction personnel must attend prior to beginning work on the Project site. A sign-in sheet for attendees of this training shall be included in the Phase IV Monitoring Report.

4.10.2 Prior To Grading Permit Issuance: FEATURE RELOCATION

Site(s) 33-011076, 33-011075, 33-017077, 33-017075, 33-017076 and portions of 33-017098, 33-017078, 33-017080 cannot be avoided through Project redesign. Prior to grading permit issuance, the Project Supervisor and Project Archaeologist shall meet onsite to determine the strategy for relocating the milling features to a permanent open space area predetermined and designated on a confidential map. Before construction activities are allowed to start and using professional archaeological methods, any visible artifacts shall be recovered and recorded, photo documentation of each feature in situ shall occur. The current Department of Parks and Recreation forms for the sites shall be updated, detailing which features were relocated, the process through which this was done, and updated maps using sub meter GIS technology to document the new location of each feature. The relocation information shall be included in the Phase IV Monitoring Report.

4.10.3 Prior To Grading Permit Issuance: NATIVE AMERICAN MONITOR

Prior to the issuance of grading permits, the developer/permit applicant shall enter into an agreement with the consulting tribe(s) for a Native American Monitor. The Native American Monitor(s) shall be on-site during all initial ground disturbing activities and excavation of each portion of the Project site including clearing, grubbing, tree removals, grading and trenching. In conjunction with the Archaeological Monitor(s), the Native American Monitor(s) shall have the authority to temporarily divert, redirect or halt the ground disturbance activities to allow identification, evaluation, and potential recovery of cultural resources. The developer/permit applicant shall submit a fully executed copy of the agreement to the County Archaeologist to ensure compliance with this condition of approval. Upon verification, the Archaeologist shall clear this condition. This agreement shall not modify any condition of approval or mitigation measure.

4.10.4 Prior To Grading Permit Issuance: PROJECT ARCHAEOLOGIST

Prior to issuance of grading permits, the applicant/developer shall provide evidence to the County of Riverside Planning Department that a County certified professional archaeologist (Project Archaeologist) has been contracted to implement a Cultural Resource Monitoring Program (CRMP). A CRMP shall be developed that addresses the details of all activities and provides procedures that must be followed in order to reduce the impacts to cultural and historic resources to a level that is less than significant as well as address potential impacts to undiscovered buried archaeological resources associated with this Project. A fully executed copy of the contract and a

wet-signed copy of the Monitoring Plan shall be provided to the County Archaeologist to ensure compliance with this condition of approval.

Working directly under the Project Archaeologist, an adequate number of qualified Archaeological Monitors shall be present to ensure that all earth moving activities are observed and shall be on-site during all grading activities for areas to be monitored including off-site improvements. Inspections will vary based on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The frequency and location of inspections will be determined by the Project Archaeologist.

4.10.5 Prior to Ground Disturbing activities: TEMPORARY FENCING

Prior to ground disturbance, temporary fencing shall be required for the protection of cultural sites 33-005368, 33-005367, 33-005373, 33-017081, 33-017179, 33-005380, 33-017099 and portions of 33-017098, 33-017078, 33-017080 and 33-028891. Prior to commencement of grading or brushing, the Project Archaeologist shall identify the site boundaries and determine an adequate buffer for protection of the site(s). Upon approval of buffers, the applicant shall direct the installation of fencing under the supervision of the project archaeologist. The fencing can be removed only after grading operations have been completed.

4.10.6 Prior To Grading Final Inspection: ARTIFACT DISPOSITION

Prior to Grading Permit Final Inspection, the landowner(s) shall relinquish ownership of all tribal cultural resources that are unearthed on the Project property during any ground-disturbing activities, including previous investigations and/or Phase III data recovery.

- ***Historic Resources** - all historic archaeological materials recovered during the archaeological investigations (this includes collections made during an earlier project, such as testing of archaeological sites that took place years ago), shall be curated at the Western Science Center, a Riverside County curation facility that meets State Resources Department Office of Historic Preservation Guidelines for the Curation of Archaeological Resources ensuring access and use pursuant to the Guidelines.*

- ***Prehistoric Resources*** *- One of the following treatments shall be applied.*

  a. Preservation-In-Place of the cultural resources, if feasible. Preservation in place means avoiding the resources, leaving them in the place where they were found with no development affecting the integrity of the resources.

  b. Reburial of the resources on the Project property. The measures for reburial shall include, at least, the following: Measures to protect the reburial area from any future impacts. Reburial shall not occur until all required cataloguing, analysis and studies have been completed on the cultural resources, with an exception that sacred items, burial goods and Native American human remains are excluded. Any reburial processes shall be culturally appropriate. Listing of contents and location of the reburial shall be included in the confidential Phase IV Report. The Phase IV Report shall be filed with the County under a confidential cover and not subject to a Public Records Request.

  c. If reburial is not agreed upon by the Consulting Tribes then the resources shall be curated at a culturally appropriate manner at the Western Science Center, a Riverside County curation facility that meets State Resources Department Office of Historic Preservation Guidelines for the Curation of Archaeological Resources ensuring access and use pursuant to the Guidelines. The collection and associated records shall be transferred, including title, and are to be accompanied by payment of the fees necessary for permanent curation. Evidence of curation in the form of a letter from the curation facility stating that subject archaeological materials have been received and that all fees have been paid, shall be provided by the landowner to the County. There shall be no destructive or invasive testing on sacred items, burial goods and Native American human remains.

4.10.7 Prior To Grading Final Inspection: PHASE IV MONITORING REPORT

Prior to Grading Permit Final Inspection, a Phase IV Cultural Resources Monitoring Report shall be submitted that complies with the Riverside County Planning Department's requirements for such reports for all ground disturbing activities associated with this grading permit. The report shall follow the County of Riverside Planning Department Cultural Resources (Archaeological) Investigations Standard Scopes of Work posted on the TLMA

website. The report shall include results of any feature relocation or residue analysis required as well as evidence of the required cultural sensitivity training for the construction staff held during the required pre-grade meeting and evidence that any artifacts have been treated in accordance to procedures stipulated in the Cultural Resources Management Plan.

Level of Significance After Mitigation: Less-Than-Significant. Implementation of the Project Conditions of Approval and Mitigation Measures 4.10.1 through 4.10.7 provide for protection of known or potential archaeological resources. With implementation of the Project Conditions of Approval and Mitigation Measures 4.10.1 through 4.10.7, the potential for the Project to alter or destroy an archaeological site; or cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations, Section 15064.5 or restrict existing religious or sacred uses within the potential impact area are reduced to levels that would be less-than-significant.

Potential Impact: *Restrict existing religious or sacred uses within the potential impact area.*

Impact Analysis: Some of the larger archaeological sites within the Project site vicinity are known to contain dozens of bedrock milling features, as well as chipped-stone and groundstone tools and debitage, culturally rich midden soils, rock shelters, pictographs (painted images on boulders), petroglyphs (pecked images on boulders), and a special type of petroglyph called cupules, which are small, circular pecked depressions attributed to girls' or boys' (or possibly both) puberty ceremonies. These larger, more complex sites contain the quantities and types of artifacts and features that indicate they were possibly permanent or semi-permanent campsites where a number of daily activities and some ceremonies occurred.

The Project site itself does not fit the description of a desirable permanent village location, where religious or sacred uses would have occurred. Rather, it appears to be an appropriate location for seasonal food procurement and processing. No known religious or sacred uses are located within the Project site. Please refer also to subsequent discussions addressing potential impacts to Tribal Cultural Resources.

Level of Significance: Less-Than-Significant.

Potential Impact: *Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.*

Impact Analysis: The entire site evidences surface exposure of igneous rocks. Igneous rocks (from the Greek word for fire) form when hot, molten rock crystallizes and solidifies. The melt originates deep within the Earth near active plate boundaries or hot spots, then rises toward the surface. Fossils, with few exceptions, are not found within igneous rocks (volcanic, or of molten origin) due to the extreme heat and/or pressure associated with the origin and history of these rock types. The Paleontological Resources Assessment concluded that the Project would not significantly affect paleontological resources.

Notable geological features within the Project site include slopes and rock formations that are predominant in the westerly portion of the Project site. As illustrated at Figure 3.1-1, the westerly approximately 58 acres of the Project site will remain vacant.

As such, the potential for the Project to destroy a unique paleontological resource or site or unique geologic feature is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Would the Project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074?*

Impact Analysis: The County has contacted those tribes on its most current AB 52 Consultation list. In compliance with AB 52, notices regarding the Project were provided to all requesting tribes.

The Pechanga Band of Luiseño Indians received the notification on May 17, 2019 but did not request to consult on the Project. The Morongo Band of Mission Indians responded

on June 19, 2019 and deferred to closer tribes. The Rincon Band of Luiseño Indians replied on June 19, 2019 and although they did not request consultation, they recommended that an archaeological record search be conducted. The Pala Band of Mission Indians responded in a letter dated May 22, 2019 and declined consultation.

Consultations were requested by the Soboba Band of Luiseño Indians (Tribe) in a letter dated June 17, 2019. For their use and reference, the Phase I Study was provided to the Tribe on August 26, 2019. A meeting was held on June 18, 2019 and also January 7, 2020 during which the Tribe advised the Planning Department that the Project area comprises a tribal cultural resource (TCR). Development of the Project could adversely affect this TCR, and the Project therefore has the potential to cause or result in substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074. This is a potentially significant impact.

Level of Significance: Potentially Significant.

Mitigation Measures: Please refer to previous Mitigation Measures 4.10.1 through 4.10.7. On January 09, 2020 the Project Conditions of Approval were provided to the Tribe and on February 11, 2020 the Tribe concurred with measures outlined in the Project Conditions of Approval to mitigate impacts to any TCRs that may be impacted during Project grading activities. These Conditions of Approval are restated herein as previous Mitigation Measures 4.10.1 through 4.10.7. With implementation of the Project Conditions of Approval and Mitigation Measures 4.10.1 through 4.10.7, potential impacts to TCRs would be reduced to levels that would be less-than-significant.

Level of Significance After Mitigation: Less-Than-Significant.

4.11 ENERGY

4.11 ENERGY

Abstract

This Section identifies and addresses potential energy impacts that may result from construction and implementation of the Project. More specifically, the energy impacts analysis evaluates the potential for the Project to cause or result in the following impacts:

- *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.*

As supported by the analysis presented in this Section, potential energy impacts of the Project would be less-than-significant.

4.11.1 BACKGROUND AND INTRODUCTION

In 1975, largely in response to the oil crisis of the 1970s, the State Legislature adopted AB 1575, which created the California Energy Commission (CEC). The statutory mission of the CEC is to forecast future energy needs; license thermal power plants of 50 megawatts or larger; develop energy technologies and renewable energy resources; plan for and direct responses to energy emergencies; and, perhaps most importantly, to promote energy efficiency through the adoption and enforcement of appliance and building energy efficiency standards.

AB 1575 also amended Public Resources Code Section 21100(b)(3) to require EIRs to consider the potential for wasteful, inefficient, and/or unnecessary consumption of energy

caused by or resulting from a project. Appendix F to the *CEQA Guidelines* (Guidelines) assists EIR preparers in this regard. More specifically, Guidelines Appendix F *Energy Conservation* establishes parameters and context for determining whether a project would result in the inefficient, wasteful, and unnecessary consumption of energy.

Guidelines Section 15126.2 *Consideration and Discussion of Significant Environmental Impacts,* as amended December 28, 2018, recognizes the need to consider Guidelines Appendix F *Energy Conservation* when analyzing project impacts (for EIRs). In this regard, Guidelines Section 15126.2 (b), excerpted below, provides the following guidance:

> **Energy Impacts.** If analysis of the project's energy use reveals that the project may result in significant environmental effects due to wasteful, inefficient, or unnecessary consumption use of energy, or wasteful use of energy resources, the EIR shall mitigate that energy use. This analysis should include the project's energy use for all project phases and components, including transportation-related energy, during construction and operation. In addition to building code compliance, other relevant considerations may include, among others, the project's size, location, orientation, equipment use and any renewable energy features that could be incorporated into the project. (Guidance on information that may be included in such an analysis is presented in Appendix F.) This analysis is subject to the rule of reason and shall focus on energy use that is caused by the project. This analysis may be included in related analyses of air quality, greenhouse gas emissions, transportation or utilities in the discretion of the lead agency. The analysis presented here conforms to Guidelines Section 15126.2 (b) guidance.

In summary, the Project would provide for, and promote, energy efficiencies consistent with applicable state or federal standards and regulations. The Project would also conform to County of Riverside (County) energy efficiency and energy conservation measures.

Moreover, energy consumed by the Project would be comparable to, or less than, energy consumed by other development proposals of similar scale and intensity. On this basis, the Project would not result in the inefficient, wasteful or unnecessary consumption of energy. Further, the Project would not cause or result in the need for additional energy producing facilities or energy delivery systems. The Project would therefore not result in significant environmental effects due to wasteful, inefficient, or unnecessary consumption use of energy, or wasteful use of energy resources. Nor would the Project result in significant environmental effects due to conflict with or obstruction of a state or local plan for renewable energy or energy efficiency.

4.11.2 EXISTING CONDITIONS

4.11.2.1 Overview

A summary of, and context for, energy consumption and energy demands within the State is presented in *U.S. Energy Information Administration, California State Profile and Energy Estimates, Quick Facts* excerpted in pertinent part here:

- California was the fourth-largest producer of crude oil among the 50 states in 2017, after Texas, North Dakota, and Alaska, and, as of January 2018, third in oil refining capacity after Texas and Louisiana.
- California is the largest consumer of jet fuel among the 50 states and accounted for one-fifth of the nation's jet fuel consumption in 2016.
- California's total energy consumption is second-highest in the nation, but, in 2016, the state's per capita energy consumption ranked 48th, due in part to its mild climate and its energy efficiency programs.
- In 2017, California ranked second in the nation in conventional hydroelectric generation and first as a producer of electricity from solar, geothermal, and biomass resources.

- In 2017, solar PV and solar thermal installations provided about 16% of California's net electricity generation. [1]

As indicated above, California is one of the nation's leading energy-producing states, and California per capita energy use is among the nation's most efficient.

4.11.2.2 Electricity and Natural Gas Resources

Electricity

Electricity would be provided to the Project by Southern California Edison (SCE). The Project site is vacant and undeveloped and does not contain uses or facilities that consume or produce electricity.

SCE is an investor-owned utility providing electric power to an estimated 15 million persons in 15 counties and in 180 incorporated cities, within a service area encompassing approximately 50,000 square miles.[2] SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers. The California Public Utilities Commission (CPUC) regulates investor-owned electric utilities operating in California, including SCE.

Natural Gas

Natural gas would be provided to the Project by Southern California Gas (SoCal Gas). The Project site is vacant and undeveloped and does not contain uses or facilities that consume or produce natural gas.

---

[1] U.S. Energy Information Administration. (2018, November 15). California Profile. Retrieved August 13, 2019, from https://www.eia.gov/state/print.php?sid=CA

[2] Southern California Edison. (n.d.). Who We Are. Retrieved August 13, 2019, from https://www.sce.com/about-us/who-we-are

SoCal Gas is the nation's largest natural gas distribution utility, serving approximately 21.8 million consumers through 5.9 million meters in more than 500 communities. The SoCal Gas service territory encompasses approximately 24,000 square miles throughout Central and Southern California, from Visalia to the Mexican border. Natural gas is available from a variety of in-state and out-of-state sources and is provided throughout the state in response to market supply and demand. Complementing available natural gas resources, biogas may soon be available via existing delivery systems, thereby increasing the availability and reliability of resources in total. The CPUC regulates investor-owned natural gas utilities operating in California, including SoCal Gas.

4.11.2.3 Transportation Energy Resources

The Project would generate additional vehicle trips with resulting consumption of energy resources, predominantly gasoline. Gasoline (and other vehicle fuels) are commercially-provided commodities and would be available to the Project patrons and employees via commercial outlets. The Project site is vacant and undeveloped and does not contain uses or facilities that consume or produce transportation energy resources.

California's historical demand for transportation fuels reflects a significant dependence on gasoline, diesel, and jet fuel. The transportation sector in California consumed more than 23.2 billion gasoline gallon equivalents (GGEs) of energy in 2015 [the latest date of record], of which 21.8 billion (or 94 percent) were fossil fuels. In 2005, California consumed roughly 23.5 billion GGE of fossil fuels. Since then, a notable decline in energy consumption occurred from 2007 to 2010, reflecting the effect of the 2008 financial crisis. However, since 2012 economic growth and declining crude oil prices have led to an increase in gasoline consumption. [3]

[3] *Transportation Energy Demand Forecast 2018 – 2030* (CEC) November 2017, p. 8.

4.11.3 STATE AND LOCAL ENERGY EFFICIENCY/ENERGY CONSERVATION PLANS, POLICIES, REGULATIONS

Project consistency with State and County Energy Efficiency/Energy Conservation Plans and related policies and/or regulations relevant to the Project are summarized at Table 4.11-1. In addition to the plans, policies, and regulations listed below, the State and County have also implemented measures that reduce air pollutant emissions and greenhouse gases. As a corollary effect, these measures in part act to promote energy efficiency and reduce energy consumption. Discussions of these plans, policies, and regulations are presented at EIR Sections 4.2, *Air Quality* and 4.3, *Greenhouse Gas Emissions*.

Table 4.11-1
State and Local Energy Efficiency/Energy Conservation Plan Consistency

PLANS, POLICES, REGULATIONS	Remarks
STATE of CALIFORNIA	
California Code of Regulations (CCR) Title 24, Part 6: Energy Efficiency Standards California Code Title 24, Part 6 (also referred to as the California Energy Code), was promulgated by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption. To these ends, the California Energy Code provides energy efficiency standards for residential and nonresidential buildings. The Project would be required to comply with energy efficiency standards in effect at the time of building permit application(s).	**Consistent:** *The Project would be designed, constructed and operated to meet or exceed incumbent CCR Title 24 Energy Efficiency Standards. On this basis, the Project is determined to be consistent with, and would not interfere with or obstruct implementation of Title 24 Energy Efficiency Standards.* *Based on the preceding, the Project is considered consistent with CCR Title 24, Part 6: Energy Efficiency Standards.*
CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen). CALGreen is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on January 1, 2011. CALGreen is updated on a regular basis, with the most recent update consisting of the 2016 California Green Building Code Standards that became effective January 1, 2017. Under state law, local jurisdictions are permitted to adopt more stringent requirements.	**Consistent:** *The Project would be designed, constructed and operated to meet or exceed incumbent CCR Title 24 CALGreen Standards. On this basis, the Project is determined to be consistent with, and would not interfere with or obstruct implementation of Title 24 CALGreen Standards.* *Based on the preceding, the Project is considered consistent with CCCR, Title 24, Part 11: CALGreen.*
COUNTY of RIVERSIDE GENERAL PLAN	
Open Space Element	
Policy OS 11.2: Support and encourage voluntary efforts to provide active and passive solar access opportunities in new developments.	**Consistent:** *The Project would comply with on-site renewable energy production requirements presented in the* County of Riverside Climate Action Plan Update, *November 2019 (CAP Update pp. 4-11, 4-12, R2-CE1,* Clean Energy). *More specifically, the Project incorporates a photovoltaic (PV) system. that would provide a portion of the Project electrical energy demands. Current designs indicate that a minimum of 20 percent of the Project electrical demands would be supplied by the proposed PV system.*
Policy OS 11.3: Permit and encourage the use of passive solar devices and other state-of-the-art energy resources.	
Policy OS 11.4: Encourage site-planning and building design that maximizes solar energy use/potential in future development applications.	

Table 4.11-1
State and Local Energy Efficiency/Energy Conservation Plan Consistency

PLANS, POLICES, REGULATIONS	Remarks
	The Project does not propose or require designs or operations that would interfere with or obstruct County actions to support, permit, or encourage use of solar energy. Please refer also to related discussions presented at EIR Section 4.3, Greenhouse Gas Emissions. *Based on the preceding, the Project is considered consistent with General Plan Policies OS 11.2, OS 11.3, OS 11.4.*
Policy OS 16.1: Continue to implement Title 24 of the State Building Code California Code of Regulations (the "California Building Standards Code"), particularly Part 6 (the California Energy Code) and Part 11 (the California Green Building Standards Code), as amended and adopted pursuant to County ordinance. Establish mechanisms and incentives to encourage architects and builders to exceed the energy efficiency standards of within CCR Title 24.	**Consistent:** *Please refer to remarks above addressing Project consistency with CCR Title 24, Part 6: Energy Efficiency Standards, and CCR, Title 24, Part 11: CALGreen.*
Policy OS 16.14: Coordinate energy conservation activities with the County Climate Action Plan (CAP) as decreasing energy usage also helps reduce carbon emissions.	**Consistent:** *The Project would conform to and implement applicable provisions of the CAP. Please refer also to related discussions presented at EIR Section 4.3,* Greenhouse Gas Emissions. *Based on the preceding, the Project is considered consistent with General Plan Policy OS 16.14*
Policy OS 16.9: Encourage increased use of passive, solar design and day-lighting in existing and new structures.	**Consistent:** *Please refer to remarks above addressing Project consistency with General Plan Policies OS 11.2, OS 11.3, OS 11.4.*
Air Quality Element	
Policy AQ 4.1: Require Encourage the use of all feasible building materials/methods which reduce emissions.	**Consistent:** *The Project would conform to or surpass all CCR Title 24, Part 6: Energy Efficiency Standards, and CCR, Title 24, Part 11: CALGreen building design and materials requirements. Conformance with these requirements acts to conserve energy and reduce energy-source emissions. Please refer also to related discussions presented at EIR Section 4.2,* Air Quality, *and Section 4.3,* Greenhouse Gas Emissions. *Based on the preceding, the Project is considered consistent with General Plan Policy*
Policy AQ 4.2: Encourage the use of all feasible efficient heating equipment and other appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and boiler units.	**Consistent:** *The Project would employ energy efficient equipment and appliances that conform to or surpass CCR Title 20 Appliance Efficiency Regulations. The Project would not interfere with or obstruct County efforts to encourage use of all feasible efficient heating equipment and other appliances.* *Based on the preceding, the Project is consistent with General Plan Policy AQ 4.2.*
Policy AQ 4.3: Encourage centrally heated facilities to utilize automated time clocks or occupant sensors to control heating where feasible.	**Consistent:** *The Project would implement centrally heated facilities with automated time clocks and/or occupant sensors to control heating where feasible.*

Table 4.11-1
State and Local Energy Efficiency/Energy Conservation Plan Consistency

PLANS, POLICES, REGULATIONS	Remarks
	Based on the preceding, the Project is consistent with General Plan Policy AQ 4.3.
Policy AQ 5.2: Adopt incentives and/or regulations to enact energy conservation requirements for private and public developments.	**Consistent:** *The Project would incorporate energy efficient designs and operations consistent with County and State requirements. The Project would not interfere with or obstruct County efforts to adopt incentives and/or regulations to enact energy conservation requirements for private and public developments.* *Based on the preceding, the Project is consistent with General Plan Policy AQ 5.2.*
Policy AQ 5.4: Encourage the incorporation of energy-efficient design elements, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling.	**Consistent:** *To the extent practical, the Project would orient buildings, building elements, and site facilities to conserve energy and promote energy efficiencies. The Project would not interfere with or obstruct County efforts to* encourage the incorporation of energy-efficient design elements. *Based on the preceding, the Project is consistent with General Plan Policy AQ 5.4.*
Policy AQ 18.1: Baseline emissions inventory and forecast. Riverside County CAP has included baseline emissions inventory with data on County's CO2e emissions for specific sectors and specific years. The carbon inventory greatly aids the process of determining the type, scope and number of GHG reduction policies needed. It also facilitates the tracking of policy implementation and effectiveness. The carbon inventory for the County consists of two distinct components; one inventory is for the County as a whole, as defined by its geographical borders and the other inventory is for the emissions resulting from the County's municipal operations.	**Consistent:** *The Project Greenhouse Gas Analysis (GHGA) provides an inventory of Project-source GHG emissions. The Project GHG emissions inventory supports County efforts to establish a County-wide GHG emissions inventory for specific sectors and specific years. Please refer also to EIR Section 4.3,* Greenhouse Gas Emissions. *The Project would not interfere with or obstruct County efforts to inventory sources and quantities of GHG emissions.* *Based on the preceding, the Project is consistent with General Plan Policy AQ 18.1.*
Policy AQ 18.2: Adopt GHG emissions reduction targets. Pursuant to the results of the Carbon Inventory and Greenhouse Gas Analysis for Riverside County, future development proposed as a discretionary project pursuant to the General Plan shall achieve a greenhouse gas emissions reduction of 25% compared to Business As Usual (BAU) project in order to be found consistent with the County's Climate Action Plan (CAP).	**Consistent:** *Project GHG emissions impact have been evaluated in the context of GHG emissions reductions targets and performance standards established under the incumbent County Climate Action Plan (Riverside County Climate Action Plan Update, November 2019 [CAP Update]). The Project GHGA substantiates that the Project would achieve a greenhouse gas emissions reduction consistent with the CAP Update. Please refer also to EIR Section 4.3,* Greenhouse Gas Emissions. *Based on the preceding, the Project is consistent with General Plan Policy AQ 18.2.*
Policy AQ 18.3: Develop a Climate Action Plan for reducing GHG emissions. The Riverside County CAP has been developed to formalize the measures necessary to achieve County GHG emissions reduction targets. The CAP includes both the policies necessary to meet stated targets and objectives. These targets, objectives and Implementation Measures may be refined, superseded or supplemented as warranted in the future.	**Consistent:** *The Project conforms to and implements applicable provisions of the CAP Update.* *The Project would not interfere with or obstruct County efforts to implement the CAP Update, CAP Update policies, or CAP Update emissions reduction targets. Please refer also to EIR Section 4.3,* Greenhouse Gas Emissions.

Table 4.11-1
State and Local Energy Efficiency/Energy Conservation Plan Consistency

PLANS, POLICES, REGULATIONS	Remarks
	Based on the preceding, the Project is consistent with General Plan Policy AQ 18.3.
Policy AQ 18.4: Implement policies and measures to achieve reduction targets. The County shall implement the green-house gas reduction policies and measures established under the County Climate Action Plan for all new discretionary development proposals.	**Consistent:** *The Project would implement applicable greenhouse gas reduction policies and measures established under the CAP Update.* *The Project would not interfere with or obstruct County efforts to implement the CAP Update, CAP Update policies, or CAP Update emissions reduction targets. Please refer also to EIR Section 4.3,* Greenhouse Gas Emissions. *Based on the preceding, the Project is consistent with General Plan Policy AQ 18.4.*
Policy AQ 18.5: Monitor and verify results. The County shall monitor and verify the progress and results of the CAP periodically. When necessary, the CAP's "feedback" provisions shall be used to ensure that any changes needed to stay "on target" with stated goals are accomplished.	**Consistent:** The Project GHG emissions inventory supports County efforts to monitor and verify GHG reduction targets established under the CAP Update. *The Project would not interfere with or obstruct County efforts to monitor sources and quantities of GHG emissions. Please refer also to EIR Section 4.3,* Greenhouse Gas Emissions. *Based on the preceding, the Project is consistent with General Plan Policy AQ 18.5.*
Policy AQ 19.3: Require new development projects subject to County discretionary approval to achieve the GHG reduction targets established in the CAP either through: a. Garnishing 100 points through the Implementation Measures found in the County's CAP; or b. Requiring quantification of project-specific GHG emissions and reduction of GHG emissions to, at minimum, the applicable GHG reduction threshold established in the CAP.	**Consistent:** *Please refer to remarks above addressing Project consistency with General Plan Policies AQ 18.2, AQ 18.4, et al.*
Policy AQ 20.10: Reduce energy consumption of new developments (residential, commercial and industrial) through efficient site design that takes into consideration solar orientation and shading, as well as passive solar design.	**Consistent:** *Please refer to remarks above addressing Project consistency with General Plan Policies AQ 4.1, AQ 4.2, AQ 4.3, AQ 5.4, et al.*
Policy AQ 20.11: Increase energy efficiency of new developments through efficient use of utilities (water, electricity, natural gas) and infrastructure design. Also, increase energy efficiency through use of energy-efficient mechanical systems and equipment.	**Consistent:** *Please refer to remarks above addressing Project consistency with General Plan Policies AQ 4.1, AQ 4.2, AQ 4.3, AQ 5.4, AQ 20.10, et al.*
Policy AQ 20.18: Encourage the installation of solar panels and other energy-efficient improvements and facilitate residential and commercial renewable energy facilities (solar array installations, individual wind energy generators, etc.).	**Consistent:** *Please refer to remarks above addressing Project consistency with General Plan Policies OS 11.2, OS 11.3, OS 11.4, OS 16.9, AQ 4.1, et al.*

Table 4.11-1
State and Local Energy Efficiency/Energy Conservation Plan Consistency

PLANS, POLICES, REGULATIONS	Remarks
Policy AQ 23.2: For discretionary actions, land use-related greenhouse gas reduction objectives shall be achieved through development and implementation of the appropriate Implementation Measures of the Climate Action Plan for individual future projects. County programs shall also be developed and implemented to address land use-related reductions for County operations and voluntary community efforts.	**Consistent:** *Please refer to remarks above addressing Project consistency with General Plan Policies AQ 18.1 – AQ 18.5, AQ 19.3, et al.* *The Project would not interfere with or obstruct County efforts to establish programs to address land use-related GHG emissions reductions for County operations and voluntary community efforts.* *Based on the preceding, the Project is consistent with General Plan Policy AQ 23.2.*
Policy AQ 24.1: The County shall implement programs and requirements to achieve the following Objectives related to reducing greenhouse gas emissions achieved through improving energy efficiency and increasing energy conservation: a. Require new development (residential, commercial and industrial) to reduce energy consumption through efficient site design that takes into consideration solar orientation and shading, as well as passive solar design. Passive solar design addressed the innate heating and cooling effects achieved through building design, such as selective use of deep eaves for shading, operable windows for cross-ventilation, reflective surfaces for heat reduction and expanses of brick for thermal mass (passive radiant heating). b. Require new development (residential, commercial and industrial) to design energy efficiency into the project through efficient use of utilities (water, electricity, natural gas) and infrastructure design. c. Require new development (residential, commercial and industrial) to reduce energy consumption through use of energy efficient mechanical systems and equipment. d. Establish or support programs to assist in the retrofitting of older affordable housing units. e. Actively seek out existing or develop new programs to achieve energy efficiency for existing structures, particularly residential units built prior to 1978 when CCR Title 24 energy efficiency requirements went into effect. f. Balance additional upfront costs for energy efficiency and affordable housing economic considerations by providing or supporting programs to finance energy-efficient housing.	**Consistent:** *Please refer to remarks above addressing Project consistency with General Plan Policies AQ 4.1 – AQ 4.3, AQ 5.2, AQ 5.4, AQ 18.1 – AQ 18.5, AQ 19.3, AQ 23.2, et al.* *The Project would not interfere with or obstruct County efforts to establish or support programs to assist in the retrofitting of older affordable housing units; actively seek out existing or develop new programs to achieve energy efficiency for existing structures; or balance costs for energy efficiency and affordable housing economic considerations by providing or supporting programs to finance energy-efficient housing.* *Based on the preceding, the Project is consistent with General Plan Policy AQ 24.1.*
Policy AQ 24.2: For discretionary actions, energy efficiency and conservation objectives shall be achieved through development and implementation of the appropriate Implementation Measures of the Climate Action Plan for all new development approvals. County programs shall also be developed and implemented to address energy efficiency and conservation efforts for County operations and the community.	**Consistent:** *Please refer to remarks above addressing Project consistency with General Plan Policies AQ 18.1 – AQ 18.5, AQ 19.3, AQ 23.2, et al.* *The Project would not interfere with or obstruct County efforts to establish programs to address energy efficiency and conservation efforts for County operations and the community.*

Table 4.11-1
State and Local Energy Efficiency/Energy Conservation Plan Consistency

PLANS, POLICES, REGULATIONS	Remarks
	Based on the preceding, the Project is consistent with General Plan Policy AQ 24.2.
Policy AQ 26.1: The County shall implement programs and requirements to achieve the following Objectives related to reducing greenhouse gas emissions derived from energy generation: a. Encourage the installation of solar panels and other energy-efficient improvements. b. Facilitate residential and commercial renewable energy facilities (solar array installations, individual wind energy generators, etc.). c. Facilitate development of renewable energy facilities and transmission lines in appropriate locations. d. Facilitate renewable energy facilities and transmission line siting. e. Provide incentives for development of local green technology businesses and locally produced green products. f. Provide incentives for investment in residential and commercial energy efficiency improvements. g. Identify lands suitable for wind power generation or geothermal production and encourage development of these alternative energy sources.	**Consistent:** *Please refer to remarks above addressing Project consistency with General Plan Policies OS 11.2 – OS 11.4, et al.* *The Project would not interfere with or obstruct with County efforts to achieve County Objectives related to reducing greenhouse gas emissions derived from energy generation.* *Based on the preceding, the Project is consistent with General Plan Policy AQ 26.1.*
Policy AQ 26.2: For discretionary actions, the objectives for greenhouse gas reduction through increased use of alternative energy sources shall be achieved through development and implementation of the applicable Implementation Measures of the Climate Action Plan. County programs shall also be developed and implemented to address use of alternative energy for County operations and within the community.	**Consistent:** *Please refer to remarks above addressing Project consistency with General Plan Policies AQ 4.1 – AQ 4.3, AQ 5.2, AQ 5.4, AQ 18.1 – AQ 18.5, AQ 19.3, AQ 23.2, AQ 24.2, et al.* *The Project would not interfere with or obstruct County efforts to address use of alternative energy for County operations and within the community.* *Based on the preceding, the Project is consistent with General Plan Policy AQ 26.2.*

Sources: CCR Title 24, Part 6: Energy Efficiency Standards; CCR, Title 24, Part 11: California Green Building Standards Code; County of Riverside General Plan; County of Riverside Climate Action Plan Update; Oleander Business Park Air Quality Impact Analysis, Oleander Business Park Greenhouse Gas Analysis; Remarks by Applied Planning, Inc.

Additionally, regulatory measures, standards, and policies directed at reducing air pollutant emissions and GHG emissions would also act to promote energy conservation and reduce Project energy consumption. Please refer to related discussions presented at EIR Sections 4.2, *Air Quality* and 4.3, *Greenhouse Gas Emissions*.

4.11.4 STANDARDS OF SIGNIFICANCE

Appendix G of the California Environmental Quality Act (*CEQA*) Guidelines indicates a Project will normally have a potentially significant effect related to energy if it 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.

4.11.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.11.5.1 Impact Statements

Potential Impact: *Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.*

Impact Analysis:

PROJECT ENERGY DEMANDS AND ENERGY EFFICIENCY/CONSERVATION MEASURES

Estimated energy demands of Project construction and Project operations are summarized in the following discussions. Project design features and operational programs, as well as regulations that promote energy conservation end energy conservation are also identified. The Project in total would be required to comply with incumbent performance standards established under the Building Energy Efficiency Standards contained in the California Code of Regulations (CCR), Title 24, Part 6 (Title 24, Energy Efficiency Standards). Also, developers and owners/tenants have vested financial incentives to avoid imprudent energy consumption practices. In this regard, there is growing recognition among developers and owners/tenants that efficient and sustainable construction and operational practices yield both environmental and economic benefits. On this basis, and as further supported by the

following discussions, the Project would not result in or cause wasteful, inefficient, and unnecessary consumption of energy.

Construction Energy Demands and Energy Efficiency/Conservation Measures

Construction Fuel/Power Consumption Estimates

Project construction energy consumption estimates are summarized at Table 4.11-2. Detailed Project construction energy consumption estimates are presented in the *Oleander Business Park Energy Tables* (Urban Crossroads, Inc.) December 16, 2019, EIR Appendix K. Project construction would represent a "single-event" energy demand and would not require ongoing or permanent commitment of energy resources for this purpose. Gasoline and diesel fuel would be provided by existing area vendors.

Table 4.11-2
Construction Energy Consumption Estimates

Activity	Diesel Fuel (Gallons)	Gasoline (Gallons)
Construction Equipment Operations	**125,156**	
Vendor Trips	**36,409**	
Haul Trips	**1,947,559**	
Worker Commutes		**127,719**
TOTALS	**2,109,124**	**127,719**

Source: Oleander Business Park Energy Tables (Urban Crossroads, Inc.) December 16, 2019.
Notes: All construction equipment are assumed to be diesel-powered. All vendor and haul trips are assumed to be diesel-powered Medium-Heavy-Duty-Trucks (MHDT) and Heavy-Heavy-Duty Trucks (HHDT). All construction worker commutes assumed to be via gasoline-powered vehicles (LDA, LDT1, LDT2, MDV)

Construction Energy Efficiency/Conservation Measures

Equipment used for Project construction would conform to CARB regulations and California emissions standards, and would demonstrate related fuel efficiencies. There are no unusual Project characteristics or construction processes that would require actions or the use of equipment that would be more energy intensive than is used for comparable activities; or equipment that would not conform to current emissions standards (and related fuel efficiencies). The Project would also implement applicable efficiency/conservation measures provisions of the County of Riverside Climate Action

Plan Update, November 2019 (CAP Update). Project construction activities would therefore not result in inefficient, wasteful, or unnecessary consumption of power or fuel.

Additionally, certain incidental construction-source energy efficiencies would likely accrue through implementation of California regulations. More specifically, California Code of Regulations Title 13, Motor Vehicles, section 2449(d)(3) *Idling*, limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. Enforcement of idling limitations is realized through periodic site inspections conducted by County building officials, and/or in response to citizen complaints.

Indirect construction energy efficiencies and energy conservation would be achieved through the use of recycled/recyclable materials and related procedures, and energy efficiencies realized from bulk purchase, transport and use of construction materials. Use of recycled and recyclable materials and use of materials in bulk also reduces energy demands associated with preparation and transport of construction materials as transport and disposal of construction waste and solid waste in general, with corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations.

Construction Waste Management Plan

Consistent with Section 5.408, *Construction Waste Reduction, Disposal, and Recycling* of the California Green Building Standards Code (CALGreen Code), as adopted by the County, the Project would recycle or salvage for reuse a minimum of 50 percent of the nonhazardous construction and demolition waste. A Project Construction Waste Management Plan would also be prepared consistent with Section 5.408.1.1 of the CALGreen Code.

Operational Energy Demands and Energy Efficiency/Conservation Measures

Energy consumption in support of or related to Project operations would include transportation energy demands (energy consumed by employee and patron vehicles accessing the Project site) and facilities energy demands (energy consumed by building operations and site maintenance activities).

Transportation Energy Demands

Project transportation energy consumption estimates are summarized at Table 4.13-3. Detailed Project transportation energy consumption estimates are presented in the *Oleander Business Park Energy Tables* (Urban Crossroads, Inc.) December 16, 2019, EIR Appendix K. Gasoline and diesel fuel would be provided by existing area vendors.

Table 4.11-3
Transportation Energy Consumption Estimates

Vehicle Class	Diesel Fuel (Gallons)	Gasoline (Gallons)
Passenger Cars		204,293
Trucks	61,752	

Source: *Oleander Business Park Energy Tables* (Urban Crossroads, Inc.) December 16, 2019.
Notes: All trucks (LHDT, MHDT, HHDT) assumed to be diesel-powered. All passenger cars (LDA, LDT1, LDT2, MDV) assumed to be gasoline-powered.

Facilities Energy Demands

Project building operations and Project site maintenance activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the Project by SoCal Gas; electricity would be supplied to the Project by SCE. Annual natural gas and electricity demands of the Project are summarized at Table 4.11-4.

Table 4.11-4
Project Annual Operational Energy Demand Summary

Natural Gas Demand	2,821,337 kBTU/year
Electricity Demand	1,443,993 kWh/year

Source: *Oleander Business Park Energy Tables* (Urban Crossroads, Inc.) December 16, 2019.

Operational Energy Efficiency/Conservation Measures

The Project would meet or surpass standards established under the California Code Title 24, Part 6 (the California Energy Code) and California Green Building Standards Code (CALGreen; CCR, Title 24, Part 11) as implemented by the County. The Project would also implement applicable efficiency/conservation measures provisions of the CAP Update.

Enhanced Vehicle Fuel Efficiencies

Estimated annual fuel consumption estimates presented previously at Table 4.11-3 represent likely potential maximums that would occur under Project Opening Year (2021) Conditions. Under future conditions, average fuel economies of vehicles accessing the Project site can be expected to improve as older, less fuel-efficient vehicles are removed from circulation. Average fuel economies of vehicles accessing the Project site can also be expected to improve over time in response to fuel economy and emissions standards imposed on newer vehicles entering the transportation system.

Project Design and Access

The Project proposes warehouse/manufacturing uses within an urbanizing context, proximate to, and readily accessible from regional and local roadways. In these regards, the Project setting proximate to transportation corridors facilitates access to the Project generally.

Alternative Transportation Modes

Bus Service

Riverside Transit Authority (RTA) is the public transit agency serving the Study Area and unincorporated Riverside County generally. RTA transit route maps and schedules are available at: http://www.riversidetransit.com/index.php/riding-the-bus/maps-schedules. There is currently no transit service proximate to (within 0.25 miles of) the Project site.

Trails and Bikeway System

The Project is located within the MVAP. The MVAP Trails and Bikeway System Plan is presented at Figure 4.1-2. Within the Study Area, community trails are proposed along Oleander Avenue, Harvill Avenue (north of Oleander Avenue), and Harley Knox Boulevard.

Pedestrian Access

Existing pedestrian facilities in the Project site vicinity are illustrated at Figure 4.1-3. In the vicinity of the Project site, sidewalks exist along Nandina Avenue, Decker Road, and Harley Knox Boulevard.

Landscaping

Drought-tolerant plants would be used where appropriate. Project landscaping would be required to conform to County requirements presented in the County of Riverside Comprehensive Landscape Guidelines. See also https://rctlma.org/trans/Land-Development/Landscape-Development.

Solid Waste Diversion/Recycling

The Project would be required to comply with applicable State of California and County solid waste diversion/recycling rules and regulations. These laws and regulations include but are not limited to: State AB 939, State AB 341; CALGreen Code Section 5.408, *Construction Waste Reduction, Disposal, and Recycling*; and Riverside County Department of Waste Resources waste reduction/recycling requirements (see: https://www.rcwaste.org). In combination, these laws and regulations act to reduce the amount of solid waste transported to, and disposed at area landfills. Corollary reduced demands on area landfill capacities and energy consumed by waste transport and landfill operations would likely result.

CONCLUSION

As supported by the preceding analyses, Project construction and operations would not result in the inefficient, wasteful or unnecessary consumption of energy, and potential Project impacts in these regards would be less-than-significant. Further, energy demands of the Project can be accommodated within the context of available resources and energy delivery systems. The Project would therefore not cause or result in the need for additional energy-producing or energy transmission facilities. The Project would not create or otherwise result in a potentially significant impact affecting energy resources or energy delivery systems.

As supported by the preceding discussions, the potential for the Project to result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.*

Impact Analysis: As substantiated at Table 4.11-1, the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The potential for the Project to conflict with or obstruct a state or local plan for renewable energy or energy efficiency is therefore considered less-than-significant.

Level of Significance: Less-Than-Significant.

4.12 WILDFIRE

4.12 WILDFIRE

Abstract

This Section identifies and addresses potential wildfire impacts that may result from the implementation and operation of the Oleander Business Park Project (Project). More specifically, the analysis presented here examines whether, if located in or near state responsibility areas or lands classified as very high fire hazard severity zones, the Project would:

- *Substantially impair an adopted emergency response plan or emergency evacuation plan;*
- *Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;*
- *Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or*
- *Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.*

As supported by the analysis presented in this Section, potential wildfire impacts of the Project would be less-than-significant.

4.12.1 INTRODUCTION

The analysis presented in this Section addresses the potential wildfire impacts associated with the construction and operation of the Project. The analysis considers potential wildfire conditions affecting the Project site; and also considers wildfire impacts resulting from the Project.

4.12.2 EXISTING WILDFIRE CONDITIONS

Information presented in this Section is summarized in part from the Riverside County General Plan, Mead Valley Area Plan, and Riverside County GIS Data Base. The Project site comprises vacant, undeveloped property. To the north, south, and west of the Project site, properties are also vacant and undeveloped. Easterly of the Project site, across Decker Road, are warehouse/distribution center uses and vacant land. Existing land uses are illustrated at EIR Section 3.0, *Project Description*, Figure 3.1-1. The Project site and vicinity properties are not located in or near state responsibility areas or lands classified as very high fire hazard severity zones.[1]

4.12.3 WILDFIRE POLICIES AND REGULATIONS

4.12.3.1 County of Riverside General Plan

The County of Riverside General Plan Safety Element establishes policies addressing wildfire hazards. Policies implemented by the County through its General Plan support prevention and education measures acting to minimize the occurrence and effects of wildfires; and include measures to ensure the County is able to respond appropriately to wildfires.

4.12.3.2 Mead Valley Area Plan

Area Plans within Riverside County establish focused policies and land use plans responding to specific aspects and attributes of localized County regions. The Project site is located in the Mead Valley Area Plan (MVAP). Broadly, MVAP policies act to "[p]rotect

[1] Parcel-specific fire hazard information obtained through the Riverside County GIS database: https://gis.countyofriverside.us/Html5Viewer/?viewer=MMC_Public

life and property through adherence to the Fire Hazards section of the General Plan Safety Element" (MVAP, p. 52).

4.12.3.3 California Building Code: Wildland - Urban Interface

The California Building Commission Wildland - Urban Interface Codes (WUI Codes) include provisions for ignition-resistant construction standards in WUI areas. The WUI Codes apply to new building applications in three specific areas:

- All State Responsibility Areas (any Fire Hazard Severity Zone);
- Local Responsibility Areas (only the Very High Fire Hazard Severity Zone);
- Any wildland-urban interface fire area designated by the enforcing agency (i.e., County of Riverside).

See also:
https://rctlma.org/Portals/5/Handouts/Residential/Wildland_Urban_Fire_Area_Guide_04-2016.pdf

4.12.3.4 California Government Code Section 51182: Defensible Space

GC Section 51182 requires creation and maintenance of fire-defensible spaces in areas adjacent to occupied structures located in very high fire hazard severity zones. Generally, defensible spaces are required to extend a minimum of 100 feet from each side and from the and rear of affected structures.

See also:
https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV&sectionNum=51182.

4.12.3.5 County Ordinance No. 787: Adopting the California Fire Code as Amended

County Ordinance No. 787 implements the California Fire Code and establishes regulations and requirements (including amendments to the California Fire Code) tailored to meet the specific fire hazard protection needs of the County. The purpose of the Ordinance is to adopt California Fire Code, to govern the safeguarding of life and

property from fire, explosion hazards and hazardous conditions and to regulate the issuance of permits and collection of fees (Ordinance No. 787, Section 2).

See also:
https://www.rivcocob.org/ords/700/787.pdf

4.12.3.6 County Ordinance No. 695: Abatement of Hazardous Vegetation

County Ordinance No. 695 requires affected property owners to reduce fire danger through mowing and other fuel modification methods. The purpose of the Ordinance is to establish a hazardous vegetation abatement program that protects the lives and property of the citizens of Riverside County, while protecting rare and sensitive plant and animal species and the environment (Ordinance No. 695, p. 1).

See also:
http://www.rvcfire.org/stationsAndFunctions/HazardReduction/Documents/695.pdf

4.12.4 STANDARDS OF SIGNIFICANCE

Pursuant to the *CEQA Guidelines* as adopted and implemented by the County of Riverside, and for purposes of this EIR, the Project, if located in or near state responsibility areas or lands classified as very high fire hazard severity zones, may result in or cause potentially significant wildfire hazard impacts if the Project would:

- *Substantially impair an adopted emergency response plan or emergency evacuation plan;*

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

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

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

4.12.5 POTENTIAL IMPACTS AND MITIGATION MEASURES

4.12.5.1 Impact Statements

Potential Impact: *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project substantially impair an adopted emergency response plan or emergency evacuation plan.*

Impact Analysis: As discussed above at Section 4.12.2, *Existing Wildfire Conditions*, the Project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; and therefore, would not impair an adopted emergency response plan or emergency evacuation plan for a very high fire hazard severity zone. Moreover, the Project does not propose or require uses or operations that would substantially impair an adopted emergency response plan or emergency evacuation plan. See also related discussions addressing emergency access presented at EIR Section 4.1, *Transportation*. Based on the preceding, the potential for the Project to substantially impair an adopted emergency response plan or emergency evacuation plan is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.*

Impact Analysis: As discussed above at Section 4.12.2, *Existing Wildfire Conditions*, the Project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; and therefore would not exacerbate wildfire risks, and thereby

expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire in a very high fire hazard severity zone. Further, the Project would comply with applicable County Policies, County Ordinances, and State Codes acting to prevent or minimize wildfire hazards, thereby avoiding or minimizing exposure to pollutant concentrations from wildfires. Based on the preceding, the potential for the Project to exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment.*

Impact Analysis: As discussed above at Section 4.12.2, *Existing Wildfire Conditions*, the Project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; and therefore, would not require the installation or maintenance of associated infrastructure that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment in a very high fire hazard severity zone. Additionally, the Project does not propose or require installation or maintenance of associated infrastructure that may exacerbate fire risk. In this latter regard, all infrastructure improvements proposed by the Project would be implemented in areas not classified as very high fire hazard severity zones. Infrastructure plans would be reviewed by the County and affected purveyors to ensure conformance with applicable fire code standards, thereby further reducing potential wildfire hazard impacts. Additionally, in the event of fire, County fire suppression services would be available to the Project site thereby minimizing potential fire risks and associated temporary or ongoing impacts to the environment. Based on the preceding, the potential for the Project to require the installation or maintenance of associated infrastructure that may exacerbate fire risk or

that may result in temporary or ongoing impacts to the environment is considered less-than-significant.

Level of Significance: Less-Than-Significant.

Potential Impact: *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.*

Impact Analysis: As discussed above at Section 4.12.2, *Existing Wildfire Conditions*, the Project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones; and therefore, would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes in a very high fire hazard severity zone. Further, the Project stormwater management system, Stormwater Pollution Prevention Plan (SWPPP), and Water Quality Management Plan (WQMP) act to avoid or minimize flooding, landslides, slope instability, or adverse drainage changes. See also: EIR Section 4.7, *Hydrology and Water Quality*. Based on the preceding, the potential for the Project to expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes is considered less-than-significant.

Level of Significance: Less-Than-Significant.

5.0 OTHER CEQA CONSIDERATIONS

5.0 OTHER CEQA CONSIDERATIONS

This Section of the EIR addresses other environmental considerations and topics mandated under the California Environmental Quality Act (CEQA). These topics include Cumulative Impacts, Alternatives to the Project, Growth Inducement, Significant Environmental Effects of the Project, and Significant and Irreversible Environmental Changes.

5.1 CUMULATIVE IMPACT ANALYSIS

The *CEQA Guidelines* require that an EIR identify any significant cumulative impacts associated with a project [*CEQA Guidelines*, Section 15130(a)]. When cumulative impacts are not deemed potentially significant, the document should explain the basis for that conclusion. Cumulative impacts are "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." [*CEQA Guidelines*, Section 15355]. Thus, a legally adequate cumulative impact analysis is an analysis of a given project viewed over time and with other related past, present, and foreseeable probable future projects, whose impacts might compound or interrelate with those of the Project considered here.

CEQA notes that the discussion of cumulative impacts should be guided by standards of practicality and reasonableness [*CEQA Guidelines*, Section 15130(b)]. Only those projects whose impacts might compound or interrelate with those of the Project under consideration require evaluation. CEQA does not require as much detail in the analysis of cumulative environmental impacts as must be provided for the Project alone.

The *CEQA Guidelines* identify two basic methods for satisfying the cumulative impacts analysis requirement: the list-of-projects methodology, and the summary-of-projections methodology. Because each environmental resource is affected by its surroundings in different manners, either of the two methodologies, or a combination of both, may be applied to the analysis of cumulative impacts to each resource. For example, because the approval and construction elements of development typically takes at least one to two years, the list-of-projects method is likely to provide a more accurate projection of growth in the near term. This method may overstate potential cumulative impacts because the considered list-of-projects may include proposals that would never be developed. Because development proposals are rarely publicly known until within five years of the expected development, the summary-of-projections method provides a more accurate projection of growth over the long term. This method may not accurately predict growth in any given year but aggregates various growth trends over the long term.

Where appropriate to the analysis in question, cumulative impacts are assessed with reference to "[a] list of past, present, and probable future projects producing related or cumulative impacts" as described at *CEQA Guidelines* §15130(b). Within the context of the cumulative impacts analysis, varied criteria are employed in determining the scope and type of related projects considered. For example, the analysis of cumulative transportation impacts evaluates the Project's transportation impacts in the context of other known or probable related development proposals that would discernibly affect area transportation operations or systems. As another example, cumulative air quality impacts are considered in terms of the Project's contribution to other air emissions impacts affecting the encompassing Air Basin.

For each topical discussion, the cumulative geographic context is identified. This in turn relates to the amount and type of growth and/or related projects anticipated within the geographic area under consideration. The manner in which each resource may be affected also dictates the geographic scope of the cumulative impact analysis.

5.1.1 DISCUSSION OF CUMULATIVE IMPACTS

Unless otherwise noted herein, the cumulative impact analysis ultimately evaluates effects of the Project within the context of anticipated buildout of the County of Riverside (County) as envisioned under the County General Plan and related Area Plans and regional plans. Specific cumulative projects have also been identified where this information may be different, is more detailed than that provided within the General Plan or applicable regional plans, or where such specific information otherwise benefits the cumulative impact analyses.

Potential cumulative impacts for each of the EIR's environmental topics are discussed below and include:

- Air Quality;
- Biological Resources;
- Cultural Resources/Tribal Cultural Resources;
- Energy;
- Geology and Soils;
- Global Climate Change/Greenhouse Gas Emissions;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Noise;
- Transportation;
- Utilities and Service Systems; and
- Wildfire.

Under other environmental topics, Project impacts have been previously determined through the Initial Study process not to be potentially significant. Further, under these topics, there are no known or anticipated projects or conditions whose impacts might compound or interrelate with those of the Project, and thereby result in potentially significant cumulative impacts. No further substantive analysis is provided under these topics, which include:

Aesthetics

Scenic Resources

- Potential to have a substantial effect upon a scenic highway corridor within which it is located.

- Potential to substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and unique or landmark features; obstruct any prominent scenic vista or view open to the public; or result in the creation of an aesthetically offensive site open to public view.

Mt. Palomar Observatory

- Potential to interfere with the nighttime use of the Mt. Palomar Observatory, as protected through Riverside County Ordinance No. 655.

Other Lighting Issues

- Potential to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

- Potential to expose residential property to unacceptable light levels.

Agriculture and Forest Resources

Agriculture

- Potential to convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

- Potential to conflict with existing agricultural zoning, agricultural use or with land subject to a Williamson Act contract or land within a Riverside County Agricultural Preserve.

- Potential to cause development of non-agricultural uses within 300 feet of agriculturally zoned property (Ordinance No. 625 "Right-to-Farm").

- Potential to involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use.

Forest

- Potential to conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Govt. Code section 51104(g)).

- Potential to result in the loss of forest land or conversion of forest land to non-forest use.

- Potential to involve other changes in the existing environment which, due to their location or nature, could result in conversion of forest land to non-forest use.

<u>Air Quality</u>

Air Quality Impacts

- Potential to involve the construction of a sensitive receptor located within one mile of an existing substantial point source emitter.

- Potential to create objectionable odors affecting a substantial number of people.

<u>Cultural Resources</u>

Archaeological Resources

- Potential to disturb any human remains, including those interred outside of formal cemeteries.

Geology and Soils

Alquist-Priolo Earthquake Fault Zone or County Fault Hazard Zones

- Potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death.

- Potential to be subject to rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.

Landslide Risk

- Potential to 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, collapse, or rockfall hazards.

Other Geologic Hazards

- Potential to be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard.

Slopes

- Potential to change topography or ground surface relief features.

- Potential to result in grading that affects or negates subsurface sewage disposal systems.

Soils

- Potential to result in substantial soil erosion or the loss of topsoil.

- Potential to have soils incapable of adequately supporting use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

Erosion

- Potential to change deposition, siltation, or erosion that may modify the channel of a river or stream or the bed of a lake.

- Potential to result in any increase in water erosion either on or off site.

Wind Erosion and Blowsand from the Project either on or off site

- Potential to be impacted by or result in an increase in wind erosion and blowsand, either on or off site.

Hazards and Hazardous Materials

Hazards and Hazardous Materials

- Potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

- Potential to 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.

- Potential to impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan.

- Potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

- Potential to 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.

Airports

- Potential to result in a safety hazard for people residing or working in the Project area.

Hazardous Fire Area

- Potential to expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Hydrology and Water Quality

Water Quality Impacts

- Potential to substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

- Potential to place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

- Potential to place within a 100-year flood hazard area structures which would impede or redirect flood flows

Floodplains

- Potential to expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam (Dam Inundation Area).

Land Use and Planning

Land Use

- Potential to result in a substantial alteration of the present or planned land use of an area.

- Potential to affect land use within a city sphere of influence and/or within adjacent city or county boundaries.

Planning

- Potential to be inconsistent with the site's existing or proposed zoning.

- Potential to be incompatible with existing surrounding zoning.

- Potential to be incompatible with existing and planned surrounding land uses.

- Potential to be inconsistent with the land use designations and policies of the General Plan (including those of any applicable Specific Plan).

- Potential to disrupt or divide the physical arrangement of an established community (including a low-income or minority community).

Mineral Resources

Mineral Resources

- Potential to result in loss of availability of a known mineral resource that would be of value to the region and to the residents of the state.

- Potential to result in loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

- Potential to be an incompatible land use located adjacent to a state classified or designated area or existing surface mine.

- Potential to expose people or property to hazards from proposed, existing or abandoned quarries or mines.

Noise

Airport Noise

- Potential to expose people residing or working in the Project area to excessive noise levels from public airport or public use airport operations.

- Potential to expose people residing or working in the Project area to excessive noise levels from private airstrip operations.

Railroad Noise

- Potential to expose people residing or working in the Project area to excessive noise levels from rail/railroad operations.

Highway Noise

- Potential to expose people residing or working in the Project area to excessive noise levels from highway operations.

Other Noise

- Potential to expose people residing or working in the Project area to excessive noise levels from other noise sources.

Population and Housing

Housing

- Potential to displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

- Potential to create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County's median income.

- Potential to displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

- Potential to affect a County Redevelopment Project Area.

- Potential to cumulatively exceed official regional or local population projections.

- Potential to induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

Public Services

Fire Services

- Potential to result in substantial adverse physical impacts associated with the provision of the new or physically altered fire protection facilities.

Sheriff Services

- Potential to result in substantial adverse physical impacts associated with the provision of the new or physically altered sheriff services facilities.

Schools

- Potential to result in substantial adverse physical impacts associated with the provision of the new or physically altered school services facilities.

Libraries

- Potential to result in substantial adverse physical impacts associated with the provision of the new or physically altered library services facilities.

Health Services

- Potential to result in substantial adverse physical impacts associated with the provision of the new or physically altered health services facilities.

Recreation

Parks and Recreation

- Potential to include or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

- Potential to increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

- Potential to be located within a Community Service Area (CSA) or recreation and park district with a Community Parks and Recreation Plan (Quimby fees).

Recreational Trails

- Potential to interfere with the use of any existing recreational trails, or conflict with any planned future recreational trails.

Transportation/Traffic

Circulation

- Potential to cause an effect upon circulation during the Project's construction.

- Potential to result in inadequate emergency access or access to nearby uses.

- Potential to conflict with adopted policies, plans or programs regarding public transit, bikeways or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities.

Bike Trails

- Potential to interfere with the use of any existing bike trails, or conflict with any planned future bike trails.

Utilities and Service Systems

Solid Waste

- Potential to generate waste that would exceed the capacity of the serving landfill(s).

- Potential to conflict with federal, state, and local statutes and regulations related to solid wastes including the CIWMP (County Integrated Waste Management Plan).

Utilities

Potential to impact the following facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects:

- Electricity;
- Natural gas;
- Communications systems;
- Storm water drainage;
- Street lighting;
- Maintenance of public facilities, including roads; and
- Other governmental services.

Please refer also to EIR Section 1.7, *Impacts Not Found to be Potentially Significant*.

5.1.1.1 Cumulative Impacts Related to Transportation

The Project Vehicle Miles Traveled (VMT) Assessment cumulative impact area coincides with relevant Riverside County Transportation Analysis Model Traffic Analysis Zones (TAZs).

Cumulative VMT Impacts

Since the Project VMT per employee impact is less than significant, and the Project is consistent with the County of Riverside Land Use Element, the Project's cumulative effect on VMT is also presumed to be less-than-significant.

Other Transportation Topics

Cumulative Impacts Related to:

- Programs, plans, ordinances or policies addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities;
- Increased hazards due to a geometric design features or incompatible uses;
- Air Traffic Safety;
- Waterborne Traffic, Rail Traffic, and Air Traffic Patterns; and
- Road Maintenance.

Under the above-listed topics, Project impacts would be less-than-significant. There are no known or probable related projects that would interact with the less-than-significant effects of the Project and thereby result in cumulatively significant impacts. Other related projects within the cumulative impact area would similarly be required to demonstrate compliance with County programs, plans, policies and ordinances addressing the above topics, thereby minimizing potential cumulative impacts.

On this basis, the Project would not result in or cause cumulatively significant impacts related to Air Traffic Safety; Waterborne Traffic, Rail Traffic, and Air Traffic Patterns, and Road Maintenance.

5.1.1.2 Cumulative Impacts Related to Air Quality

The cumulative impact area for air quality considerations is generally defined by the encompassing Air Basin and boundaries of the jurisdictional air quality management agency. In this case, the South Coast Air Basin (Basin) and the South Coast Air Quality Management District (SCAQMD), respectively. Project air pollutant emissions within the context of SCAQMD's regional emissions thresholds provide an indicator of potential cumulative impacts in the Basin. Due to the defining geographic and meteorological

characteristics of the Basin, criteria pollutant emissions that could cumulatively impact air quality would be, for practical purposes, restricted to the Basin. Accordingly, the geographic area encompassed by the Basin is the appropriate limit for the cumulative Air Quality analysis.

Construction-source Air Quality Impacts

Regional Impacts

Project construction-source air pollutant emissions would not exceed applicable SCAQMD regional thresholds and would be less-than-significant. Per SCAQMD criteria, less-than-significant impacts at the Project level are not cumulatively considerable. There are no known or probable related projects that would interact with the less-than-significant effects of the Project and thereby result in cumulatively significant impacts. Other related projects within the cumulative impact area would be required to minimize regional construction-source air pollutant emissions consistent with SCAQMD programs and strategies, thereby minimizing potential cumulative impacts. Mitigation would be implemented, if applicable.

Based on the preceding, regional construction-source air quality impacts of the Project are not cumulatively considerable and the Project cumulative regional construction-source air quality impacts would be less-than-significant.

Localized Impacts

Mitigated Project construction-source air quality emissions would not exceed applicable SCAQMD Localized Significance Thresholds (LSTs) and would be less-than-significant. Per SCAQMD criteria, less-than-significant impacts at the Project level are not cumulatively considerable. There are no known or probable related projects that would interact with the less-than-significant effects of the Project and thereby result in cumulatively significant impacts. Other related projects within the cumulative impact area would be required to minimize localized construction-source air pollutant emissions consistent with SCAQMD programs and strategies, thereby minimizing potential cumulative impacts. Mitigation would be implemented, if applicable.

Based on the preceding, localized construction-source air quality impacts of the Project are not cumulatively considerable and the Project cumulative localized construction-source air quality impacts would be less-than-significant.

Nonattainment Impacts

The Project is located within ozone and $PM_{10}/PM_{2.5}$ nonattainment areas (NO_x is a precursor to ozone and $PM_{10}/PM_{2.5}$). Project construction-source emissions would not exceed applicable SCAQMD thresholds, and would therefore not result in a cumulatively considerable net increase in criteria pollutants (ozone and $PM_{10}/PM_{2.5}$) for which the encompassing region is nonattainment. Project-level and cumulative impacts would be less-than-significant. There are no known or probable related projects that would interact with the less-than-significant effects of the Project and thereby result in cumulatively significant impacts. Other related projects within the cumulative impact area would be required to minimize localized construction-source air pollutant emissions consistent with SCAQMD programs and strategies, thereby minimizing potential cumulative impacts. Mitigation would be implemented, if applicable.

AQMP Consistency Impacts

Project construction-source emissions would not exceed applicable SCAQMD thresholds and Project construction activities would not otherwise be inconsistent with or obstruct implementation of the AQMPs. Project-level and cumulative impacts would be less-than-significant. There are no known or probable related projects that would interact with the less-than-significant effects of the Project and thereby result in cumulatively significant impacts. Other related projects within the cumulative impact area would be required to minimize localized construction-source air pollutant emissions consistent with SCAQMD programs and strategies, thereby minimizing potential cumulative impacts. Mitigation would be implemented, if applicable.

Other Impacts

The potential for the Project construction activities to cause or result in other air quality impacts would be less-than-significant. Per SCAQMD criteria, less-than-significant impacts at the Project level are not cumulatively considerable. There are no known or

probable related projects that would interact with the less-than-significant effects of the Project and thereby result in cumulatively significant impacts. Other related projects within the cumulative impact area would be required to minimize air quality impacts consistent with SCAQMD programs and strategies, thereby minimizing potential cumulative impacts. Mitigation would be implemented, if applicable.

Based on the preceding, other potential construction-source air quality impacts of the Project are not cumulatively considerable and the Project cumulative impacts would be less-than-significant.

Operational-source Air Quality Impacts

Regional Impacts

The Project would incorporate design features including contemporary energy-efficient technologies and operational programs, and would be required to comply with SCAQMD emissions reductions measures and rules. These measures would reduce Project operational-source air pollutant emissions generally. However, even with implementation of Project design features and operational programs, and compliance with all SCAQMD requirements, the Project would generate operational-source NO_x emissions that would exceed applicable SCAQMD regional thresholds. This is a potentially significant individual and cumulative air quality impact.

Mitigation: The EIR mitigation measures would act to generally reduce Project operational-source NO_x emissions. However, for the purposes of this analysis, unmitigated and mitigated operational-source NOx emissions are considered substantively equal. In this regard, it is important to recognize that approximately 93% of the Project operational-source NO_x emissions derive from mobile-source tailpipe emissions. Regulation and mitigation of tailpipe emissions is the responsibility of CARB and EPA. The Lead Agency and/or Applicant cannot autonomously regulate or mitigate tailpipe emissions. Based on the preceding, even with application of Mitigation Measures, Project operational-source NOx emissions impacts would exceed applicable

SCAQMD regional thresholds. Project operational-source NOx emissions impacts would therefore be individually and cumulatively significant and unavoidable.

Localized Impacts

Project operational-source air quality emissions would not exceed applicable SCAQMD Localized Significance Thresholds (LSTs) and would be less-than-significant. Per SCAQMD criteria, less-than-significant impacts at the Project level are not cumulatively considerable. There are no known or probable related projects that would interact with the less-than-significant effects of the Project and thereby result in cumulatively significant impacts. Other related projects within the cumulative impact area would be required to minimize localized operational-source air pollutant emissions consistent with SCAQMD programs and strategies, thereby minimizing potential cumulative impacts. Mitigation would be implemented, if applicable.

Based on the preceding, operational localized air quality impacts of the Project are not cumulatively considerable and the Project cumulative operational localized air quality impacts would be less-than-significant.

Nonattainment Impacts

The Project is located within ozone and $PM_{10}/PM_{2.5}$ nonattainment areas (NO_x is a precursor to ozone and $PM_{10}/PM_{2.5}$). Over the life of the Project, operational-source NO_x emissions exceedances noted above would result in a cumulatively considerable net increase in criteria pollutants (ozone and $PM_{10}/PM_{2.5}$) for which the encompassing region is nonattainment. Project nonattainment impacts would therefore be cumulatively significant and unavoidable.

AQMP Consistency Impacts

Project operational-source emissions would exceed applicable SCAQMD regional thresholds. As discussed above, there is no feasible means to reduce Project operational-source emissions to levels that would be less-than-significant. Project operational-source NOx emissions exceedances may therefore delay or obstruct goals and strategies articulated in the AQMP for the South Coast Air Basin. On this basis, the Project would

conflict with the governing AQMP. This is a Project-level and cumulatively significant and unavoidable impact.

Other Impacts

The potential for the Project operations to cause or result in other air quality impacts would be less-than-significant. Per SCAQMD criteria, less-than-significant impacts at the Project level are not cumulatively considerable. There are no known or probable related projects that would interact with the less-than-significant effects of the Project and thereby result in cumulatively significant impacts. Other related projects within the cumulative impact area would be required to minimize air quality impacts consistent with SCAQMD programs and strategies, thereby minimizing potential cumulative impacts. Mitigation would be implemented, if applicable.

Based on the preceding, other potential operational-source air quality impacts of the Project are not cumulatively considerable and the Project cumulative impacts would be less-than-significant.

Health Risk Impacts

Construction

Project construction activities would yield a total maximum increased Toxic Air Contaminant (TAC)-source cancer risk exposure of 1.17 incidents per million population. The applicable SCAQMD significance threshold for Project-level TAC-source cancer risk impacts is 10 incidents per million population. The 1.17 incidents per million population increment resulting from Project construction activities is therefore less-than-significant. Per SCAQMD criteria, less-than-significant impacts at the Project level are not cumulatively considerable.

The maximum non-cancer risk from Project construction activities would total 0.001, and would not exceed the SCAQMD Hazard Index of 1.0. The non-cancer risk exposure resulting from the Project construction activities is therefore less-than-significant. Per

SCAQMD criteria, less-than-significant impacts at the Project level are not cumulatively considerable.

Operations

Project operations would yield a total maximum increased TAC-source cancer risk exposure of 1.03 incidents per million population. The applicable SCAQMD significance threshold for Project-level TAC-source cancer risk impacts is 10 incidents per million population. The 1.03 incidents per million population increment resulting from the Project operations is therefore less-than-significant. Per SCAQMD criteria, less-than-significant impacts at the Project level are not cumulatively considerable.

The maximum non-cancer risk from Project operations activities would total 0.0004, and would not exceed the SCAQMD Hazard Index of 1.0. The non-cancer risk exposure resulting from Project operations is therefore less-than-significant. Per SCAQMD criteria, less-than-significant impacts at the Project level are not cumulatively considerable.

There are no known or probable related projects that would interact with the less-than-significant effects of the Project and thereby result in cumulatively significant impacts. Other related projects within the cumulative impact area would be required to minimize TAC emissions consistent with SCAQMD programs and strategies, thereby minimizing potential cumulative impacts. Mitigation would be implemented, if applicable.

Based on the preceding, TAC health risk impacts of the Project are not cumulatively considerable and the Project cumulative TAC health risk impacts would be less-than-significant.

5.1.1.3 Cumulative Impacts Related to GHG Emissions/Global Climate Change

CEQA emphasizes that the effects of greenhouse gas emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impacts analysis. (*CEQA Guidelines* Section 15130(f)). The Project Greenhouse Gas (GHG) Analysis (EIR Appendix D) is by nature a cumulative analysis. Because GHG emissions and climate change are a global issue, any approved project regardless of its location has

the potential to contribute to a cumulative global accumulation of GHG emissions. The geographic context of the cumulative contributions to GHGs and climate change is worldwide. Practically however, lead agencies and responsible agencies are only able to regulate GHG emissions within their respective jurisdictions. Accordingly, for the purposes of this analysis, the cumulative impact area for GHG/Global Climate Change considerations is the County and the encompassing SCAQMD jurisdictional area.

Consistent with *CEQA Guidelines* direction, the Project GHG Analysis and this EIR evaluate Project GHG emissions under the following topical headings:

- Potential for the Project to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; and

- Potential for the Project to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

The County has further determined that each of the above thresholds establish a separate and independent basis upon which to substantiate the significance of the Project's potential GHG emissions impact. Project impacts within the context of the above threshold considerations are evaluated in the following discussions.

As discussed at EIR Section 4.3, *Greenhouse Gas Emissions*, even after application of mitigation, the Project could directly or indirectly generate GHG emissions that may have a significant impact on the environment. In this respect, the Project's potential to contribute considerably (either individually or cumulatively) to global climate change impacts through GHG emissions is therefore considered significant and unavoidable.

As also discussed at EIR Section 4.3, *Greenhouse Gas Emissions,* with incorporation of mitigation, the Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. The Project's potential GHG emissions impacts in this respect are therefore determined to be less-than-significant as mitigated and would not be cumulatively considerable.

Other related projects within the cumulative impact area would be required to minimize GHG emissions and demonstrate compliance with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions.

5.1.1.4 Cumulative Impacts Related to Noise

The cumulative impact area for noise considerations is generally defined as surrounding properties that could receive Project-generated noise (either construction-source or operational-source), and would also include roadway corridors affected by Project-related traffic and associated vehicular noise. Potential noise impacts of the Project are discussed at EIR Section 4.4, *Noise*, and EIR Appendix E.

Construction-Source Noise

As discussed at EIR Section 4.4, *Noise*, Project construction-source noise would not exceed applicable thresholds, and would not substantially contribute to ambient noise conditions or to other related noise sources. There are no known or probable related projects that would interact with the less-than-significant effects of the Project and thereby result in cumulatively significant impacts. Other related projects within the cumulative impact area would be required to minimize construction noise consistent with County policies and regulations, thereby minimizing cumulative impacts. Mitigation would be implemented, if applicable.

Based on the preceding, the potential for Project construction-source noise to result in or cause cumulatively significant impacts is considered less-than-significant.

Operational Noise-Area Sources

As discussed at EIR Section 4.4, *Noise*, Project operational noise from area sources would not exceed applicable thresholds. Noise levels resulting from Project operations would not substantially contribute to ambient noise conditions or to other related noise sources. There are no known or probable related projects that would interact with the less-than-significant effects of the Project and thereby result in cumulatively significant impacts. Other related projects within the cumulative impact area would be required to minimize

construction noise consistent with County policies and regulations, thereby minimizing cumulative impacts. Mitigation would be implemented, if applicable.

Based on the preceding, the potential for Project operational area-source noise to result in or cause cumulatively significant impacts is considered less-than-significant.

Operational Noise-Mobile Sources

Maximum cumulative effects of vehicular (mobile-source) noise are demonstrated by comparing noise levels under Existing Conditions (2019) and Opening Year Conditions (2021). Noise contours for Study Area roadway segments are based on roadway average daily trip (ADT) estimates, Project trip generation, and trip distribution as presented in the Project TIA.

When ambient noise conditions are within acceptable parameters (less than 60 dBA CNEL) and cumulative effects of vehicular-source noise received at noise-sensitive land uses would be readily perceptible (≥ 5 dBA CNEL), cumulative vehicular-source noise impacts would be considered potentially significant. When ambient baseline conditions already exceed minimum acceptable standards (60 – 65 dBA CNEL) and subsequent increases in noise levels received at noise-sensitive land uses would be barely perceptible (≥ 3 dBA CNEL), cumulative vehicular-source noise impacts would be considered potentially significant. When ambient baseline conditions already exceed minimum acceptable standards (> 65 dBA CNEL), increases in noise levels of ≥ 1.5 dBA CNEL received at noise-sensitive land uses would be considered potentially significant.

As indicated at Table 5.1-1, the maximum cumulative noise increases along roadways within the Study Area over the considered 2-year cumulative time frame would range from 0.0 dBA CNEL to 4.5 dBA CNEL. None of the received cumulative vehicular-source noise impacts would exceed applicable thresholds. Cumulative effects of vehicular-source noise would therefore be less-than-significant.

Table 5.1-1
Cumulative Vehicular-Source Noise Impacts

Roadway	Segment	CNEL at Affected Property Line					Noise Sensitive Receptor Land Use?
		Existing	2021 w/o Project	2021 w/Project	Max. Cumulative CNEL Increase	Max. Project Increment	
Harvill Ave.	n/o Harley Knox Blvd.	59.4	61.7	62.8	3.4	1.1	No
Harvill Ave.	s/o Harley Knox Blvd.	72.1	73.2	73.2	1.1	0.0	No
Nandina Ave.	e/o Decker Rd.	n/a	56.2	60.7	4.5	4.5	No
Harley Knox Blvd.	e/o Decker Rd.	n/a	64.0	67.7	3.7	3.7	No
Harley Knox Blvd.	e/o Harvill Ave.	72.1	73.9	74.6	2.5	0.6	No
Harley Knox Blvd.	e/o I-215 NB Ramps	75.7	77.4	77.4	1.7	0.0	No
Oleander Ave.	e/o Decker Rd.	n/a	66.4	67.0	0.7	0.7	No

Source: *Oleander Business Park Noise Impact Analysis, County of Riverside* (Urban Crossroads, Inc.) October 2, 2019.
Notes: e/o = east of; w/o = west of; n/o = north of; s/o = south of.
Values rounded to the nearest one-tenth and may not total due to rounding.

Based on the preceding, the Project's potential contribution to cumulative operational mobile-source noise impacts is not considerable, and the cumulative effects of the Project are less-than-significant.

5.1.1.5 Cumulative Impacts Related to Hazards and Hazardous Materials

For the purposes of this analysis, the cumulative impact area when considering potential hazards and hazardous materials issues generally includes the area to be developed within the Project site, as well as off-site locations that might be affected by or contribute to hazards or hazardous conditions resulting from the Project and its operations. The cumulative hazards and hazardous materials impact analysis evaluates effects of the Project construction and operations, and reflects long-term buildout conditions within the cumulative impact area.

As substantiated at EIR Section 4.5, *Hazards/Hazardous Materials*, development and operation of land uses within the Project site would not create, or result in exposure to potentially significant hazardous conditions. Further, the Project would not be adversely affected by any hazards or hazardous conditions associated with MARB/Inland Port

Airport (Airport); nor would the Project result in or cause hazards or hazardous conditions that would adversely affect the Airport or its operations.

The Project does not propose uses or activities that would require substantive handling or use of hazardous materials, hazardous substances, or hazardous waste that could result in potential adverse effects. To the extent that such materials or substances may be present during Project construction or operations they would be transported, stored, used and disposed of consistent with the multiple and broad regulatory requirements.

There are no known or probable related projects that would interact with the less-than-significant effects of the Project and thereby result in cumulatively significant impacts. Other related projects within the cumulative impact area would be required to minimize hazards/hazardous materials impacts consistent with federal, State, County, and local policies and regulations, thereby minimizing cumulative impacts. Mitigation would be implemented, if applicable.

Based on the preceding, the Project's potential contribution to cumulative hazards/hazardous materials impacts is not considerable, and the cumulative effects of the Project are less-than-significant.

5.1.1.6 Cumulative Impacts Related to Geology and Soils

The Project site and all of Southern California lie within a seismically active area, generally susceptible to earthquake hazards. In this sense, Southern California is considered the cumulative impact area for geology and soils considerations. As substantiated at EIR Section 4.6, the Project's potential geology and soils impacts are determined to be less-than-significant as mitigated. The Project does not propose or require facilities or operations that would result in or contribute to potentially adverse seismic effects or adverse soils conditions.

The Project would result in the construction of new warehouse/manufacturing uses and supporting facilities. Infrastructure improvements and utility extensions implemented by the Project would include transportation system improvements, water lines, sewer lines,

gas lines, electricity lines, and storm water management systems. Consistent with market demands, telephone and cable television services would also be extended into the subject site.

Based on the creation and occupation of additional uses and implementation of supporting infrastructure described above, the Project would incrementally increase concentrations of persons, structures, and infrastructure systems on a previously undeveloped site within an earthquake-prone region. Potential impacts of increased exposure to seismic effects as a result of new development were considered, and determined to be less-than-significant with implementation of Project Geotechnical Investigation recommendations and requirements; together with application of standard seismic design and engineering practices, requirements of the California Building Code (CBC) and State Seismic Mapping Act, and applicable County building standards. Similarly, potential impacts related to erosion, subsidence, shrinkage, expansion, and soil consolidation are mitigated through conformance with Project Geotechnical Investigation recommendations and requirements; and compliance with local, regional, state, and federal permitting and regulatory requirements.

There are no known or probable related projects that would interact with the less-than-significant effects of the Project and thereby result in cumulatively significant impacts. Locally and regionally, project-by-project compliance with seismic design and engineering standards, soil conservation and erosion protection are mandated through existing regulations and requirements as outlined above, thereby reducing potential cumulative geology and soils impacts within the region. Mitigation would be implemented, if applicable.

Based on the preceding, the Project's potential contribution to cumulative geology and soils impacts is not considerable, and the cumulative effects of the Project are less-than-significant.

5.1.1.7 Cumulative Impacts Related to Hydrology/Water Quality

The area encompassed within the jurisdictional Regional Water Quality Control Board (RWQCB); in this case, the Santa Ana Regional Water Quality Control Board (SARWQCB), defines the cumulative impact area for hydrology/water quality impact considerations. Local oversight addressing hydrology/water quality impact considerations is provided by Riverside County.

Development of the Project site would incrementally increase impervious surfaces within the cumulative impact area, with related potential increases in the rate and quantity of local stormwater discharges. As summarized at EIR Section 4.7, and presented in detail within the Project Hydrology Study, (EIR Appendix H), the Project incorporates those stormwater management components, including drainage facilities, stormwater detention basins, and structural and non-structural Best Management Practices, which collectively act to ensure that post-development stormwater discharge rates are adequately conveyed within available system capacities.

Stormwater discharges from the Project site would be conveyed via the on-site storm drain system to existing Master Drainage Plan (MDP) storm drains. The MDP storm drain has been designed and constructed pursuant to the *Perris Valley MDP*, and in anticipation of stormwater discharges resulting from areawide development such as that proposed by the Project. As substantiated in the Project Hydrology Study, Project stormwater discharges would not result in exceedance of available storm drain capacities or flooding due to the introduction of substantial, unanticipated stormwater flows. In this manner, the Project's contributions to cumulative stormwater discharges are limited consistent with available stormwater system capacities, and the Project's contributions would not be cumulatively considerable.

To ensure adequate and appropriate treatment of stormwater discharges, the Project stormwater management system concept and associated Water Quality Management Plan (WQMP) would incorporate treatment systems to remove potential pollutants of concern from developed stormwater discharges onsite prior to release to the MDP system. More specifically, the Project WQMP would provide volume-based underground

retention areas and Modular Wetland System (MWS) bio-filtration facilities. The Project WQMP would be designed, constructed, operated and maintained in conformance with design criteria and performance standards presented in the Santa Ana Regional Water Quality Control Board WQMP Guidance Document.

The Project would also be required to comply with applicable provisions of the Statewide Industrial General Permit 2014-0057-DWQ. The Statewide Industrial General Permit (IGP) implements applicable federal regulations addressing industrial activities that discharge stormwaters to waters of the United States. The Project WQMP and mandated compliance with provisions of the IGP act to ensure that potential water quality impacts of the Project would be individually and cumulatively less-than-significant.

There are no known or probable related projects that would interact with the less-than-significant effects of the Project and thereby result in cumulatively significant impacts. Other related projects within the cumulative impact area would be required to minimize hydrology/water quality impacts consistent with federal, State, County, and local policies and regulations, thereby minimizing cumulative impacts. Mitigation would be implemented, if applicable.

Based on the preceding, the Project's potential contribution to cumulative hydrology/water quality impacts is not considerable, and the cumulative effects of the Project are less-than-significant.

5.1.1.8 Cumulative Impacts Related to Utilities and Service Systems

The EIR at Section 4.8, *Utilities and Service Systems*, substantiates that Project impacts related to utilities and service systems would be less-than-significant. Cumulative impacts that could occur under the *Public Services and Utilities* environmental topics evaluated in the EIR are summarized below.

Water Supply

Water service to the Project would be provided by the Eastern Municipal Water District (EMWD). The Project would connect to existing EMWD water system lines located in

adjacent rights-of-way. The cumulative impact area for water supply considerations is the EMWD Service Area (Service Area). Issues germane to the Project, including cumulative water supply impacts are addressed within *Eastern Municipal Water District 2015 Urban Water Management Plan* (EMWD) June 2016 (2015 UWMP)[1] and the Project Water Supply Assessment (Project WSA). The 2015 UWMP can be accessed at: https://www.emwd.org/post/urban-water-management-plan. The Project WSA is provided at EIR Appendix I.

The Project WSA substantiates availability of water supplies to the serve the Project in the context of cumulative water supply demands of the Service Area. As stated on page 24 of the WSA, "EMWD has determined that it will be able to provide adequate water supplies to meet the potable water demand for this project as part of its existing and future demands." Further, within the 2015 UWMP, EMWD determined that there are sufficient water supplies to meet all projected demand through 2040, even under a repeat of historic multiple-year drought scenarios.

There are no known or probable related projects that would interact with the less-than-significant effects of the Project and thereby result in cumulatively significant impacts. Other related projects within the cumulative impact area would be required to minimize water supply impacts consistent with County and EMWD policies and regulations, thereby minimizing cumulative impacts. Mitigation would be implemented, if applicable.

Based on the preceding, water supply impacts of the Project are not cumulatively considerable and the Project cumulative water supply impacts would be less-than-significant.

Water Treatment

Water treatment services for the Project would be provided by EMWD. The cumulative impact area for water treatment considerations is the EMWD Service Area. Water quality

[1] The EMWD 2015 UWMP can be accessed at: https://www.emwd.org/post/urban-water-management-plan

of all potable water deliveries within the Service Area meets or surpasses all regulated drinking water standards[2] and water treatment is not considered a substantive constraint on water supplies. Additionally, as summarized in the 2015 UWMP, "[t]here are no known water quality concerns that will significantly impact water supply reliability. Water supplies will be managed to protect water quality to the greatest extent possible, and treatment will be implemented if necessary (2015 UWMP, p. 7-8). The 2015 UWMP reflects and anticipates cumulative water treatment demands within the EMWD Service Area, including water treatment demands of uses proposed by the Project. The Project proposes conventional light industrial facilities and does not require water treatment beyond that provided by EMWD.

There are no known or probable related projects that would interact with the less-than-significant effects of the Project and thereby result in cumulatively significant impacts. Other related projects within the cumulative impact area would be required to minimize water treatment impacts consistent with County and EMWD policies and regulations, thereby minimizing cumulative impacts. Mitigation would be implemented, if applicable.

Based on the preceding, water treatment impacts of the Project are not cumulatively considerable and the Project cumulative water supply impacts would be less-than-significant.

Wastewater Treatment

Wastewater treatment and conveyance services for the Project would be provided by EMWD. The cumulative study area for wastewater treatment considerations is the EMWD's service area. Wastewater generated by the Project would be conveyed to and treated at the Perris Valley Regional Water Reclamation Facility (PVRWRF). Typical daily wastewater flows received by the PVRWRF total approximately 13.8 million gallons per

[2] *Your 2018 Water Quality Consumer Confidence Report* (EMWD) p. 2, et al.
see also: https://www.emwd.org/sites/default/files/file-attachments/emwd_2018_ccr_final_web.pdf

day (mgd). The PVRWRF has a current treatment capacity of 22.0 mgd with a planned expansion capacity of 100 mgd.[3]

Based on the current PVRWRF capacity/demand estimates, the PVRWRF has an approximately 8.2 mgd residual treatment capacity. Conservatively assuming the entire Project water demand (54,150 gpd) would translate to wastewater treatment demand, the Project wastewater treatment demand would comprise approximately 0.66% PVRWRF estimated 8.2 mgd residual capacity. It therefore appears that there is available PVRWRF wastewater treatment capacity available to serve the Project without the need for additional or expanded wastewater treatment facilities. Moreover, wastewater generated by the Project is accounted for and reflected in current and programmed EMWD wastewater treatment facilities planning.

The Applicant would pay applicable sewer connection and service fees, providing funds available for EMWD wastewater system expansion and maintenance, acting to offset the Project's incremental and cumulative demands for wastewater collection and treatment services.

There are no known or probable related projects that would interact with the less-than-significant effects of the Project and thereby result in cumulatively significant impacts. Other related projects within the cumulative impact area would be required to minimize wastewater treatment impacts consistent with County and EMWD policies and regulations, thereby minimizing cumulative impacts. Mitigation would be implemented, if applicable.

Based on the preceding, wastewater treatment impacts of the Project are not cumulatively considerable and the Project cumulative wastewater treatment impacts would be less-than-significant.

[3] *Perris Valley Regional Water Reclamation Facility* (EMWD) October 2016, n.p. see also: https://www.emwd.org/sites/main/files/file-attachments/pvrwrffactsheet.pdf

5.1.1.9 Cumulative Impacts Related to Biological Resources

The cumulative impact areas for biological resources are generally defined by available habitat, species' range(s), physical constraints, and other limiting factors as discussed within the Project Biological Resources Assessments, EIR Appendix J.

As discussed at EIR Section 4.9, *Biological Resources*, mitigation proposed in the EIR reduces potential impacts to special-status wildlife species to levels that would be less-than-significant. Mitigation of Project-specific biological resources impacts would also reduce the Project's potential incremental contributions to cumulative biological resources impacts within the region.

The Project would have no potentially significant effects on other biological resources. These Project impacts would be individually and cumulatively less-than-significant.

To the extent that each development proposal within the cumulative impact area(s) provides appropriate mitigation, cumulative impacts to biological resources are reduced below significance thresholds. Pursuant to the provisions of CEQA, each development project within the cumulative impact area that requires a discretionary action by a public agency will be assessed for its potential impacts on biological resources. Appropriate biological resources mitigation will also be required of other projects within the cumulative impact areas.

Based on the preceding, the Project's potential contribution to cumulative impacts in regard to biological resources is not considerable, and the cumulative effects of the Project are determined to be less-than-significant.

5.1.1.10 Cumulative Impacts Related to Cultural Resources/Tribal Cultural Resources

The cumulative impact area for prehistoric, archaeological, historic, and tribal cultural resources generally includes the County and surrounding areas. Impacts to any cultural resources or tribal cultural resources within this area would be site-specific. In the event that potentially significant cultural or tribal resources are encountered at any

development sites within the cumulative impact area, specific mitigation measures would be applied before construction activities could proceed. Potential impacts to cultural resources and tribal cultural resources are determined to be less-than-significant as mitigated. In this regard, mitigation proposed for the Project (i.e., monitoring of construction activities; and recordation, cataloguing, and curation of any potentially significant cultural resources) is typical of, and consistent with, mitigation required for construction within urban and suburban areas throughout the County and surrounding region.

The Lead Agency has initiated Tribal Cultural Consultation processes pursuant to AB 52 (Gatto, 2014) Native Americans: California Environmental Quality Act. The County has contacted applicable tribes on its most current AB 52 Consultation list. Please refer also to AB 52 Correspondence provided at EIR Appendix L. Mitigation presented in the EIR establishes monitoring protocols, and provisions for avoidance, protection, or curation of Tribal Cultural Resources (TCRs) that may be identified through the AB 52 Consultation process. These mitigation measures reduce Project potential impacts to TCRs to levels that would be less-than-significant.

There are no known or probable related projects that would interact with the less-than-significant effects of the Project and thereby result in cumulatively significant impacts. Other related projects within the cumulative impact area would be required to minimize cultural resources/tribal cultural resources impacts consistent with State, County and potentially affected Tribe policies and regulations, thereby minimizing cumulative impacts. Mitigation would be implemented, if applicable.

Based on the preceding, cultural resources/tribal cultural resources impacts of the Project are not cumulatively considerable and the Project cumulative cultural resources/tribal cultural resources impacts would be less-than-significant.

5.1.1.11 Cumulative Impacts Related to Energy

Primary natural gas and electricity providers for the Project facilities would be:

- Southern California Gas Company, SoCalGas (natural gas); and
- Southern California Edison, SCE (electricity).

The geographic scope of cumulative energy impacts is generally limited to the energy provider service area(s). The analysis at EIR Section 4.11, *Energy,* substantiates that the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. These plans and policies address development-level and cumulative impacts to energy resources. Project consistency with state and local plans for renewable energy and energy efficiency demonstrates that the Project cumulative energy impacts would not be cumulatively considerable and the Project cumulative energy impacts would be less-than-significant.

There are no known or probable related projects that would interact with effects of the Project and thereby result in potentially significant cumulative energy impacts. As with the Project, other developments within the energy provider service areas would be required to demonstrate compliance with state and local plans for renewable energy and energy efficiency.

Based on the preceding, energy impacts of the Project are not cumulatively considerable and the Project cumulative energy impacts would be less-than-significant.

5.1.1.12 Cumulative Impacts Related to Wildfire

The EIR at Section 4.12, *Wildfire*, substantiates that Project wildfire impacts would be less-than-significant. The cumulative impact area for wildfire impacts comprises properties including the Project site and vicinity properties that are designated as located in or near state responsibility areas or lands classified as very high fire hazard severity zones.

As discussed at EIR Section 4.12, *Wildfire*, the Project site and vicinity properties are not classified as very high fire hazard severity zones. Further, the Project does propose or

require facilities or operations that would result in or substantially contribute to wildfire hazards. The Project would comply with General Plan Policies, County Ordinances, and State Government Codes that act to preclude or minimize wildfire hazards.

There are no known or probable related projects that would interact with effects of the Project and thereby result in potentially significant wildfire impacts. As with the Project, other developments would be required to demonstrate compliance with General Plan Policies, County Ordinances, and State Government Codes that act to preclude or minimize wildfire hazards.

Based on the preceding, wildfire impacts of the Project are not cumulatively considerable and the Project cumulative wildfire impacts would be less-than-significant.

5.2 ALTERNATIVES ANALYSIS

5.2.1 Alternatives Overview

Consistent with provisions of the *CEQA Guidelines*, this EIR evaluates alternatives to the Project that would lessen its significant environmental effects while allowing for attainment of the basic Project Objectives. Alternatives to the Project considered in detail within this analysis include:

- No Project Alternatives (No Build Scenario, and Manufacturing Uses Development Scenario);
- Reduced Intensity Alternative.

Alternatives considered and rejected include:

- Alternative Sites.

The above-listed Alternatives are summarized below, and are described in greater detail at Section 5.2.2, *Description of Alternatives*.

To provide context for the subsequent consideration of Alternatives, significant Project impacts are summarized below at Table 5.2-1.

Table 5.2-1
Summary of Significant and Unavoidable Impacts

Environmental Topic	Comments
Air Quality	**NOx Regional Threshold Exceedance** Project operational-source emissions of nitrogen oxides (NO_x) would exceed applicable South Coast Air Quality Management District (SCAQMD) regional thresholds. This is a Project-level and cumulatively significant impact. **AQMP Consistency** Project operational-source emissions would exceed SCAQMD NOx regional significance thresholds. Project operational-source NO_X emissions exceedances may delay or obstruct goals and strategies articulated in the AQMP for the SCAB. The Project would therefore be inconsistent with applicable AQMP. **Contributions to Non-Attainment Conditions** The Project is located within ozone and PM_{10}/$PM_{2.5}$ non-attainment areas (NO_x is a precursor to ozone, PM_{10}, and $PM_{2.5}$). Project operational-source NO_x emissions exceedances would therefore result in a cumulatively considerable net increase in criteria pollutants (ozone, PM_{10}, and $PM_{2.5}$) for which the Project region is non-attainment. These are cumulatively significant air quality impacts.
GHG Emissions	Quantified Project-source GHG emissions would exceed 3,000 MTCO2e/year; and the Project cannot feasibly achieve the CAP Update screening-level threshold of 3,000 MTCO2e/year. On this basis, the Project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Impacts in this regard are therefore considered to be individually and cumulatively significant and unavoidable.

5.2.2 Description of Alternatives

Alternatives to the Project that are considered in this analysis are described below.

5.2.2.1 No Project Alternative

Overview

The *CEQA Guidelines* specifically require that an EIR include evaluation of a No Project Alternative. The No Project Alternative should make a reasoned assessment as to future disposition of the subject site should the Project under consideration not be developed. In this latter regard, the *CEQA Guidelines* state in pertinent part:

> "If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the "no project" alternative

> is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in its existing state against environmental effects which would occur if the project is approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this "no project" consequence should be discussed. In certain instances, the no project alternative means "no build" wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment." (*CEQA Guidelines*, Section 15126.6 (e)(3)(B)).

Within this analysis, two No Project Scenarios are considered – "No Build" and "Manufacturing Uses Development Scenario."

No Project Alternative: No Build Scenario

The No Project Alternative: No Build Scenario assumes the site remains in its current undeveloped condition. If a No Build Scenario were maintained, its comparative environmental impacts would replicate the existing conditions discussions for each of the environmental topics evaluated in this EIR; and comparative impacts of the Project would be as presented under each of the EIR environmental topics.

No Project Alternative: Manufacturing Uses Development Scenario

The No Project Alternative: Manufacturing Uses Development Scenario assumes development of the subject site with a building area equal to that of the Project (710,736 total square feet). The No Project Alternative: Manufacturing Uses Development Scenario would however comprise manufacturing uses only, rather than the mix of 80% warehouse uses/20% manufacturing uses assumed under the Project.

5.2.2.2 Reduced Intensity Alternative

Overview

The Project would result in operational-source regional NOx threshold exceedances and associated cumulatively significant contributions to Basin non-attainment conditions. The Reduced Intensity Alternative considered in this EIR is directed at avoidance of the Project's significant operational-source NOx emissions impacts. The Reduced Intensity Alternative would also diminish the scope of Project impacts in general.

Evaluated Reduced Intensity Alternative

The Reduced Intensity Alternative considers a development scenario that would avoid the Project's operational-source NOx emissions regional threshold exceedances. Under the Project, maximum daily operational-source NOx emissions would total approximately 112.36 lbs./day. The predominance (approximately 93% by weight) of the Project operational-source NOx emissions are generated by mobile sources (Project traffic). The applicable SCAQMD NOx regional threshold is 55 lbs./day. In order to avoid the NOx regional threshold exceedance occurring under the Project, operational-source NOx emissions would need to be reduced to less than 55 lbs./day, or an approximate 52% reduction in the Project operational-source NOx emissions. For the purposes on this analysis, and to allow for a margin of error, the Reduced Intensity Alternative assumes a 60% reduction in Project scope. Project operational-source NOx emissions would be reduced roughly proportionally to approximately 44.94 lbs./day, and would not exceed the applicable SCAQMD NOx regional threshold (55 lbs./day).

Under this Alternative, it is assumed that uses similar to the Project would be implemented but at a 60% reduction in scope. When compared to the Project scope (710,736 square feet), the Reduced Intensity Alternative would realize approximately 284,294 square feet of warehouse/manufacturing uses. Like the Project, it is assumed that the warehouse/manufacturing uses would be apportioned between 2 buildings of approximately equal size (2 buildings at approximately 142,147 square feet each).

In addition to an avoidance of the Project's significant operational-source NOx emissions impacts, the Reduced Intensity Alternative would generally reduce the extent of other environmental impacts otherwise resulting from the Project.

5.2.2.3 Alternatives Considered and Rejected

Alternative Sites Considered and Rejected

As stated in the *CEQA Guidelines* §15126.6 (f)(1)(2)(A), the "key question and first step in [the] analysis [of alternative locations] is whether any of the significant effects of the project would be avoided or substantially lessened by putting the project in another location. Only locations that would avoid or substantially lessen any of the significant effects of the project need be considered for inclusion in the EIR." *CEQA Guidelines* §15126.6 (f) (1) also provides that when considering the feasibility of potential alternative sites, the factors that may be taken into account include: "site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent). None of these factors establishes a fixed limit on the scope of reasonable alternatives."

As discussed in the body of the Draft EIR and summarized previously in Table 5.2-1, the Project would result in the following significant and unavoidable impacts.

<u>Air Quality</u>

NOx Regional Threshold Exceedance

Project operational-source emissions of nitrogen oxides (NOx) would exceed applicable South Coast Air Quality Management District (SCAQMD) regional thresholds. This is a Project-level and cumulatively significant impact.

AQMP Consistency

Project operational-source emissions would exceed SCAQMD NOx regional significance thresholds. Project operational-source NOx emissions exceedances may delay or obstruct goals and strategies articulated in the AQMP for the SCAB. The Project would therefore be inconsistent with applicable AQMP. This is a Project-level and cumulatively significant impact.

Contributions to Non-Attainment Conditions

The Project is located within ozone and PM_{10}/$PM_{2.5}$ non-attainment areas (NOx is a precursor to ozone, PM_{10}, and $PM_{2.5}$). Project operational-source NOx emissions exceedances would therefore result in a cumulatively considerable net increase in criteria pollutants (ozone, PM_{10}, and $PM_{2.5}$) for which the Project region is non-attainment. These are cumulatively significant air quality impacts.

GHG Emissions

Quantified Project-source GHG emissions would exceed 3,000 MTCO2e/year; and the Project cannot feasibly achieve the CAP Update screening-level threshold of 3,000 MTCO2e/year. On this basis, the Project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Impacts in this regard are therefore considered to be individually and cumulatively significant and unavoidable.

All other potential Project impacts would be either less-than-significant, or less-than-significant after mitigation.

Significant NOx Emissions Impacts Not Substantially Reduced at an Alternative Site

Relocation to an Alternative Site would not likely achieve any measurable reduction in the Project's operational-source air quality impacts. Specifically, Project operational-source NOx emissions would exceed the applicable SCAQMD regional threshold. The Project operational-source NOx exceedance is a regional air quality impact. Relocation of the Project anywhere within the South Coast Air Basin would not alter or diminish the significance of this impact.

Significant GHG Emissions Impacts Not Substantially Reduced at an Alternative Site
GHG emissions impacts are by definition cumulative and global in their effects. Relocation of the Project would not alter or diminish the significance of its GHG emissions impacts.

Based on the preceding considerations, analysis of an Alternative Site was not further considered.

5.2.3 Comparative Impacts of Alternatives

For each environmental topic addressed in the EIR, environmental impacts associated with each of the considered Alternatives are described relative to impacts of the Project. Comparative attainment of the Project Objectives is presented at Table 5.2-6. At the conclusion of these discussions, Table 5.2-7 summarizes and compares relative impacts of the considered Alternatives.

5.2.3.1 Comparative Transportation Impacts

PROJECT

VMT Impacts

As substantiated at EIR Section 4.1, *Transportation*, Project VMT impacts would be less-than-significant.

Other Transportation Topics

The Study Area is currently served by the Riverside Transit Agency (RTA). No bus routes currently provide proximate service (within one-quarter mile) of the Project site. The Applicant, Lead Agency, and RTA would coordinate transit services and amenities available to the Project area. The Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Riverside County Airport Land Use Commission (ALUC) review and conditional approval of the Project is required, acting to avoid potential conflicts with MARB

operations and reducing potential airport/airfield hazards to levels that would be less-than-significant. The ALUC has reviewed and conditionally approved the Project. The Applicant would comply with all ALUC Conditions of Approval. Please refer to ALUC documentation provided at EIR Appendix F.

The Project does not propose inherently hazardous transportation design features. The Project would not impair or conflict with emergency access. The Project Site Plan Concept provides for adequate and safe access. Final Site Plan design, including site access, internal circulation, and parking are subject to review and approval by the County. On this basis, the potential for the Project to result in or cause adverse impacts related to hazardous features or improper access and internal circulation features would be less-than-significant. Please refer also to EIR Section 4.1, *Transportation*.

NO PROJECT ALTERNATIVE: NO BUILD SCENARIO

VMT Impacts

This Alternative would maintain existing areawide VMT/employee conditions. This Alternative would result in decreased total areawide VMT when compared to the Project because no new development at the Project site and no new vehicle trips would occur. VMT impacts would be less-than-significant.

Other Transportation Topics

No new traffic would be generated, and no new or additional impacts related to other transportation topics would result under this Alternative. As with the Project, airport land use compatibility, traffic hazards, and emergency access impacts would be less-than-significant.

NO PROJECT ALTERNATIVE: MANUFACTURING USES DEVELOPMENT SCENARIO

VMT Impacts

Trip generation under this Alternative would be approximately 91% greater than would result from the Project. It is assumed that VMT would increase proportionally. The

number of employees under this Alternative would nonetheless be consistent with employee estimates for the Project.[4] It is assumed that the VMT per employee under this Alternative would be increased proportional to its increased trip generation. On this basis, under this Alternative, the VMT per employee would be 1.91 x 14.02 (the Project VMT per employee) or 26.78 VMT per employee. This would exceed the County threshold of 14.24 VMT per employee. Under this Alternative, VMT impacts would be increased when compared to the Project and would be potentially significant.

Other Transportation Topics

This Alternative would result in increased trip generation when compared to the Project. As with the Project, this Alternative would be designed and implemented pursuant to County Standards, Policies, and Conditions of Approval addressing airport land use compatibility, traffic hazards, and emergency access impacts. As with the Project, impacts in these regards would be less-than-significant.

REDUCED INTENSITY ALTERNATIVE

Trip generation under this Alternative would be reduced by approximately 60% when compared to the Project. It is assumed that VMT would be reduced proportionally. The number of employees under this Alternative would also be reduced by 60%. On this basis, under this Alternative, the VMT per employee would be the same as under the Project. VMT impacts would be comparable to the Project and would be less-than-significant.

Other Transportation Topics

This Alternative would result in decreased trip generation when compared to the Project. As with the Project, this Alternative would be designed and implemented pursuant to County Standards, Policies, and Conditions of Approval addressing airport land use

[4] The General Plan estimates that industrial land uses, such as would result under the No Project Alternative: Manufacturing Uses Development Scenario, would employ one worker for every 1,030 SF of building area (Riverside County General Plan, Appendix E-2, Table E-5). See: https://planning.rctlma.org/. On this basis, the No Project Alternative: Manufacturing Uses Development Scenario 710,736 square feet of warehouse/manufacturing uses would generate an estimated 690 jobs.

compatibility, traffic hazards, and emergency access impacts. As with the Project, impacts in these regards would be less-than-significant.

5.2.3.2 Comparative Air Quality Impacts

PROJECT

Mitigation is incorporated in the Project that would reduce localized construction-source emissions impacts to levels that would be less-than-significant.

Project operational-source NOx emissions would exceed applicable SCAQMD regional thresholds. This is an individually and cumulatively significant and unavoidable air quality impact. The Project lies within a region classified as nonattainment for ozone and $PM_{10}/PM_{2.5}$. NO_x is an ozone and $PM_{10}/PM_{2.5}$ precursor. Project NO_x exceedances within the encompassing ozone and $PM_{10}/PM_{2.5}$ nonattainment areas would therefore be considered a cumulatively significant and unavoidable impact to regional nonattainment conditions. Project NO_x exceedances may delay or obstruct goals and strategies articulated in the AQMP for the South Coast Air Basin. The Project is therefore considered to conflict with the AQMP. This is a Project-level and cumulatively significant and unavoidable impact.

All other Project air quality impacts would be less-than-significant. See also EIR Section 4.2, *Air Quality*.

NO PROJECT ALTERNATIVE: NO BUILD SCENARIO

Under this Alternative existing air quality conditions would be maintained (see: EIR Section 4.2, *Air Quality*, 4.2.3, *Setting*). This Alternative would realize no new development and would generate no additional air pollutant emissions. This Alternative would result in reduced air quality impacts when compared to the Project. Air quality impacts would be less-than-significant.

NO PROJECT ALTERNATIVE: MANUFACTURING USES DEVELOPMENT SCENARIO

Mitigation is incorporated in the Project that would reduce localized construction-source emissions impacts to levels that would be less-than-significant. Equivalent mitigation would be incorporated in this Alternative. Under this Alternative and the Project, localized construction-source emissions impacts would be less-than-significant as mitigated.

The increase in vehicular trips under this Alternative would increase operational-source air pollutant emissions. The approximately 91% increase in ADT generation under the No Project alternative is assumed to translate to a roughly proportional increase in air pollutant emissions. Table 5.2-2 provides a comparison of operational-source air pollutant emissions under the Project and this Alternative.

Table 5.2-2
Project and No Project Alternative: Manufacturing Uses Development Scenario
Operational-Source Emissions Comparison
(Pounds per Day, Maximum Total Summer/Winter Emissions)

Pollutant	SCAQMD Threshold	Project		No Project Alternative	
		Emissions	Threshold Exceeded?	Emissions	Threshold Exceeded?
VOC	55	22.71	No	43.38	No
NOx	55	112.36	**Yes**	214.61	**Yes**
CO	550	63.53	No	121.34	No
SOx	150	0.50	No	0.96	No
PM_{10}	150	26.99	No	51.56	No
$PM_{2.5}$	55	8.82	No	16.85	No

Sources: Project operational-source emissions estimates from: *Oleander Business Park Air Quality Impact Analysis* (Urban Crossroads, Inc.) December 13, 2019. No Project Alternative operational-source emissions estimates: Applied Planning, Inc.

As indicated in Table 5.2-2, increased trip generation under this Alternative would result in increases in all operational-source air pollutant emissions when compared to the Project air pollutant emissions. NO_x emissions thresholds exceedances occurring under the Project would be exacerbated under this Alternative. Related non-attainment impacts and AQMP inconsistency impacts would also be exacerbated when compared to the Project.

Increased traffic generated by this Alternative would likely include increased truck traffic. Increased truck DPM emissions and DPM-source cancer and non-cancer risks would likely be increased compared to the Project. However, even assuming that maximum DPM-source cancer and non-cancer risks under this Alternative would be nine times that resulting from the Project (1.03 in one million cancer risk; 0.0004 non-cancer risk), applicable SCAQMD thresholds (10 in one million cancer risk; 1.0 non-cancer risk) would not be exceeded.

Other operational-source air quality impacts under this Alternative would be similar to the Project and would be less-than-significant.

REDUCED INTENSITY ALTERNATIVE

Construction activities and use of construction equipment would be similar to the Project. As with the Project, mitigated construction-related emissions would not exceed SCAQMD emissions thresholds.

Under the Reduced Intensity Alternative, the Project development intensity and overall trip generation would be reduced by approximately 60% when compared to the Project. The reduction in vehicular trips under the Reduced Intensity Alternative would reduce operational-source air pollutant emissions. The approximately 60% reduction in ADT generation under the Reduced Intensity Alternative would translate to a roughly proportional decrease in air pollutant emissions. Table 5.2-3 provides a comparison of operational-source air pollutant emissions under the Project and Reduced Intensity Alternative.

Table 5.2-3
Project and Reduced Intensity Alternative
Operational-Source Emissions Comparison
(Pounds per Day, Maximum Total Summer/Winter Emissions)

Pollutant	SCAQMD Threshold	Project		No Project Alternative	
		Emissions	Threshold Exceeded?	Emissions	Threshold Exceeded?
VOC	55	22.71	No	9.08	No
NOx	55	112.36	**Yes**	44.94	**No**

Table 5.2-3
Project and Reduced Intensity Alternative
Operational-Source Emissions Comparison
(Pounds per Day, Maximum Total Summer/Winter Emissions)

Pollutant	SCAQMD Threshold	Project		No Project Alternative	
		Emissions	Threshold Exceeded?	Emissions	Threshold Exceeded?
CO	550	63.53	No	25.41	No
SOx	150	0.50	No	0.20	No
PM_{10}	150	26.99	No	10.80	No
$PM_{2.5}$	55	8.82	No	3.53	No

Sources: Project operational-source emissions estimates from: *Oleander Business Park Air Quality Impact Analysis* (Urban Crossroads, Inc.) December 13, 2019. Reduced Intensity Alternative operational-source emissions estimates: Applied Planning, Inc.

As indicated at Table 5.2-3, under the Reduced Intensity Alternative, operational-source NOx emissions would be reduced below the applicable SCAQMD threshold, and would therefore be less-than-significant. Related non-attainment impacts and AQMP inconsistency impacts would also be reduced to levels that would be less-than-significant. when compared to the Project. Other operational emissions would be incrementally reduced when compared to the Project, and would remain at levels that would be less-than-significant.

5.2.3.3 Comparative Greenhouse Gas/Global Climate Change Impacts

PROJECT

As discussed at EIR Section 4.3, *Greenhouse Gas Emissions*, quantified Project-source GHG emissions would exceed 3,000 $MTCO_2e$/year; and the Project cannot feasibly achieve the CAP Update screening-level threshold of 3,000 $MTCO_2e$/year. The CAP Update 3,000 $MTCO_2e$/year screening-level threshold is the most conservative metric available and is employed in this analysis in of GHG emissions significance. On this basis, the Project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Impacts in this regard are therefore considered to be individually and cumulatively significant and unavoidable.

As also discussed at EIR Section 4.3, *Greenhouse Gas Emissions*, with incorporation of mitigation, the Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Project impacts in this regard would therefore be less-than-significant.

NO PROJECT ALTERNATIVE: NO BUILD SCENARIO

Under this Alternative, existing GHG emissions conditions would be maintained (see: EIR Section 4.3, *Greenhouse Gas Emissions*, 4.3.2.3, *Existing Greenhouse Gases Emissions Inventories*). This Alternative would realize no new development and would generate no additional GHG emissions. This Alternative would result in reduced GHG emissions impacts when compared to the Project. GHG emissions impacts would be less-than-significant.

NO PROJECT ALTERNATIVE: MANUFACTURING USES DEVELOPMENT SCENARIO

Increased trip generation under this Alternative would result in increased mobile-source GHG emissions when compared to the Project. For analytic purposes, GHG emissions from all other sources is assumed to be equal under the Project and this Alternative. Reflecting the approximately 91% increase in trip generation and mobile-source GHG emissions under this Alternative, a comparison of Project GHG emissions and GHG emissions resulting from this Alternative is presented at Table 5.2-4.

Table 5.2-4
Project and No Project Alternative: Manufacturing Uses Development Scenario
GHG Emissions Comparison

Source	Project $MTCO_2e$/year	No Project Alternative Total $MTCO_2e$/year
Mobile Sources	8,037.32	15,351.28
All Other	2,800.31	2,800.31
Total	10,837.63	18,151.59

Sources: Project GHG emissions estimates from: *Oleander Business Park Greenhouse Gas Analysis, County of Riverside* (Urban Crossroads, Inc.) August 21, 2020. No Project Alternative GHG emissions estimates: Applied Planning, Inc.

GHG emissions generated by this Alternative would be increased when compared to the Project. It is assumed that as with the Project, mitigation requiring implementation of CAP Update Screening Table Measures providing for a minimum 100 points per the

County Screening Tables would be required under this Alternative. As with the Project, GHG emissions under this Alternative would exceed 3,000 $MTCO_2e$/year and could not feasibly achieve the CAP Update screening-level threshold of 3,000 $MTCO_2e$/year. On this basis, this Alternative would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Impacts in this regard are therefore considered to be individually and cumulatively significant and unavoidable.

This Alternative is assumed to comply with applicable plans and policies addressing GHG emissions. On this basis, this Alternative would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Impacts would be less-than-significant and comparable to the Project.

REDUCED INTENSITY ALTERNATIVE

The reduction in scope under the Reduced Intensity Alternative would result in diminished GHG emissions when compared to the Project. For the purposes of this analysis GHG emissions under the Reduced Intensity Alternative are assumed to be reduced roughly proportional to the reduction in development scope (approximately 60%) that would result from this Alternative. A comparison of Project and Reduced Intensity Alternative GHG emissions is presented in Table 5.2-5.

Table 5.2-5
Project and Reduced Intensity Alternative
GHG Emissions Comparison

Source	Project GHG Emissions $MTCO_2e$/year	Reduced Intensity Alternative GHG Emissions $MTCO_2e$/year
Mobile Sources	8,037.32	3,214.93
All Other	2,800.31	1,120.12
Total	**10,837.63**	**4,335.05**

Sources: Project GHG emissions estimates from: *Oleander Business Park Greenhouse Gas Analysis* (Urban Crossroads, Inc.) December 13, 2019. No Project Alternative GHG emissions estimates: Applied Planning, Inc.

As indicated at Table 5.2-5, as with the Project, GHG emissions under this Alternative would exceed 3,000 $MTCO_2e$/year and could not feasibly achieve the CAP Update

screening-level threshold of 3,000 $MTCO_2e$/year. On this basis, this Alternative would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Impacts in this regard are therefore considered to be individually and cumulatively significant and unavoidable.

It is assumed that the Reduced Intensity Alternative would be required to comply with applicable plans and policies addressing GHG emissions. On this basis, the Reduced Intensity Alternative would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Impacts would be comparable to the Project.

5.2.3.4 Comparative Noise/Vibration Impacts

PROJECT

Project construction-source noise and construction-source vibration impacts would be less-than-significant. Project operational area-source noise impacts and vehicular-source noise would be less-than-significant. Project operational-source vibration impacts would be less-than-significant.

NO PROJECT ALTERNATIVE: NO BUILD SCENARIO

Under this Alternative, existing noise/vibration conditions would be maintained (see EIR Section 4.4, *Noise*, 4.4.2, *Setting*). This Alternative would realize no new development and would generate no additional noise/vibration. This Alternative would result in reduced noise/vibration impacts when compared to the Project. Noise/vibration impacts under this Alternative would be less-than-significant.

NO PROJECT ALTERNATIVE: MANUFACTURING USES DEVELOPMENT SCENARIO

Under this Alternative, the types of construction activities and equipment employed would likely be similar to those associated with construction of the Project. Maximum construction-source noise/vibration levels received at off-site locations would be comparable to those resulting from construction of the Project. Under this Alternative

and the Project, construction-source noise/vibration impacts would be less-than-significant.

This Alternative does not propose uses that would generate or result in operational area-source noise or vibration impacts substantively different than would result from uses proposed by the Project. This Alternative would not require or implement uses that would be substantive vibration sources. Under this Alternative and the Project, operational area-source noise impacts and operational area-source vibration impacts would be less-than-significant.

Under this Alternative, trip generation would increase by approximately 91% when compared to the Project. The increase in vehicle trips would likely increase perceived vehicular-source noise levels along area roadways. Although noise levels would be increased, the affected receiving land uses are not considered noise-sensitive. As such, received vehicular-source noise levels under this Alternative would not exceed applicable thresholds. Under this Alternative and the Project, vehicular-source noise impacts would be less-than-significant.

REDUCED INTENSITY ALTERNATIVE

Under the Reduced Intensity Alternative, the types of construction activities and equipment employed would likely be similar to those associated with construction of the Project. Maximum construction-source noise/vibration levels received at off-site locations would be comparable to those resulting from construction of the Project. Under the Reduced Intensity Alternative and the Project, construction-source noise/vibration impacts would be less-than-significant.

The Reduced Intensity Alternative uses would not generate or result in operational area-source noise substantively different than would result from uses proposed by the Project. Mitigation would be implemented to reduce noise received from on-site noise sources to levels that would be less-than-significant. The Reduced Intensity Alternative would not require or implement uses that would be substantive vibration sources. Under the

Reduced Intensity Alternative and the Project, operational area-source noise impacts and operational vibration impacts would be less-than-significant as mitigated.

The estimated 60% reduction in vehicle trips under the Reduced Intensity Project Alternative may reduce perceived vehicular (mobile-source) noise levels along area roadways. Under the Reduced Intensity Alternative and the Project vehicular-source noise impacts would be less-than-significant.

5.2.3.5 Comparative Hazards and Hazardous Materials Impacts

PROJECT

The Project site is not adversely affected by hazards or hazardous materials. The Project would not implement uses or programs that would result in potentially significant hazards/hazardous materials impacts, or that would exacerbate any existing adverse hazards/hazardous materials conditions.

NO PROJECT ALTERNATIVE: NO BUILD SCENARIO

Under this Alternative, existing hazards/hazardous materials conditions would be maintained (see: EIR Section 4.5, *Hazards/Hazardous Materials*, 4.5.2, *Setting*). This Alternative would realize no new development and would generate no additional hazards/hazardous materials impacts. Hazards/hazardous material impacts would be reduced when compared to the Project and would be less-than-significant.

NO PROJECT ALTERNATIVE: MANUFACTURING USES DEVELOPMENT SCENARIO

Increased truck traffic under this Alternative may increase DPM-source cancer/non-cancer risk impacts when compared to the Project. DPM-source health risk impacts would however remain less-than-significant (see also: previous Section 5.2.3.2, *Comparative Air Quality Impacts*).

This Alternative would not otherwise result in hazards and hazardous materials impacts different than those resulting from the Project. This Alternative would not implement uses or programs that would exacerbate any existing adverse hazards/hazardous

materials conditions. Potential hazards/hazardous material impacts of this Alternative and the Project would be comparable and would be less-than-significant.

REDUCED INTENSITY ALTERNATIVE

The Reduced Intensity Alternative land uses would be similar to the Project and would not result in hazards and hazardous materials impacts different than those resulting from the Project. The Reduced Intensity Alternative would not implement uses or programs that would exacerbate any existing adverse hazards/hazardous materials conditions. Potential hazards/hazardous materials impacts of the Reduced Intensity Alternative and the Project would be comparable and would be less-than-significant.

5.2.3.6 Comparative Geology and Soils Impacts

PROJECT

As concluded in the Project Geotechnical Investigation, the subject site can be developed as proposed under the Project, contingent on adherence to the recommendations and requirements of the Geotechnical Investigation and incorporation of applicable County and California Building Code (CBC) design/construction requirements. Based on mandated compliance with seismic design and building code requirements, potential geology/soils impacts affecting the Project would be less-than-significant. The Project would not implement uses or programs that would exacerbate any existing adverse geology/soils conditions. See also EIR Section 4.6, *Geology and Soils.*

NO PROJECT ALTERNATIVE: NO BUILD SCENARIO

Under this Alternative, existing geology and soils conditions would be maintained (see: EIR Section 4.6, *Geology and Soils*, 4.6.2, *Setting*). This Alternative would realize no new development and would result in no new or additional geology and soils impacts. This Alternative would result in reduced potential geology and soils impacts when compared to the Project. Impacts would be less-than-significant.

NO PROJECT ALTERNATIVE: MANUFACTURING USES DEVELOPMENT SCENARIO

Under this Alternative compliance with requirements and recommendations identified in the geotechnical investigation, and incorporation of applicable County and CBC design/construction requirements would reduce potential geology/soils impacts to levels that would be less-than-significant. This Alternative would not require uses or programs that would exacerbate any existing adverse geology/soils conditions. Potential geology/soils impacts of this Alternative and the Project would be comparable and would be less-than-significant.

REDUCED INTENSITY ALTERNATIVE

Under the Reduced Intensity Alternative compliance with requirements and recommendations identified in the geotechnical investigation, and incorporation of applicable County and CBC design/construction requirements would act to reduce potential geology/soils impacts to levels that would be less-than-significant. Because the scope of development under the Reduced Intensity Alternative would be diminished, the overall exposure of facilities and persons to seismic events would be reduced. The Reduced Intensity Alternative would not require uses or programs that would exacerbate any existing adverse geology/soils conditions. Potential geology/soils impacts of the Reduced Intensity Alternative and the Project would be comparable and would be less-than-significant.

5.2.3.7 Comparative Hydrology and Water Quality Impacts

PROJECT

The Project would implement storm water management systems that would connect to existing storm drains with sufficient capacities. The Project would implement a construction Storm Water Pollution Prevention Plan (SWPPP) and operational Water Quality Management Plan (WQMP) reducing potential impacts to water quality to levels that would be less-than-significant. On this basis, the Project's impacts to hydrology and water quality would be less-than-significant. See also EIR Section 4.7, *Hydrology and Water Quality*.

NO PROJECT ALTERNATIVE: NO BUILD SCENARIO

Under this Alternative, existing hydrology/water quality conditions would be maintained (see: EIR Section 4.7, *Hydrology/Water Quality*, 4.7.2, *Existing Conditions*). This Alternative would realize no new development and would generate no additional hydrology and water quality impacts. Impacts would be reduced when compared to the Project and would be less-than-significant.

NO PROJECT ALTERNATIVE: MANUFACTURING USES DEVELOPMENT SCENARIO

The area subject to development with impervious surfaces under this Alternative and the Project would be comparable. This Alternative and the Project would therefore result in comparable rates and quantities of post-development storm water runoff. This Alternative would be required to implement storm water management systems, reducing impacts to existing storm drain capacities to levels that would be less-than-significant. This Alternative would be required to comply with applicable SWPPP and WQMP provisions, thereby reducing potential water quality impacts to levels that would be less-than-significant. Potential hydrology and water quality impacts of this Alternative and the Project would be comparable and would be less-than-significant.

REDUCED INTENSITY ALTERNATIVE

When compared to the Project, the area subject to development with impervious surfaces under the Reduced Intensity Alternative would likely be reduced. The Reduced Intensity Alternative may therefore result in reduced rates and quantities of post-development storm water runoff. The Reduced Intensity Alternative would be required to implement storm water management systems, reducing impacts to existing storm drain capacities to levels that would be less-than-significant. The Reduced Intensity Alternative would be required to comply with applicable SWPPP and WQMP provisions, thereby reducing potential water quality impacts to levels that would be less-than-significant. Hydrology and water quality impacts of the Reduced Intensity Alternative and the Project would be comparable and would be less-than-significant.

5.2.3.8 Comparative Utilities and Service Systems Impacts

PROJECT

Potentially increased demands utilities and services resulting from the Project are addressed in part through the Project's physical design features, payment of connection and service fees, and compliance with purveyor requirements and conformance with existing regulations and performance standards

As required by the County and serving utility purveyors, the Project would construct all utilities extensions and connections necessary to serve the Project uses. Further, development impact fees (DIF) and taxes paid under the Project would provide funds available for public services and utilities expansion and enhancement, acting to offset the Project demands. Based on the preceding, Project-related utilities and service systems impacts were determined to be less-than-significant.

NO PROJECT ALTERNATIVE: NO BUILD SCENARIO

Under this Alternative, existing utilities and service systems conditions would be maintained (see: EIR Section 4.8, *Utilities & Service Systems*, 4.8.2 *Existing Conditions*).

NO PROJECT ALTERNATIVE: MANUFACTURING USES DEVELOPMENT SCENARIO

This Alternative would implement manufacturing uses, with resulting utilities and service systems demands comparable to demands of the Project. As with the Project, this Alternative would be required to construct all utilities extensions and connections necessary to serve the proposed uses. DIF and taxes paid under this Alternative would provide funds available for public services and utilities expansion and enhancement, acting to offset demands of this Alternative.

REDUCED INTENSITY ALTERNATIVE

The Reduced Intensity Alternative would result in development of land uses at a lower intensity than the Project. The Reduced Intensity Alternative can be expected to have similar, though reduced, utilities and service systems impacts when compared to the Project. Potential utilities and service systems impacts of the Project are determined to be

less-than-significant. The Reduced Intensity Alternative would further diminish already less-than-significant impacts resulting from the Project.

5.2.3.9 Comparative Biological Resources Impacts

PROJECT

In total, Project development activities could affect approximately 43 acres. These 43 acres have been significantly impacted due to years of disturbance, trash, off-road trails and footpaths. Mitigation is incorporated to ensure that potential impacts to nesting birds and the burrowing owl would be less-than-significant. The Project would not otherwise result in potentially significant impacts to biological resources. See also EIR Section 4.9, *Biological Resources*.

NO PROJECT ALTERNATIVE: NO BUILD SCENARIO

Under this Alternative, existing biological resources conditions would be maintained (see: EIR Section 4.9, *Biological Resources*, 4.9.2, *Setting*). This Alternative would realize no new development and would have no incremental effects on biological resources. This Alternative would result in reduced biological resources impacts when compared to the Project. Impacts would be less-than-significant.

NO PROJECT ALTERNATIVE: MANUFACTURING USES DEVELOPMENT SCENARIO

Maximum site disturbance and potential impacts to biological resources would be similar to those of the Project. It is assumed that this Alternative would incorporate mitigation that would reduce potential impacts to biological resources to levels that would be less-than-significant. Biological resources impacts of this Alternative and the Project would be comparable and would be less-than-significant as mitigated.

REDUCED INTENSITY ALTERNATIVE

Maximum site disturbance and potential impacts to cultural resources would be similar to those of the Project. It is assumed that the Reduced Intensity Alternative would incorporate mitigation that would reduce potential impacts to biological resources to levels that would be less-than-significant. Biological resources impacts of the Reduced

Intensity Alternative and the Project would be comparable and would be less-than-significant as mitigated.

5.2.3.10 Comparative Cultural Resources/Tribal Cultural Resource Impacts

PROJECT

Tribal consultation is in process as required under *AB 52, Gatto. Native Americans: California Environmental Quality Act*. The Project incorporates mitigation that reduces potential impacts to cultural resources/tribal cultural resources to levels that would be less-than-significant. See also EIR Section 4.10, *Cultural Resources/Tribal Cultural Resources*.

NO PROJECT ALTERNATIVE: NO BUILD SCENARIO

Under this Alternative, existing cultural resources/tribal cultural resources conditions would be maintained (see: EIR Section 4.10, *Cultural Resources/Tribal Cultural Resources*, 4.10.2, *Setting*). This Alternative would realize no new development and would result in no new or additional cultural resources/tribal cultural resources impacts. This Alternative would result in reduced cultural resources/tribal cultural resources impacts when compared to the Project. Impacts would be less-than-significant.

NO PROJECT ALTERNATIVE: MANUFACTURING USES DEVELOPMENT SCENARIO

Maximum site disturbance and potential impacts to cultural resources would be similar to those of the Project. It is assumed that this Alternative would incorporate mitigation that would reduce potential impacts to cultural resources/tribal cultural resources to levels that would be less-than-significant. Cultural resources/tribal cultural resources impacts of this Alternative and the Project would be comparable and would be less-than-significant as mitigated.

REDUCED INTENSITY ALTERNATIVE

Maximum site disturbance and potential impacts to cultural resources would be similar to those of the Project. It is assumed that the Reduced Intensity Alternative would incorporate mitigation that would reduce potential impacts to cultural resources/tribal cultural resources to levels that would be less-than-significant. Cultural resources/tribal

cultural resources impacts of the Reduced Intensity Alternative and the Project would be comparable and would be less-than-significant as mitigated.

5.2.3.11 Comparative Energy Impacts

PROJECT

The analysis presented at EIR Section 4.11, *Energy* substantiates that the Project would not result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. Further, the analysis substantiates that the Project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

NO PROJECT ALTERNATIVE: NO BUILD SCENARIO

Under this Alternative, existing energy conditions would be maintained (see: EIR Section 4.11, *Energy*, 4.11.2, *Existing Conditions*). This Alternative would realize no new development and would not result in increased energy demands. This Alternative would result in reduced energy impacts when compared to the Project. Impacts would be less-than-significant.

NO PROJECT ALTERNATIVE: MANUFACTURING USES DEVELOPMENT SCENARIO

Under this Alternative, only manufacturing uses would be implemented. This use would result in building energy demands comparable to the Project. Increased trip generation under this Alternative may translate to increased vehicular-source energy consumption. Like the Project, this use would be required to implement energy-efficient facilities, and to otherwise demonstrate effective energy use. Under this Alternative, proposed development would also be required to substantiate compliance with state or local plan for renewable energy or energy efficiency. Impacts would be similar to the Project and would be less-than-significant.

REDUCED INTENSITY ALTERNATIVE

The reduction in development scope under the Reduced Intensity Project Alternative would likely reduce total energy demands and total energy consumption. As with the

Project, the Reduced Intensity Alternative uses would be required to implement energy-efficient facilities, and to otherwise demonstrate effective energy use. Under the Reduced Intensity Alternative, proposed development would also be required to substantiate compliance with state or local plan for renewable energy or energy efficiency. Impacts would be similar to the Project and would be less-than-significant.

5.2.3.12 Comparative Wildfire Impacts

PROJECT

The analysis presented at EIR Section 4.12, *Wildfire* substantiates that the Project would not result in potentially significant wildfire impacts.

NO PROJECT ALTERNATIVE: NO BUILD SCENARIO

Under this Alternative, existing wildfire conditions would be maintained (see: EIR Section 4.12, *Wildfire* 4.12.2, *Existing Wildfire Conditions*). This Alternative would realize no new development and would not result in increased wildfire impacts. Impacts would be reduced when compared to the Project and would be less-than-significant.

NO PROJECT ALTERNATIVE: MANUFACTURING USES DEVELOPMENT SCENARIO

This Alternative would result in wildfire impacts comparable to the Project. Like the Project, this Alternative would be required to comply with General Plan Policies, County Ordinances, and State Government Codes that act to preclude or minimize wildfire hazards. Impacts would be similar to the Project and would be less-than-significant.

REDUCED INTENSITY ALTERNATIVE

The reduction in development scope under the Reduced Intensity Project Alternative would likely reduce potential exposure to wildfire hazards. As with the Project, the Reduced Intensity Alternative uses would be required to comply with General Plan Policies, County Ordinances, and State Government Codes that act to preclude or minimize wildfire hazards. Impacts would be similar to the Project and would be less-than-significant.

5.2.4 Comparative Attainment of Project Objectives

The Project Objectives and comparative attainment of the Project Objectives under the No Project Alternative: No Build Scenario, No Project Alternative: Manufacturing Uses Development Scenario, and Reduced Intensity Alternative are summarized at Table 5.2-6.

As presented at Table 5.2-6, under the No Project Alternative: No Build Scenario, the Project Objectives would not be realized.

Under the No Project Alternative: Manufacturing Uses Development Scenario, the Project warehouse-oriented Objectives would not be realized, and attainment of 2 of the 11 Project Objectives would be substantially constrained.

Under the Reduced Intensity Alternative, attainment of 5 of 11 the Project Objectives would be substantially constrained.

Table 5.2-6 Comparative Attainment of Project Objectives			
	EVALUATED ALTERNATIVES		
	No Project Alternative: No Build Scenario	**No Project Alternative: Manufacturing Uses Development Scenario**	**Reduced Intensity Alternative**
	The No Project Alternative: No Build Scenario assumes the site remains in its current undeveloped condition. If a No Build Scenario were maintained, its comparative environmental impacts would replicate the existing conditions discussions for each of the environmental topics evaluated in this EIR; and comparative impacts of the Project would be as presented under each of the EIR environmental topics.	The No Project Alternative: Manufacturing Uses Development Scenario assumes development of the subject site with a building area equal to that of the Project (710,736 total square feet). The No Project Alternative: Manufacturing Uses Development Scenario would however comprise manufacturing uses only, rather than the mix of 80% warehouse uses/20% manufacturing uses assumed under the Project.	Under this Alternative, it is assumed that uses similar to the Project would be implemented but at a 60% reduction in scope. When compared to the Project scope (710,736 square feet), the Reduced Intensity Alternative would realize approximately 284,294 square feet of warehouse/manufacturing uses. Like the Project, it is assumed that the warehouse/manufacturing uses would be apportioned between 2 buildings of approximately equal size (2 buildings @ approximately 142,147 sf each).
PROJECT OBJECTIVES	**Attainment of Project Objectives**		
	No Project Alternative: No Build Scenario	**No Project Alternative: Manufacturing Uses Development Scenario**	**Reduced Intensity Alternative**
Implement the County General Plan (General Plan) through development that is consistent with the General Plan Land Use Element and applicable General Plan Goals, Objectives, Policies and Programs.	No new development would be implemented. ***Attainment of this Objective would not be realized.***	Manufacturing uses that would be implemented under this Alternative are allowed under and are consistent with the General Plan Land Use Element and applicable General Plan Goals, Objectives, Policies and Programs. *Attainment of this Objective would be comparable to the Project.*	Warehouse/manufacturing uses that would be implemented under this Alternative are allowed under and are consistent with the General Plan Land Use Element and applicable General Plan Goals, Objectives, Policies and Programs. *Attainment of this Objective would be comparable to the Project.*
Implement the Mead Valley Area Plan (Area Plan) through development that is consistent with the Area Plan land uses and development concepts, and in total supports the Area Plan Vision.	No new development would be implemented. ***Attainment of this Objective would not be realized.***	Manufacturing uses that would be implemented under this Alternative are consistent with the Area Plan land uses and development concepts, and in total supports the Area Plan Vision. *Attainment of this Objective would be comparable to the Project.*	Warehouse/manufacturing uses that would be implemented under this Alternative are consistent with the Area Plan land uses and development concepts, and in total supports the Area Plan Vision. *Attainment of this Objective would be comparable to the Project.*

Table 5.2-6 Comparative Attainment of Project Objectives			
	EVALUATED ALTERNATIVES		
	No Project Alternative: No Build Scenario	**No Project Alternative: Manufacturing Uses Development Scenario**	**Reduced Intensity Alternative**
Provide adequate roadway and wet and dry utility infrastructure to serve the Project.	No new development would be implemented. Additional or enhanced infrastructure systems would not be constructed. ***Attainment of this Objective would not be realized.***	It is assumed that all necessary roadway and wet and dry utility infrastructure systems would be implemented under this Alternative. *Attainment of this Objective would be comparable to the Project.*	It is assumed that all necessary roadway and wet and dry utility infrastructure systems would be implemented under this Alternative. *Attainment of this Objective would be comparable to the Project.*
Implement warehouse/manufacturing uses that are compatible with adjacent land uses.	No new development would be implemented. ***Attainment of this Objective would not be realized.***	It is assumed that the manufacturing uses under this Alternative would be designed and implemented in a manner that is compatible with adjacent land uses. *Attainment of this Objective would be comparable to the Project.*	It is assumed that the warehouse/manufacturing uses under this Alternative would be designed and implemented in a manner that is compatible with adjacent land uses. *Attainment of this Objective would be comparable to the Project.*
Provide an attractive, efficient and safe environment for warehouse/manufacturing uses that is cognizant of natural and man-made conditions.	No new development would be implemented. ***Attainment of this Objective would not be realized.***	It is assumed that the manufacturing uses under this Alternative would be designed and implemented to provide a safe and efficient development that is cognizant of natural and man-made conditions. *Attainment of this Objective would be comparable to the Project.*	It is assumed that the warehouse/manufacturing uses under this Alternative would be designed and implemented to provide a safe and efficient development that is cognizant of natural and man-made conditions. *Attainment of this Objective would be comparable to the Project.*
Accommodate warehouse/manufacturing uses responsive to current and anticipated market demands.	No new development would be implemented. ***Attainment of this Objective would not be realized.***	Only manufacturing uses would be implemented under this Alternative. There would no opportunity to respond to market demands for warehouse uses. ***Attainment of this Objective would be substantially constrained when compared to the Project.***	The 60 percent reduction in development scope under this Alternative would limit response to current and anticipated market demands for warehouse/manufacturing uses. ***Attainment of this Objective would be substantially constrained when compared to the Project.***

Table 5.2-6 Comparative Attainment of Project Objectives			
	EVALUATED ALTERNATIVES		
	No Project Alternative: No Build Scenario	**No Project Alternative: Manufacturing Uses Development Scenario**	**Reduced Intensity Alternative**
Make efficient use of the undeveloped subject property by maximizing its buildout potential for employment-generating warehouse/manufacturing uses, while protecting natural features.	No new development would be implemented. ***Attainment of this Objective would not be realized.***	Manufacturing uses implemented under this Alternative would be similar in scope to development resulting from the Project. This Alternative would likely result in maximum potential buildout of the site consistent with protection of natural features. Total employment opportunities would be similar to the Project. However, no warehouse-oriented jobs would not be created. *Attainment of this Objective would be comparable to the Project.*	The 60 percent reduction in development scope under this Alternative would result in inefficient use of available land by limiting rather than maximizing buildout potential of the site. The 60 reduction in development scope under this Alternative would comparably reduce total available employment opportunities as well as the range of available employment opportunities. Protection of natural features would occur, but at no greater extent than would be realized under the Project. ***Attainment of this Objective would be substantially constrained when compared to the Project.***
Implement warehouse/manufacturing uses providing additional construction employment opportunities.	No new development would be implemented. ***Attainment of this Objective would not be realized.***	Manufacturing uses implemented under this Alternative would be similar in scope to development resulting from the Project. This Alternative would likely result in local and regional construction employment opportunities similar to those resulting from the Project. *Attainment of this Objective would be comparable to the Project.*	The 60 percent reduction in development scope under this Alternative would comparably reduce total construction employment opportunities as well as the range of available construction employment opportunities. ***Attainment of this Objective would be substantially constrained when compared to the Project.***

Table 5.2-6
Comparative Attainment of Project Objectives

	EVALUATED ALTERNATIVES		
	No Project Alternative: No Build Scenario	**No Project Alternative: Manufacturing Uses Development Scenario**	**Reduced Intensity Alternative**
Implement warehouse/manufacturing uses supporting additional long-term employment opportunities.	No new development would be implemented. ***Attainment of this Objective would not be realized.***	Manufacturing uses implemented under this Alternative would be similar in scope to development resulting from the Project. This Alternative would likely result in total long-term employment opportunities similar to those resulting from the Project. However, no warehouse-oriented jobs would not be created. *Attainment of this Objective would be comparable to the Project.*	The 60 percent reduction in development scope under this Alternative would comparably reduce total long-term employment opportunities as well as the range of available long-term employment opportunities. ***Attainment of this Objective would be substantially constrained when compared to the Project.***
Provide warehouse/manufacturing uses near existing roadways and freeways and thereby reduce VMT, traffic congestion, and air emissions.	No new development would be implemented. ***Attainment of this Objective would not be realized.***	As with the Project, manufacturing uses implemented under this Alternative would be provided proximate access to existing roadways and freeways. *Attainment of this Objective would be comparable to the Project.*	As with the Project, warehouse/manufacturing uses implemented under this Alternative would be provided proximate access to existing roadways and freeways. *Attainment of this Objective would be comparable to the Project.*
Attract new businesses and jobs and thereby foster economic growth.	No development would occur. No businesses or jobs would be created. ***This Objective would not be realized.***	Only manufacturing uses would be implemented under this Alternative. This would limit the potential range of new businesses and related job opportunities when compared to the Project. ***Attainment of this Objective would be substantially constrained when compared to the Project.***	The 60 percent reduction in development scope under this Alternative would comparably reduce the scopes and types of businesses that may locate at the site. The 60 percent reduction in development scope under this Alternative would comparably reduce long-term employment opportunities as well as the range of available long-term employment opportunities. ***Attainment of this Objective would be substantially constrained when compared to the Project.***

5.2.5 Comparison of Alternatives

Table 5.2-7 summarizes by topic, of the preceding alternatives analysis, indicating comparative impacts of the Project and the considered Alternatives.

5.2.6 Environmentally Superior Alternative

The *CEQA Guidelines* require that the environmentally superior alternative (other than the No Project Alternatives) be identified among the Project and other Alternatives considered in an EIR.

As indicated at Table 5.2-7, with exclusion of the No Project Alternatives as provided of under CEQA[5], the Reduced Intensity Alternative would likely result in a general reduction in other environmental effects when compared to the Project. For the purposes of CEQA, the Reduced Intensity Alternative is identified as the "environmentally superior alternative."

Summary and Conclusions

Under the Reduced Intensity Alternative, significant NOx emissions impacts otherwise occurring under the Project would be avoided. Additionally, GHG emissions impacts would be reduced but would remain significant and unavoidable. Under the Reduced Intensity Alternative, attainment of 5 of 11 of the Project Objectives would be substantially constrained.

[5] If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (*CEQA Guidelines* Section 15126.6 (e)(2)).

Table 5.2-7
Summary of Potential Impacts, Alternatives Compared to Project, By Topic

EIR Topic: Project Impacts	No Project Alternative: No Build Scenario	No Project Alternative: Manufacturing Uses Development Scenario	Reduced Intensity Alternative
Transportation/Traffic			
VMT Impacts Project VMT impacts would be less-than-significant individually and cumulatively. VMT inducement impacts would be less-than-significant. ***Other Transportation Topics*** All other impacts would be less-than-significant.	***VMT Impacts*** This Alternative would maintain existing areawide VMT/employee conditions. VMT impacts would be reduced when compared to the Project and would be less-than-significant. ***Other Transportation Topics*** All other impacts would be less-than-significant.	***VMT Impacts*** Trip generation would be increased. VMT/Employee and total VMT impacts would be increased and would be potentially significant. VMT inducement impacts would be less-than-significant. ***Other Transportation Topics*** All other impacts would be less-than-significant.	***VMT Impacts*** Trip generation would be reduced. Total VMT impacts would be diminished, VMT/employee would be comparable to the Project. VMT impacts would be comparable to the Project and would be less-than-significant. VMT inducement impacts would be less-than-significant. ***Other Transportation Topics*** All other impacts would be less-than-significant.
Air Quality			
Operational-source exceedances of SCAQMD regional thresholds for NO_x would be significant and unavoidable. NO_x exceedances would also be cumulatively considerable within the encompassing ozone and $PM_{10}/PM_{2.5}$ nonattainment areas. Project operational-source NOx emissions exceedances may delay or obstruct goals and strategies articulated in the AQMP for the South Coast Air Basin. On this basis, the Project would conflict with the governing AQMP. This is a Project-level and cumulatively significant impact.	Existing air quality conditions would be maintained Air quality impacts would be reduced when compared to the Project. Air quality impacts would be less-than-significant.	Operational-source NOx emissions would be increased in proportion to increased trip generation under the No Project Alternative. Operational-source exceedances of SCAQMD regional thresholds for NOx would be significant and unavoidable. NOx exceedances would also be cumulatively considerable within the encompassing ozone and $PM_{10}/PM_{2.5}$ nonattainment areas. Operational-source NOx emissions exceedances may delay or obstruct goals and strategies articulated in the AQMP for the South Coast Air Basin. On this basis, the No Project Alternative would conflict with the governing AQMP. Impacts would be individually and cumulatively significant. All other impacts would be less-than-significant.	Operational-source NOx emissions would be reduced below the applicable SCAQMD threshold, and would therefore be less-than-significant. Related non-attainment impacts and AQMP inconsistency impacts would also be reduced to levels that would be less-than-significant. Other operational emissions would be incrementally reduced when compared to the Project, and would remain at levels that would be less-than-significant.

Table 5.2-7
Summary of Potential Impacts, Alternatives Compared to Project, By Topic

EIR Topic: Project Impacts	No Project Alternative: No Build Scenario	No Project Alternative: Manufacturing Uses Development Scenario	Reduced Intensity Alternative
All other impacts would be less-than-significant.			
Greenhouse Gas Emissions (GHG)/Global Climate Change (GCC)			
Quantified Project-source GHG emissions would exceed 3,000 MTCO2e/year; and the Project cannot feasibly achieve the CAP Update screening-level threshold of 3,000 MTCO2e/year. On this basis, the Project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Impacts in this regard are therefore considered to be individually and cumulatively significant and unavoidable. With incorporation of mitigation, the Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Project impacts in this regard would therefore be less-than-significant.	Existing GHG emissions conditions would be maintained. This Alternative would result in reduced GHG emissions impacts when compared to the Project. All GHG emissions impacts would be less-than-significant.	GHG emissions would be increased when compared to the Project. As with the Project, GHG emissions under this Alternative would exceed 3,000 MTCO2e/year and could not feasibly achieve the CAP Update screening-level threshold of 3,000 MTCO2e/year. On this basis, this Alternative would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Impacts in this regard are therefore considered to be individually and cumulatively significant and unavoidable. This Alternative is assumed to comply with applicable plans and policies addressing GHG emissions. On this basis, this Alternative would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Impacts would be less-than-significant and comparable to the Project.	GHG emissions would be reduced in proportion to reduced trip generation under the Reduced Intensity Alternative. As with the Project, GHG emissions under this Alternative would exceed 3,000 MTCO2e/year and could not feasibly achieve the CAP Update screening-level threshold of 3,000 MTCO2e/year. On this basis, this Alternative would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Impacts in this regard are therefore considered to be individually and cumulatively significant and unavoidable. This Alternative is assumed to comply with applicable plans and policies addressing GHG emissions. On this basis, this Alternative would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Impacts would be less-than-significant and comparable to the Project.
Noise			
Project construction-source noise would be less-than-significant.	Existing noise/vibration conditions would be maintained. This Alternative would realize no new development and would generate no additional	Construction-source noise impacts would be similar to those of the Project and would be less-than-significant.	Construction-source noise impacts would be similar to those of the Project and would be less-than-significant.

Table 5.2-7
Summary of Potential Impacts, Alternatives Compared to Project, By Topic

EIR Topic: Project Impacts	No Project Alternative: No Build Scenario	No Project Alternative: Manufacturing Uses Development Scenario	Reduced Intensity Alternative
Operational area-source noise impacts would be less-than-significant as mitigated. Vehicular-source noise impacts would be less-than-significant.	noise/vibration. All noise/vibration impacts would be reduced when compared to the Project. Noise/vibration impacts under this Alternative would be less-than-significant.	Operational area-source noise impacts would be similar to those of the Project and would be less-than-significant. Vehicular-source noise may perceptibly increase. Noise-sensitive land uses would not be affected. Vehicular-source noise impacts would be less-than-significant.	Operational area -source noise impacts would be similar to those of the Project and would be less-than-significant. Vehicular-source noise impacts would be similar to those of the Project and would be less-than-significant.
Hazards/Hazardous Materials			
Project hazards/hazardous materials impacts including potential cancer and non-cancer risks from DPM emissions would be less-than-significant.	Existing hazards/hazardous materials conditions would be maintained. This Alternative would realize no new development and would generate no additional hazards/hazardous materials impacts. Hazards/hazardous material impacts would be reduced when compared to the Project and would be less-than-significant.	Cancer and non-cancer risks from DPM emissions may be increased but would remain less-than-significant. Hazards/hazardous materials impacts would otherwise be similar to the Project and would be less-than-significant.	Cancer and non-cancer risks from DPM emissions may be decreased and would remain less-than-significant. Hazards/hazardous materials impacts would be similar to the Project and would be less-than-significant.
Geology and Soils			
Project geology and soils impacts would be less-than-significant.	Existing geology and soils conditions would be maintained. This Alternative would realize no new development and would generate no additional geology and soils impacts. Geology and soils impacts would be reduced when compared to the Project and would be less-than-significant.	Geology and soils impacts would be similar to the Project and would be less-than-significant.	Geology and soils impacts would be similar to the Project and would be less-than-significant.
Hydrology/Water Quality			
Project hydrology/water quality impacts would be less-than-significant.	Existing hydrology/water quality conditions would be maintained. This Alternative would realize no new development and would generate no additional hydrology and water quality impacts. Impacts would be reduced when compared to the Project and would be less-than-significant.	Hydrology/water quality impacts would be similar to those of the Project and would be less-than-significant.	Hydrology/water quality impacts would be similar to those of the Project and would be less-than-significant.
Public Services and Utilities			
Project public services and utilities impacts would be less-than-significant.	Existing public services and utilities conditions would be maintained. This Alternative would realize no new development and would generate no	Public services and utilities impacts would be similar to those of the Project and would be less-than-significant.	Public services and utilities impacts would be similar to those of the Project and would be less-than-significant.

Table 5.2-7
Summary of Potential Impacts, Alternatives Compared to Project, By Topic

EIR Topic: Project Impacts	No Project Alternative: No Build Scenario	No Project Alternative: Manufacturing Uses Development Scenario	Reduced Intensity Alternative
	additional public services and utilities impacts. Impacts would be reduced when compared to the Project and would be less-than-significant.		
Biological Resources			
Project biological resources impacts would be less-than-significant as mitigated.	Existing biological resources conditions would be maintained. This Alternative would realize no new development and would generate no additional biological resources impacts. Impacts would be reduced when compared to the Project and would be less-than-significant.	Biological resources impacts would be similar to those of the Project and would be less-than-significant as mitigated.	Biological resources impacts would be similar to those of the Project and would be less-than-significant as mitigated.
Cultural Resources/Tribal Cultural Resources			
Project cultural resources/tribal cultural resources impacts would be less-than-significant as mitigated.	Existing cultural resources/tribal cultural resources conditions would be maintained. This Alternative would realize no new development and would generate no additional cultural resources/tribal cultural resources impacts. Impacts would be reduced when compared to the Project and would be less-than-significant.	Cultural resources/tribal cultural resources impacts would be similar to those of the Project and would be less-than-significant as mitigated.	Cultural resources/tribal cultural resources impacts would be similar to those of the Project and would be less-than-significant as mitigated.
Energy			
Project energy impacts would be less-than-significant.	Existing energy resources conditions would be maintained. This Alternative would realize no new development and would generate no additional energy resources impacts. Impacts would be reduced when compared to the Project and would be less-than-significant.	Facility energy impacts would be similar to the Project. Increased trip generation may translate to increased vehicular-source energy demands. As with the Project, energy impacts would be less-than-significant.	Total energy demands and energy consumption would likely be reduced. As with the Project, energy impacts would be less-than-significant.
Wildfire			
Project wildfire impacts would be less-than-significant.	Existing wildfire conditions would be maintained This Alternative would realize no new development and would not result in increased wildfire impacts. Impacts would be reduced when compared to the Project and would be less-than-significant.	Wildfire impacts would be similar to the Project and would be less-than-significant.	The reduction in development scope would likely result in reduced exposure to wildfire hazards. Impacts would be similar to the Project and would be less-than-significant.
Relative Attainment of Project Objectives: All Project Objectives would be realized	The Project Objectives would not be realized.	The Project warehouse-oriented Objectives would not be realized, and attainment of 2 of the 11 Project Objectives would be substantially constrained. Moreover, as summarized above, when compared to	Under the Reduced Intensity Alternative, attainment of 5 of 11 of the Project Objectives would be substantially constrained.

Table 5.2-7
Summary of Potential Impacts, Alternatives Compared to Project, By Topic

EIR Topic: Project Impacts	No Project Alternative: No Build Scenario	No Project Alternative: Manufacturing Uses Development Scenario	Reduced Intensity Alternative
		the Project, environmental impacts under the topics of VMT, Air Quality, Noise (vehicular sources), Hazards (DPM-source cancer risks), and Energy (vehicular sources) would be increased under this Alternative.	

5.3 GROWTH-INDUCING IMPACTS OF THE PROPOSED ACTION

5.3.1 Overview

CEQA Guidelines Section 15126.2 (e) *Growth-Inducing Impact of the Proposed Project* requires that an EIR:

> "Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a recycled water plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."

Potential growth-inducing aspects and elements of the Project would include:

- Construction of infrastructure systems;
- Job creation; and
- Economic stimulus/other.

Infrastructure Improvements

The Project would implement infrastructure improvements that are consistent with the County and purveyor master plans. This EIR evaluates likely maximum impacts associated with all Project actions and operations, including but not limited to construction and operation of utilities and service systems distribution and conveyance lines. Construction and operation of the Project utilities and service systems distribution

and conveyance lines described in this EIR would not result in conditions or environmental impacts not already considered and addressed elsewhere in this EIR. Mitigation proposed in this EIR under other environmental topics would also address potential impacts associated with construction and operation of utilities and service systems distribution and conveyance lines. There are no unique or atypical conditions or aspects of the Project utilities and service systems distribution and conveyance lines that would result in significant environmental impacts. Growth resulting from or facilitated by Project infrastructure improvements is anticipated under the General Plan, and environmental impacts attributable to such growth is considered and addressed in the Policy Plan EIR. Further, new development that may be facilitated by availability of infrastructure constructed by the Project would be required to conduct CEQA analyses substantiating less-than-significant impacts to infrastructure systems themselves or to customers served by those infrastructure systems.

Job Creation

The Project would create an estimated 690 new jobs. In general terms, job creation furthers growth via wages, salaries and general fiscal benefits; increased demands for housing; and increased demands for consumer goods and services. Because the Project does not propose or require amendment of the General Plan Land Use Element, Project job creation would not exceed the General Plan employment forecasts for the subject site. Project employment and any associated growth are therefore reflected in the General Plan and impacts of such growth are considered and addressed in the General Plan EIR. Project job creation and associated growth would not result in impacts not already considered and addressed in the General Plan EIR.

Economic Stimulus/Other

Construction and operation of the Project would act generally as economic stimulus for the County and region. As noted above, Project job creation provide local and regional fiscal benefits and would contribute generally to increased demands for housing, goods and services. Salaries and wages paid to employees, taxes, and other revenue streams generated by the Project would provide incentive for creation of second tier businesses

with accompanying economic stimulus, which in turn would create third tier businesses, with accompanying economic stimulus, etc.

Economic stimulus and related growth resulting from the Project would create additional demands for County services. As noted previously, growth resulting from the Project is comprehensively reflected in the General Plan, and environmental impacts of this growth, including demands on County services are considered and addressed in the General Plan EIR. Growth due to Project economic stimulus factors would not result in impacts not already considered and addressed in the General Plan EIR.

The Project would not otherwise encourage and facilitate known or probable activities that could significantly affect the environment, either individually or cumulatively. To the satisfaction of the County, as-yet unknown activities or developments that may derive from the Project would be independently required to evaluate and address their potential environmental impacts.

Summary

The Project could induce growth through the construction of infrastructure improvements, job creation, and economic stimulus. Project infrastructure improvements would not of themselves result in impacts not considered and addressed within the EIR body text. There are no unique or atypical conditions or aspects of the Project utilities and service systems distribution and conveyance lines that would result in significant environmental impacts. Growth resulting from or facilitated by Project infrastructure improvements is anticipated under the General Plan, and environmental impacts attributable to such growth is considered and addressed in the Policy Plan EIR. Further, new development that may be facilitated by availability of infrastructure constructed by the Project would be required to conduct CEQA analyses substantiating less-than-significant impacts to infrastructure systems themselves or to customers served by those infrastructure systems.

Project job creation would not exceed employment projection developed under the General Plan. Growth resulting from Project job creation is anticipated under the General

Plan, and such growth would not result in environmental impacts not already considered and addressed in the General Plan EIR.

The Project would provide economic stimulus that would directly and indirectly contribute to growth. However, growth due to Project economic stimulus factors would not result in impacts not already considered and addressed in the General Plan EIR.

The Project would not otherwise encourage and facilitate known or probable activities that could significantly affect the environment, either individually or cumulatively. To the satisfaction of the County, as-yet unknown activities or developments that may derive from the Project would be independently required to evaluate and address their potential environmental impacts.

5.4 SIGNIFICANT ENVIRONMENTAL EFFECTS

An EIR must identify any significant environmental effects that would result from the Project. (Pub. Resources Code, §21100, subd. (b)(2)(B).) The significant environmental impacts of the Project are summarized previously at Table 5.2-1, and restated below at Table 5.4-1.

Table 5.4-1
Summary of Significant and Unavoidable Impacts

Environmental Topic	Comments
Air Quality	**NOx Regional Threshold Exceedance** Project operational-source emissions of nitrogen oxides (NO_x) would exceed applicable South Coast Air Quality Management District (SCAQMD) regional thresholds. This is a Project-level and cumulatively significant impact. **AQMP Consistency** Project operational-source emissions would exceed SCAQMD NOx regional significance thresholds. Project operational-source NO_X emissions exceedances may delay or obstruct goals and strategies articulated in the AQMP for the SCAB. The Project would therefore be inconsistent with applicable AQMP. **Contributions to Non-Attainment Conditions** The Project is located within ozone and PM_{10}/$PM_{2.5}$ non-attainment areas (NO_x is a precursor to ozone, PM_{10}, and $PM_{2.5}$). Project operational-source NO_x emissions exceedances would therefore result in a cumulatively considerable net increase in criteria pollutants (ozone, PM_{10}, and $PM_{2.5}$) for which the Project region is non-attainment. These are cumulatively significant air quality impacts.

Table 5.4-1
Summary of Significant and Unavoidable Impacts

Environmental Topic	Comments
GHG Emissions	Quantified Project-source GHG emissions would exceed 3,000 MTCO2e/year; and the Project cannot feasibly achieve the CAP Update screening-level threshold of 3,000 MTCO2e/year. On this basis, the Project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. Impacts in this regard are therefore considered to be individually and cumulatively significant and unavoidable.

5.5 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Guidelines § § 15126, subd. (c), 15126.2, subd. (c), 15127, require that for certain types or categories of projects, an EIR must address significant irreversible environmental changes that would occur should the Project be implemented. As presented at *Guidelines* §15127, the topic of Significant Irreversible Environmental Changes need be addressed in EIRs prepared in connection with any of the following activities:

(a) The adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency;

(b) The adoption by a local agency formation commission of a resolution making determinations; or

(c) A project which will be subject to the requirements for preparing of an environmental impact statement pursuant to the requirements of the National Environmental Policy Act of 1969, 42 U.S.C. 4321-4347.

The Project does not propose or require any of the above actions, and is not subject to *CEQA Guidelines* § § 15126, subd. (c), 15126.2, subd. (c), 15127 requirements.

6.0 ACRONYMS AND ABBREVIATIONS

6.0 ACRONYMS AND ABBREVIATIONS

ACMs	Asbestos Containing Materials
ADT	Average Daily Traffic
ALUCP	Airport Land Use Compatibility Plan
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
AST	above-ground storage tank
AVO	Average Vehicle Occupancy
BAT	best available technology
BCT	best conventional pollutant control technology
BMP	Best Management Practice
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalARP	California Accidental Release Prevention Program
CalEPA	California Environmental Protection Agency
CALINE4	California Line Source Dispersion Model
Cal/OSHA	California Department of Industrial Relations, Division of Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CAO	Chino Airport Overlay
CARB	California Air Resources Board
CAT	Climate Action Team
CBC	California Building Code
CCAA	California Clean Air Act
CCAR	California Climate Action Registry
CCR	California Code of Regulations
CC&Rs	Covenants, Conditions and Restrictions

CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CEC	California Energy Commission
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CH_4	Methane
CIWMB	California Integrated Waste Management Board
CMP	Congestion Management Plan
CNEL	Community Noise Equivalent Level
CO	Carbon monoxide
CO_2	Carbon dioxide
CPUC	California Public Utilities Commission
CRA	Community Redevelopment Agency
CRWQCB	California Regional Water Quality Control Board
CTP	Comprehensive Transportation Plan
CUP	Conditional Use Permit
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DHS	California Department of Health Services
DIF	Development Impact Fees
DOT	U. S. Department of Transportation
DPM	Diesel Particulate Matter
DTSC	California Department of Toxic Substances Control
EIR	Environmental Impact Report
EMWD	Eastern Municipal Water District
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment

FCAA	Federal Clean Air Act
Fed/OSHA	Federal Occupational Safety and Health Administration
FEIR	Final Environmental Impact Report
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FICON	Federal Interagency Committee on Noise
FIRM	Flood Insurance Rating Map
FMMP	Farmland Mapping & Monitoring Program
fpm	feet per minute
FTA	Federal Transit Administration
GCC	Global Climate Change
GHG	Greenhouse Gas
GMP	Growth Management Plan
gpd	gallons per day
HCM	Highway Capacity Manual
HDV	Heavy-Duty Vehicle
HOV	High Occupancy Vehicle
HRA	Health Risk Assessment
HSC	Health and Safety Code
HSWA	Hazardous and Solid Waste Amendments Act
HUD	U. S. Department of Housing and Urban Development
ICU	Intersection Capacity Utilization
IEUA	Inland Empire Utilities Agency
IS	Initial Study
ISTEA	Intermodal Surface Transportation Efficiency Act
ITE	Institute of Transportation Engineers
kV	kilovolt
kVA	kilovolt-ampere
LBP	Lead-Based Paint
Ldn	day/night average sound level
LDV	Light-Duty Vehicle
LEA	Local Enforcement Agency

Leq	equivalent sound level
LEED	Leadership in Energy and Environmental Design
LOS	Level of Service
LST	Localized Significance Threshold
M	Richter Magnitude
MBTA	Migratory Bird Treaty Act
mgd	million gallons per day
MOE	Measure of Effectiveness
MPE	maximum probable earthquake
mph	miles per hour
MPO	Metropolitan Planning Organization
MPODC	Master Plan and Overall Design Concept
MRF	Material Recovery Facility
msl	mean sea level
MSW	Municipal Solid Waste
MTA	Metropolitan Transit Authority
MVAP	Mead Valley Area Plan
MWD	Metropolitan Water District
$\mu g/m^3$	micrograms per cubic meter
NAAQS	National Ambient Air Quality Standards
NDFE	Non-Disposal Facility Element
NIH	National Institutes of Health
NO_2	Nitrogen dioxide
NOI	Notice of Intent
NOP	Notice of Preparation
NO_x	Oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRC	Nuclear Regulatory Commission
NTS	Natural Treatment System
O_3	Ozone
OAP	Ozone Attainment Plan
OEHHA	California Office of Environmental Health Hazard Assessment

OES	Office of Emergency Services
OSHA	Occupational Safety and Health Administration
OSMRE	Office of Surface Mining and Reclamation Enforcement
PA	Preliminary Assessment
Pb	Lead
PCE	passenger car equivalency
$PM_{2.5}$	Particulate Matter Less Than 2.5 Microns in Diameter
PM_{10}	Particulate Matter Less Than 10 Microns in Diameter
ppm	parts per million
PPV	peak particle velocity
PV	Photovoltaic
PVRWRF	Perris Valley Regional Water Reclamation Facility
RCRA	Resource Conservation and Recovery Act
REMEL	Reference Energy Mean Emission Level
RMP	Resources Management Plan
ROG	Reactive Organic Gases
RTA	Riverside Transit Authority
RWMP	Regional Water Management Plan
RWQCB	Regional Water Quality Control Board
SARA	Superfund Amendments & Reauthorization Act
SARWQCB	Santa Ana Regional Water Quality Control Board
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SCH	State Clearinghouse
SCUP	Special Conditional Use Permit
SIP	State Implementation Plan
SLM	Sound Level Meter
SO_x	Oxides of sulfur
SRRE	Source Reduction and Recycling Element
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan

SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
TDS	total dissolved solids
TEA-21	Transportation Equity Act for the 21st Century
TIA	Traffic Impact Analysis
TPD	tons per day
UBC	Uniform Building Code
UFC	Uniform Fire Code
USBM	U.S. Bureau of Mines
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
V/C	Volume to Capacity
VdB	vibration decibel
VMT	vehicle miles traveled
VOC	Volatile Organic Compound
WMWD	Western Municipal Water District
WQMP	Water Quality Management Plan
WSA	Water Supply Assessment
WWRF	Western Water Recycling Facility

7.0 REFERENCES

7.0 REFERENCES

PERSONS AND ORGANIZATIONS CONSULTED

County of Riverside
Tim Wheeler, Urban Regional Planner

Project Applicant
Sares Regis Group
3501 Jamboree Road, Suite 3000
Newport Beach, CA 92660

EIR PREPARERS

Applied Planning, Inc.
Ross S. Geller, Principal
Charly Ray, Senior Project Manager
Amy Flores, Assistant Project Manager
Jennifer Gilbert, Staff Editor

DOCUMENTS CONSULTED

Biological Report for the Oleander Business Park Project Site (Harmsworth Associates) November 2019.

Burrowing Owl Survey Report for the Oleander Business Park Project Site (Harmsworth Associates) April 2020.

Construction Health Risk Assessment Memorandum (Urban Crossroads, Inc.) December 13, 2019.

Geotechnical Investigation, Mead Valley Business Park, SWC Nandina Avenue and Decker Road, Unincorporated Riverside County (Perris Area), California (Southern California Geotechnical) June 13, 2019.

Guidelines for Implementation of the California Environmental Quality Act, Sections 15000-15387 of the California Code of Regulations, Governor's Office of Planning and Research.

Jurisdictional Survey and MSHCP Riparian/Riverine/Vernal Pools Evaluation (Ecological Sciences, Inc.) December 17, 2019.

Oleander Business Park Air Quality Impact Analysis, County of Riverside (Urban Crossroads, Inc.) December 13, 2019.

Oleander Business Park Energy Tables (Urban Crossroads, Inc.) December 16, 2019.

Oleander Business Park Greenhouse Gas Analysis, County of Riverside (Urban Crossroads, Inc.) August 21, 2020.

Oleander Business Park Mobile Source Health Risk Assessment, County of Riverside (Urban Crossroads, Inc.) December 13, 2019.

Oleander Business Park Noise Impact Analysis, County of Riverside (Urban Crossroads, Inc.) August 17, 2020.

Oleander Business Park Traffic Impact Analysis, County of Riverside (Urban Crossroads, Inc.) August 16, 2019.

Oleander Business Park Vehicle Miles Travelled (VMT) Assessment (Urban Crossroads, Inc.) August 25, 2020.

Paleontological Resources Assessment Report, Assessor's Parcel Nos. 295-310-012 TO -015, Tentative Parcel Map 36034, Sares-Regis Project, Mead Valley Area, Riverside County, California (CRM TECH) May 19, 2008.

Phase I Archaeological Assessment, Assessor's Parcel Nos. 295-310-012 TO -015, Tentative Parcel Map 36034, Sares-Regis Project, Mead Valley Area, Riverside County, California (CRM TECH) May 19, 2008.

Phase I Environmental Site Assessment, 100-acre Vacant Land, SWC of Decker Road and Nandina Avenue, Riverside County, California (Ardent Environmental Group, Inc.) January 7, 2019.

Phase II Archaeological Testing and Evaluation Program, Tentative Parcel Map No. 36034, Sares-Regis Project, Mead Valley Area, Riverside County, California (CRM TECH) December 5, 2008.

Preliminary Hydrology Report for Sares-Regis Industrial Development, County of Riverside California (Michael Baker International) July 2019.

Project Specific Water Quality Management Plan, Oleander Business Park (Michael Baker International) March 25, 2019.

Update and Addendum to Phase I and Phase II Cultural Resource Studies, Oleander Business Park Project (Formerly Sares-Regis Project; TTM 36034) Mead Valley Area, Riverside County, California, Plot Plan No. 190011; CRM TECH Contract No. 3468 (CRM TECH) December 6, 2019.

Water Supply Assessment Report, Mead Valley Project (EMWD) July 11, 2019.

Western Riverside County Multiple Species Habitat Conservation Plan Consistency Analysis for the Oleander Business Park Project (Harmsworth Associates) November 2019.