Source: Bing Aerial Microsoft Corporation 2020, Datum: NAD 83, Coordinate Sytem: State Plane 6

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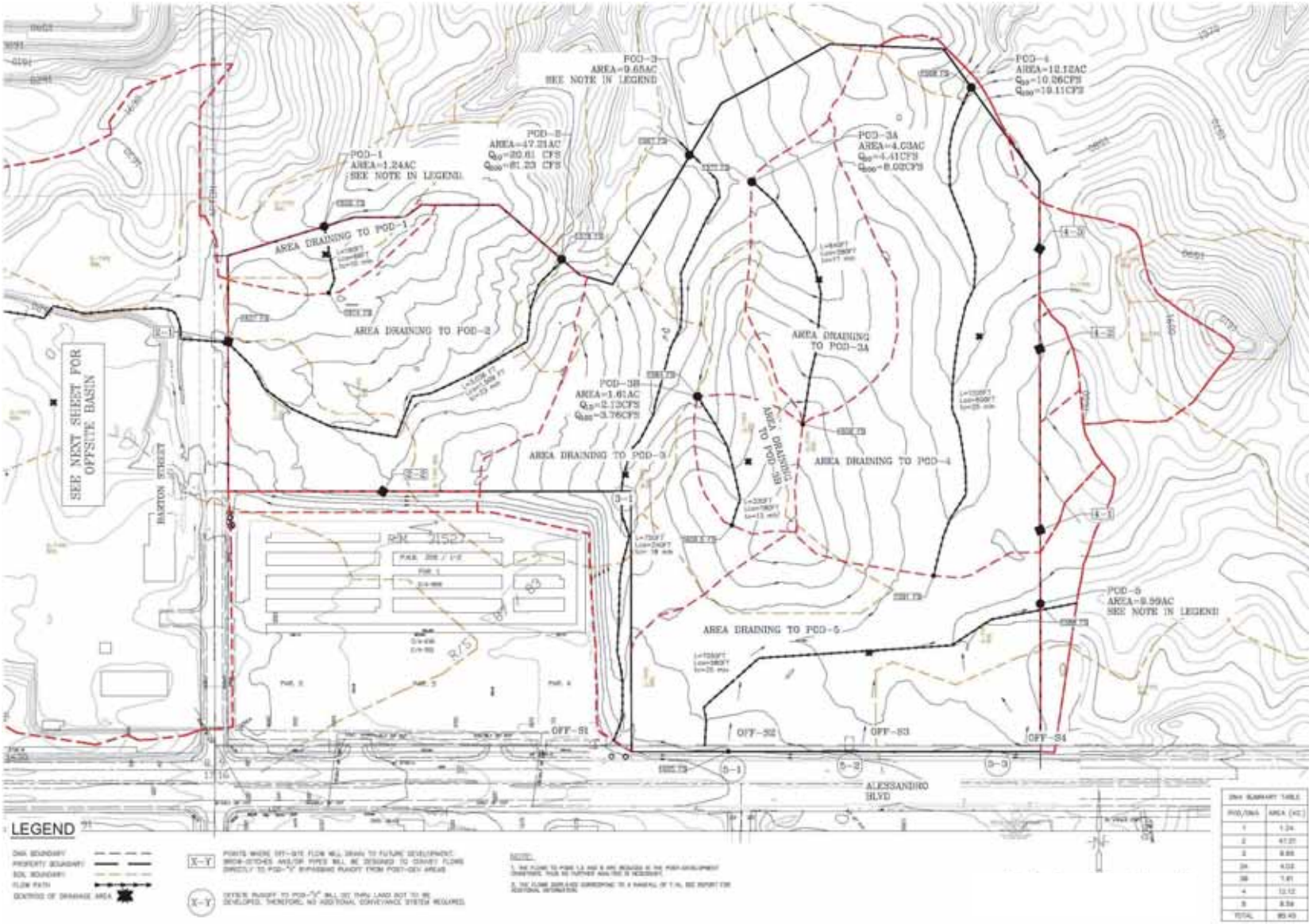
RVA

Project Connectivity to Santa Ana River

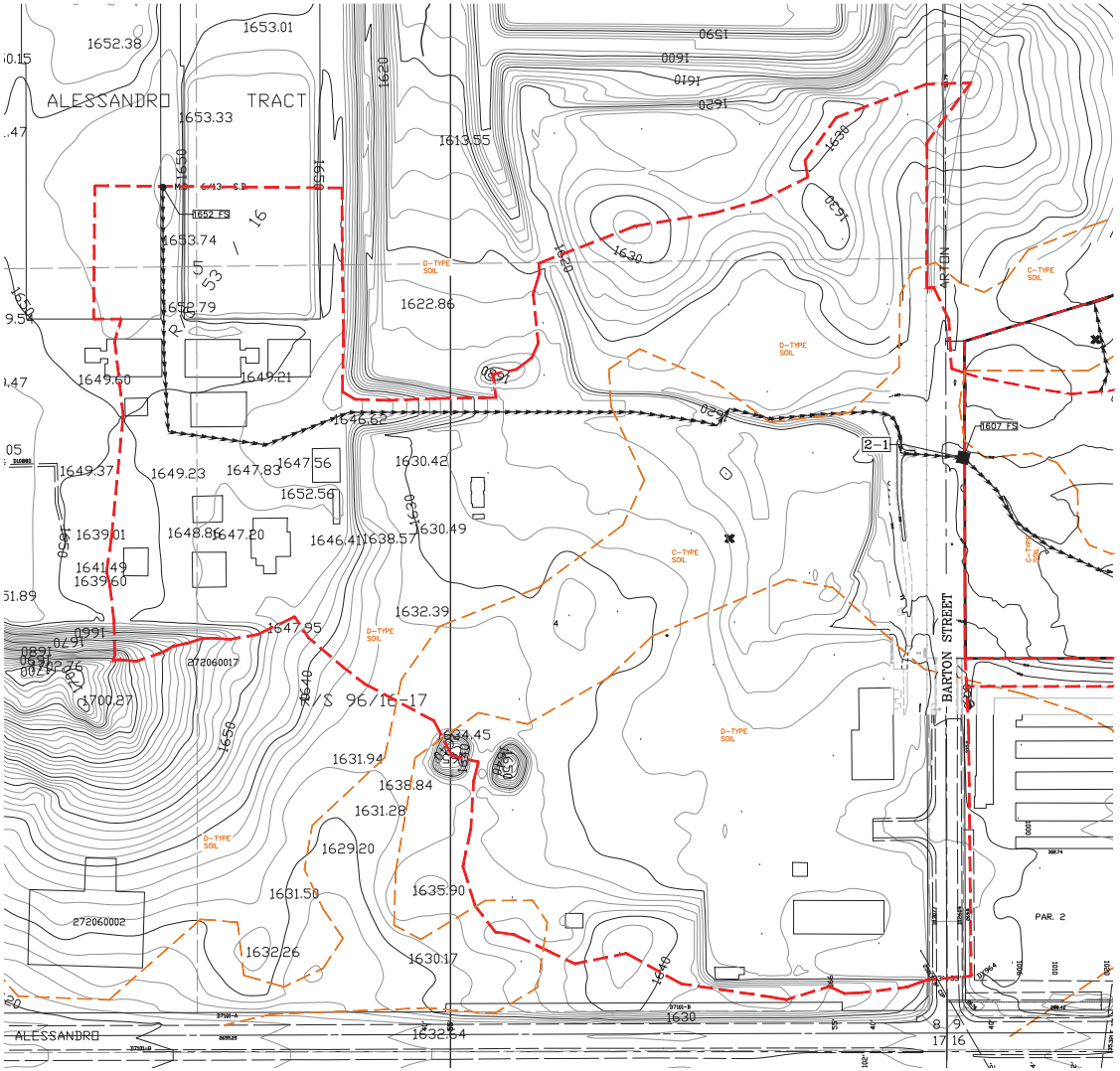
Figure 5.9-2



SYCAMORE HILLS DISTRIBUTION CENTER

Existing Condition Hydrology Map

Figure 5.9-3A



LEGEND

DMA BOUNDARY
PROPERTY BOUNDARY
SOIL BOUNDARY
FLOW PATH
CENTROID OF DRAINAGE AREA

X-Y POINTS WHERE OFF-SITE FLOW WILL DRAIN TO FUTURE DEVELOPMENT. BROW-DITCHES AND/OR PIPES WILL BE DESIGNED TO CONVEY FLOWS DIRECTLY TO POD-"X" BYPASSING RUNOFF FROM POST-DEV AREAS

X-Y OFFSITE RUNOFF TO POD-"X" WILL GO THRU LAND NOT TO BE DEVELOPED. THEREFORE, NO ADDITIONAL CONVEYANCE SYSTEM REQUIRED.

NOTE:

1. THIS AREA DRAINS TO POD-2 BUT HAS NOT BEEN ANALYZED IN THE PRE-DEVELOPED AND POST-DEVELOPED CASES BECAUSE THIS WILL BE A PROPOSED PARKING LOT TO BE DEDICATED TO THE CITY. ANY REQUIRED ANALYSIS OR DETENTION TO BE PERFORMED BY THE CITY.

2. THE FLOWS TO PODS 1,3 AND 5 ARE REDUCED IN THE POST-DEVELOPMENT CONDITIONS, THUS NO FURTHER ANALYSIS IS NECESSARY.

3. THE FLOWS DISPLAYED CORRESPOND TO A RAINFALL OF 1 Hr, SEE REPORT FOR ADDITIONAL INFORMATION.

100 50 0 100 200 300
SCALE: 1" = 100'

SYCAMORE HILLS DISTRIBUTION CENTER

Existing Condition Hydrology Map

Figure 5.9-3B

Groundwater Resources

Water supplies throughout the City are predominately sustained by groundwater basins. Groundwater conditions in these basins are influenced by natural hydrologic conditions such as precipitation, groundwater seepage and surface water from the Santa Ana River and the six arroyos that traverse the City. In addition, local groundwater basins are actively recharged by various agencies with stormwater runoff, treated wastewater, and imported water (GP 2025 FPEIR, pp. 5.8-4 – 5.8-5). Groundwater quality and water rights issues are managed by the Santa Ana RWQCB through waste discharge permits and well permitting (GP 2025, p. OS-57). Groundwater elevation levels, and basin management is generally overseen by the California Department of Water Resources (DWR).

Although the Project site is mostly fill, natural soil and bedrock (NorCal Engineering, p. 3), the site overlies the Riverside South groundwater basin, from which the City's water utility, Riverside Public Utilities (RPU), extracts domestic water for its service area (GP 2025, Figure PF 1.1). Since 2009, RPU has met all of its water supply needs by utilizing groundwater sources located in the Bunker Hill Basin and Riverside North and South Basins[1], and water quality from these sources met or surpassed all State and Federal drinking water quality standards in 2015 (RPU(a), 2015). In past years when RPU has not been able to meet its water demand from pumping from these groundwater basins, RPU has purchased imported water from Western Municipal Water District (Western), which is the water utility that will serve the Project site (GP 2025 FPEIR, p. 5.16-10 and Figure 5.16-3).

The Riverside South Basin is adjudicated by the 1969 Orange County Judgment[2], with the pumping rights of the basin further defined in the 1969 Western-San Bernardino Judgment[3]. As the major pumper of the basin, RPU prepared the Riverside Basin Groundwater Management Plan (GWMP) in 2011 through a stakeholder-based planning effort with DWR guidance (RPU, 2012). The GWMP is intended to help operate and manage the basin in a sustainable manner. RPU also updates an Urban Water Management Plan (UWMP) every five years that is also aimed to facilitate long-range planning for reliable water supplies (RPU(b), 2015).

According to the 2015 RPU UWMP, The Riverside South Basin is projected to operate in a state of overdraft in the future. However, Western is responsible for replenishment of the basin should extractions exceed the base period extraction amount, or by more than 20 percent in a single year, unless credits are available from previous years, as detailed in the Western-San Bernardino Judgment. RPU participates in independent groundwater production is metered and reported to the Western-San Bernardino Watermaster (RPU(b), 2015).

[1] Riverside North and Riverside South basins are hydrologically connected but separated by the San Bernardino County/Riverside County line, per the 1969 Western-San Bernardino Judgment.
[2] Orange County Water District vs. City of Chino, et al., Case No. 117628 (i.e. the Orange County Judgment of April 17, 1969)
[3] Western Municipal Water District vs. East San Bernardino County Water District, et al., Case No. 78426 (i.e. the Western-San Bernardino Judgment of April 17, 1969) describes the groundwater pumping rights in the Colton, Riverside, and San Bernardino Area and is administered by the two-person Western-San Bernardino Watermaster.

Storm Drain System

The Riverside County Flood Control and Water Conservation District (RCFCWCD) is responsible for the regional flood control and drainage facilities. The City maintains local facilities that tie into the RCFCWCD regional system. Local drainage facilities, consisting mostly of underground closed conduits and storm drains located primarily in developed portions of the City collect stormwater and convey it to regional facilities, including the Santa Ana River (GP 2025 FPEIR, p. 5.8-4).

The Sycamore Canyon Business Park Specific Plan (SCBPSP) indicates that if necessary, adequate drainage-siltation basins will be built on the side canyons entering the arroyo so as to retard increased flow and retain debris originating in the industrial area. Such facilities shall be engineered, constructed and maintained through a Tax Assessment District and/or Redevelopment Agency Project.

On November 24, 1992, the City Council approved an amendment to the SCBPSP (SP-001-923) locating three drainage-siltation basins subject to conditions. Two of the facilities, Basins B and C are located entirely within Sycamore Canyon Wilderness Park and Basin A straddles the boundary with the SCBP (SCBPSP, p. 26). These basins are north and northwest of the Project site and storm water runoff from the Project site does not flow to these basins.

The Project site is not located within an existing RCFCWCD Master Drainage Plan area (GP 2025 FPEIR, Figure 5.16-1).

Flooding and Inundation

Flooding in the City mainly results from intense rainfall, which usually occurs in the winter. Flooding in the City could also result from dam failure. Most of the dams within the City and its Sphere of Influence fall under the jurisdiction of the California Department of Water Resources Division of Safety of Dams. Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps show that portions of the City fall within the 100-year flood zone. Flood hazard risks are greatest in the vicinity of channels, creeks, streams, and watercourses. This includes the Santa Ana River and several dams. (GP 2025 FPEIR, p. 5.8-5) The Project site, however, is not within a 100-year flood zone or dam inundation area (GP 2025, Figure PS-4).

Due to the City's distance from the ocean, there is no foreseeable risk of tsunami (tidal wave) inundation. Seiches are oscillations in enclosed bodies of water caused by seismic waves. Existing development is subject to hazards from seiches in reservoirs such as Lake Mathews and Lake Evans at Fairmount Park and other small waterbodies. Mudflows associated with erosion may also occur in portions of the community. (GP 2025 FPEIR, p. 5.8-5) The Project site is not located near Lake Mathews or Lake Evans; not located in a coastal area, which are subject to tsunamis; and not located near the Santa Ana River, Lake Hills, Norco Hills, or Box Springs Mountain area or arroyos that are subject to significant mudflows. (GP 2025 FPEIR, p. 5.8-24)

5.9.2 Related Regulations

5.9.2.1 Federal Regulations

Clean Water Act

The Clean Water Act (CWA) was designed to restore and maintain the chemical, physical, and biological integrity of the waters in the United States, so that all waters can be fishable and swimmable. The U.S. Environmental Protection Agency (EPA) has delegated responsibility for implementation of the CWA to the State Water Resources Control Board (SWRCB) and the nine RWQCBs, including water allocation and water quality protection programs and the National Pollutant Discharge Elimination System (NPDES) program. The NPDES program is a set of permits designed to regulate various activities that generate pollutants with potential to impact water quality. The City is a co-permittee with the County of Riverside in the Municipal Separate Storm Sewer System (MS4) NPDES permit, and is therefore required to mandate that all new development projects and substantial redevelopment projects incorporate Best Management Practices (BMPs) for construction and operation as identified in the Santa Ana Regional Drainage Area Management Plan (SAR-DAMP) (GP 2025, p. OS-57). As a co-permittee, the City must require that most development projects prepare a site-specific Water Quality Management Plan (WQMP). Its primary purpose is to ensure that the land use approval and permitting process of the City will minimize the impact of urban runoff, through the use of Low-Impact Development (LID) principles in site design, source control measures and treatment control BMPs (SAR-DAMP p.6-9). The Project would also be subject to another NPDES permit, the *General Permit for Stormwater Discharges Associated with Construction Activity*, requiring effective erosion and sediment controls during construction. Project-specific BMPs are referenced in Section 5.9.3-Project Design Considerations.

Section 303 of the CWA requires states to adopt water quality standards for all surface waters of the United States, and section 303(d) requires a priority list of Impaired Waterbodies (“the 303(d) list”). These waters do not meet their numeric and/or narrative Water Quality Standards necessary to protect their Beneficial Uses (see Tables 5.9-1 and 5.9-2). To remedy the impairment, a Total Maximum Daily Load (TMDL) is developed for the waterbody that specifies the maximum amount of pollutant it can receive and still meet Standards and allocates pollutant loadings among point-source and non-point source discharges. The Project is within the Santa Ana River’s Reach 3. Reach 3 of the Santa Ana River has three impairments: pathogens, copper, and lead. The Middle Santa Ana River Bacterial Indicator TMDL is currently in effect to address pathogens. Copper and lead TMDLs are slated for 2021 (RWQCB(b), p.13).

Please refer to Section 5.3 – Biological Resources for a discussion of CWA section 401 and section 404 permits, as well as the CDFW and Streambed Alteration Agreement (Fish and Game code 1602).

5.9.2.2 State Regulations

Porter-Cologne Water Quality Control Act and the Basin Plan

The Porter-Cologne Water Quality Control Act, Division 7 of the California Water Code, authorizes the SWRCB to adopt, review, and revise policies for all waters of the state (including both surface and ground waters) and directs the RWQCBs to develop regional Basin Plans. The Water Quality Control Plan for the Santa Ana River Basin ("Basin Plan") is designed to preserve and enhance the quality of water resources in the Santa Ana River basin for the benefit of present and future generations. The purpose of the Basin Plan is to designate beneficial uses of the region's surface and ground waters, designate water quality objectives for the reasonable protection of those uses, and establish an implementation plan to achieve the objectives (RWQCB(b), p. 1-1).

Beneficial uses are all the various ways that water can be used for the benefit of people and/or wildlife. A total of 23 beneficial uses are defined statewide, of which 19 beneficial uses are recognized within the Santa Ana Region (RWQCB(b), p. 3-2). The main stem of the Santa Ana River is divided into six reaches, each of which is generally a hydrologic and water quality unit (RWQCB(b), p. 1-10). Reach 3 of the Santa Ana River, which is the ultimate receiving water for drainage leaving the Project site, includes the portion of the Santa Ana River from Mission Boulevard Bridge to Prado Dam (RWQCB(b), p. 1-10).

Tequesquite Arroyo and each reach of the Santa Ana River have assigned beneficial uses, which are threatened or lost when water quality objectives are violated. Tequesquite Arroyo has the following seven beneficial uses: municipal and domestic supply (MUN) waters used as drinking water supply, water contact recreation (REC 1), non-contact recreation (REC 2), warm freshwater habitat (WARM), wildlife habitat (WILD), rare, threatened or endangered species (RARE), and spawning reproduction and development (SPWN). In order to protect those beneficial uses, narrative water quality objectives apply to all inland surface waters, unless stricter numeric objectives exist, as detailed in Chapter 4 of the Basin Plan (RWQCB(b)).

The Santa Ana River's Reach 3 has the following eight beneficial uses: agricultural supply (AGR), groundwater recharge (GWR), REC1, REC2, WARM, WILD, RARE and SPWN. The Reach has been "excepted" from the municipal or domestic water supply (MUN) designation because it was determined not a good source for drinking water supply per the Sources of Drinking Water Policy (Res No. 88- 63). In addition to the narrative objectives, Reach 3 designations must be protected by numeric thresholds for various constituents that can cause adverse impacts, such as sodium, sulfate and boron (RWQCB(b), Table 4-1). Project-related runoff will discharge into Tequesquite Arroyo and ultimately Reach 3 of the Santa Ana River. The beneficial uses designated for the receiving waters for the Project are identified in Table 5.9-1– Constituents and Beneficial Uses for Receiving Waters.

Table 5.9-1 – Constituents and Beneficial Uses for Receiving Waters

Receiving Waterbody	303(d) List Constituents	TMDL Constituents	Beneficial Uses[a,b]
Tequesquite Arroyo	-----	-----	MUN, REC1, REC2, WARM, WILD, RARE, SPWN
Santa Ana River, Reach 3	Copper (wet season only) Lead	Pathogens	AGR, GWR, REC1, REC2, WARM, WILD, RARE, SPWN

Definitions of Beneficial Uses[a]	
AGR	Waters used for farming, horticulture or ranching. Uses may include, but are not limited to, irrigation, stock watering, and support of vegetation for range grazing.
GWR	Groundwater recharge waters, used for natural or artificial recharge of groundwater for purposes that may include future extraction, maintaining water quality, or halting saltwater intrusion in freshwater aquifers.
MUN	Waters are used for community, military, municipal or individual water supply systems. These uses may include, but are not limited to, drinking water supply.
REC1	Water contact recreation water used for recreational activities involving body contact with water where ingestion of water is reasonably possible. Uses may include swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, and use of natural hot springs.
REC2	Non-contact water recreation waters, used for recreational activities involving proximity to water, but not normally involving body contact with water where ingestion of water would be reasonably possible. These uses may include picnicking, sunbathing, hiking, beachcombing, camping, boating, sightseeing, and aesthetic enjoyment in conjunction of the above activities.
WARM	Warm freshwater habitat waters support waters support warm ecosystems that may include preservation and enhancement of aquatic habitats, vegetation, fish and wildlife, including invertebrates.
WILD	Wildlife habitat waters support wildlife habitats that may include the preservation and enhancement of vegetation and prey species used by waterfowl and other wildlife.
RARE	Rare, threatened or endangered species waters support habitats necessary for the survival and successful maintenance of plant or animal species designated under the State or federal law as rare, threatened, or endangered.
SPWN	Spawning, reproduction and development sites

Noted:
[a]RWQCB(b) (chapter 3 updated June 2019 to include approved amendments), Table 3-1, p. 3-25; definitions adapted from pp. 3-2 – 3-3.
[b]PWQMP, p.10.

The Porter-Cologne Act defines water quality objectives as, "…the limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area" (RWQCB(b), p. 4-1). The numeric water quality objectives for receiving waters of the Project site are shown in Table 5.9-2-Numeric Water Quality Objectives for Receiving Waters. Water quality standards are attained when designated beneficial uses are achieved and water quality objectives are being met. The regulatory programs of the RWQCB are designed to minimize pollutant discharges to surface and ground waters within the region, largely through permitting, such that water quality standards are effectively attained.

Table 5.9-2 – Numeric Water Quality Objectives for Receiving Waters

Water body	Water Quality Objectives (mg/L)							
	Total Dissolved Solids	Hardness	Sodium	Chloride	Total Inorganic Nitrogen	Sulfate	Chemical Oxygen Demand	Boron
Santa Ana River, Reach 3 – Base Flow	700	350	110	140	10[3a]	150	30	0.75

Notes:
[3a] Total nitrogen in a filtered sample
Source: RWQCB(b) (chapter 4 updated June 2019 to include approved amendments), Table 4-1, p. 4-35.

Whether or not a waterbody has numeric water quality objectives, narrative objectives apply to all inland surface waters and groundwater basins within the region under jurisdiction of the Santa Ana RWQCB. Where more than one narrative objective is applicable, the Santa Ana RWQCB requires application of the more stringent objective (RWQCB(b), pp. 4-6 and 4-18). Because no numeric objectives have been established for Tequesquite Arroyo, only narrative objectives apply.

Narrative water quality objectives vary in applicability and scope, reflecting the variety of beneficial uses of water that have been identified. Where numerical objectives are specified, they generally represent the levels that will protect beneficial uses. In some cases, an objective may tolerate natural levels of certain substances or characteristics but no increases over those values (RWQCB(b), p. 4-2).

The reduction of pollutants in urban stormwater discharge to the maximum extent practicable (MEP) through the use of structural and non-structural BMPs is one of the primary objectives of the water quality regulations for MS4 co-permittees. BMPs typically used to manage water quality of urban runoff includes controlling roadway and parking lot contaminants by installing filters with oil and grease absorbents at storm drain inlets, cleaning parking lots on a regular basis, incorporating peak-flow reduction and infiltration features (such as grass swales, infiltration trenches, and grass filter strips) into landscaping, and implementing education programs. BMPs have been incorporated into the design of the Project as discussed in Section 5.9.3 Project Design Considerations.

The Project-Specific Water Quality Management Plan (PWQMP) (Appendix J) for the Project was reviewed and deemed approved as preliminary by the City. The PWQMP is discussed in greater detail in Section 5.9.3. The primary objective of the PWQMP is to minimize the impact of Project-generated urban runoff and protect water quality in Reach 3 of the Santa Ana River.

Prior to the issuance of any building or grading permits in connection with the Project, the applicant will prepare a Final Project Specific WQMP, which must be approved by the City Public Works Department (GP 2025 FPEIR, p. 5.8-11). The City is also responsible for requiring the Project applicant to obtain coverage under the construction NPDES permit prior to commencement of any Project-related demolition or construction activities (GP 2025 FPEIR, p. 5.8-10). To obtain coverage, the Project applicant must file a Notice of Intent with a vicinity map and the appropriate fee with the SWRCB.

5.9.2.3 Local Regulations

Riverside General Plan 2025

The City's General Plan 2025 (GP 2025) contains objectives and policies related to drainage and water quality in the Open Space and Conservation Element and Public Facilities and Infrastructure Element that are applicable to the Project. The Project would be subject to the following objectives and policies:

Objective PS-2: Reduce potential flood hazards within Riverside

> **Policy PS-2.1:** Reduce flood risks for residents and businesses within urbanized areas, as feasible.
>
> **Policy PS-2.2:** Encourage flood control infrastructure that does not reduce the natural character or limit the use of the site.
>
> **Policy PS-2.3:** Minimize additional flood risk exposure in developing areas.

Riverside Municipal Code

The Riverside Municipal Code (RMC) contains several provisions regulating the discharge of stormwater and changes in hydrology. For example, Title 17 Grading Code of the RMC governs grading activities in the City. Most grading projects that exceed one acre will require a permit from the City. To obtain a permit, applicants must supply a grading plan, and if applicable, must demonstrate compliance with the General Construction Stormwater NPDES Permit described above.

In addition, Title 14 Public Utilities, Chapter 14.12 of the RMC regulates discharges into the City's sewer and storm drain systems and implements the City's requirements under the MS4 permit. Among other things, RMC Chapter 14.12 prohibits discharges to the City's sewer and storm drain systems that contain pollutants or that would impair the operation of those systems. Chapter 14.12 also contains specific regulations for industrial dischargers. Finally, this Chapter gives the City enforcement authority to declare violations, apply penalties, and impose stop-work orders, monitoring requirements, and other enforcement mechanisms.

City of Riverside Green Action Plan

The City of Riverside is committed to becoming a clean, green and sustainable community. Beginning in 2005, a task force of citizen volunteers assembled to outline sustainability goals resulting in the City's 2009 designation by the California Department of Conservation as an "Emerald City". Developed by the Green Accountability Performance Committee, the Green Action Plan in its eighth iteration lists 19 goals and more than 50 tasks for the City to achieve additional sustainability goals and reduce its ecological footprint.

Goal 16 of the current Green Action Plan states, "Reduce per capita water usage 20 percent citywide by 2020" and Goal 17 states, "Increase the use of recycled water by 30 percent by 2020, based on the 2008 baseline (GAP, p. 32)." An update to the Green Action Plan is currently pending by the City.

In order to effectively conserve water, the Project includes water conservation and efficiency measures as discussed in Section 3 – Project Description. The Project is also subject to RMC Chapter 14.22 – Water Conservation that includes the Water Conservation Ordinance, drought plan, and water conservation programs that help water users throughout the City conform to local and state regulations for water conservation including drought-related regulations.

5.9.3 Project Design Considerations

Hydrology

The existing site is comprised of five (5) drainage management areas (DMAs) and two (2) sub areas which each drain to their respective point of discharge (POD). In the proposed development, the Project site will comprise of ten (10) DMAs and three (3) sub areas. A detailed post-development conditions description of each DMA is provided as follows:

DMA-1 will remain undeveloped in post-development conditions. Runoff from DMA-A1 overland flows to POD-1. POD-1 is a natural flow path located near the northwestern corner of the Project site. POD-1 received practically no offsite run-on, thus there is no need to preserve or divert any offsite flow (PWQMP, p. 6).

DMA-2A, 2C and 2D consists of the eastern, western and northern side of the proposed western building, parking lot/driveway, and landscape area. Runoff from these areas will first flow into Filterras (engineered biofiltration systems) for water quality treatment prior to discharging into an underground detention system. Runoff from the detention system will then discharge to POD-2.

DMA-2B will contain the southern portion of the western building which will overland flow to Basin 2-1. Basin 2-1 is located upstream of Basin 2-2 and is configured such that detained flows shall be conveyed to POD-2 and overflow from Basin 2-1 will discharge to Basin 2-2 for additional detention. Detained outflows from the underground detention system and the basins will be confluence at POD-2 (PWQMP, p. 7).

DMA-2E consist of the parking lot in Parcel C located at the North West corner of the site. Parcel C will be dedicated to the City to be used in conjunction with an adjacent trail. This DMA will have a separate Filterra BMP to treat runoff from this parcel. Runoff from the BMP will then discharge to POD-2 (PWQMP, p.7).

DMA-2F is the self-treating area that will remain undisturbed along the north east side of Building B. This area will flow overland to POD-2 (PWQMP, p.7).

POD-2 is located near the northeast corner the western development; Building B. POD-2 receives a significant and undetermined amount of run-on from the 48-inch pipe discharging into the property as previously shown in Figure 5.9-4A and Figure 5.9-4B. This flow will be captured in a 48-inch pipe that will cross through the Project along the northern parking lot of Building B and will discharge to POD-2. Run-on from the south will be captured by a 18” diameter corrugated metal pipe (CMP) riser inlet and conveyed to POD-2 (PWQMP, p.7).

DMA-3 will remain undeveloped in existing and proposed development conditions. There are two (2) sub-areas within DMA-3A which will be subject to development. These sub-areas are

designated DMA-3A and DMA-3B. Run-off from DMA-3 flows to POD-3. POD-3 receives offsite run-on, via storm drain, from the residential/commercial developments to the south of Alessandro Boulevard and the surface flow run-on from the adjacent abandoned developed lot (PWQMP, p. 7).

DMA-3A consists of the southern entrance and southern parking lot of the eastern building. Runoff from DMA-3A shall overland flow to proposed Basin-3A for detention and storage. DMA-3B consists of the eastern and southwestern portion of the eastern building. Runoff from the DMA-3B shall overland flow to the proposed Basin-3B for detention and storage. Detained outflows from Basins 3A and 3B shall confluence at POD-3 (PWQMP, p. 7).

POD-3 is a natural flow path located near the northwestern corner of the eastern development. POD-3 receives run-on from point 3-1. Notice that in this case, the natural conveyance system will be preserved as the natural channel from 3-1 to POD-3. Due to POD-3 being in an area of no development, any run-on coming to 3-1 can flow freely to POD-3. The OFF-S1 represents the discharge of a pipe system into the natural channel, but such discharge and flow path occurs off-site the property until point 3-1 is reached. It should be mentioned that PODs 3A and 3B are natural flow paths located upstream of POD-3 (PWQMP, p.7).

DMA-4 consists of the remaining building and parking lot of the eastern development which does not drain to PODs 3A or 3B. Runoff from DMA-4 overland flows to Basin-4 for detention and treatment. Runoff from DMA-4 flows to POD-4 which is a natural flow path located near the northeast corner of the eastern development (PWQMP, p.7).

DMA-4A contains a small area of pervious landscaping at the north east corner of the site that bypasses the BMPs and drains directly to POD-4.

POD-4 receives a small and undetermined amount of sheet-flow from the adjacent areas that's enters to the property at points 4-1,4-2 and 4-3. The runoff from this area located to the east of the property line will be captured by a proposed brow-ditch / pipe system to be designed at a later phase of the Project, and conveyed to POD-4 (PWQMP, p.7).

DMA-5 remains undeveloped in post-development conditions. Runoff from DMA-5 flows to POD-5 which is a natural flow path located near the southeastern corner of the eastern development (PWQMP, p.7).

POD-5 receives run-on from multiple sources. All run-on eventually reaching POD-5 will flow through natural conveyance systems and areas to be preserved, and consequently the Project will have no impact on how this run-on flow. The only exception is the entrance road that must include a culvert design to convey the run-on from 5-1 and the little run-off produced by the property area west of the entrance (PWQMP, p.8). This culvert will be designed at a later phase of this Project.

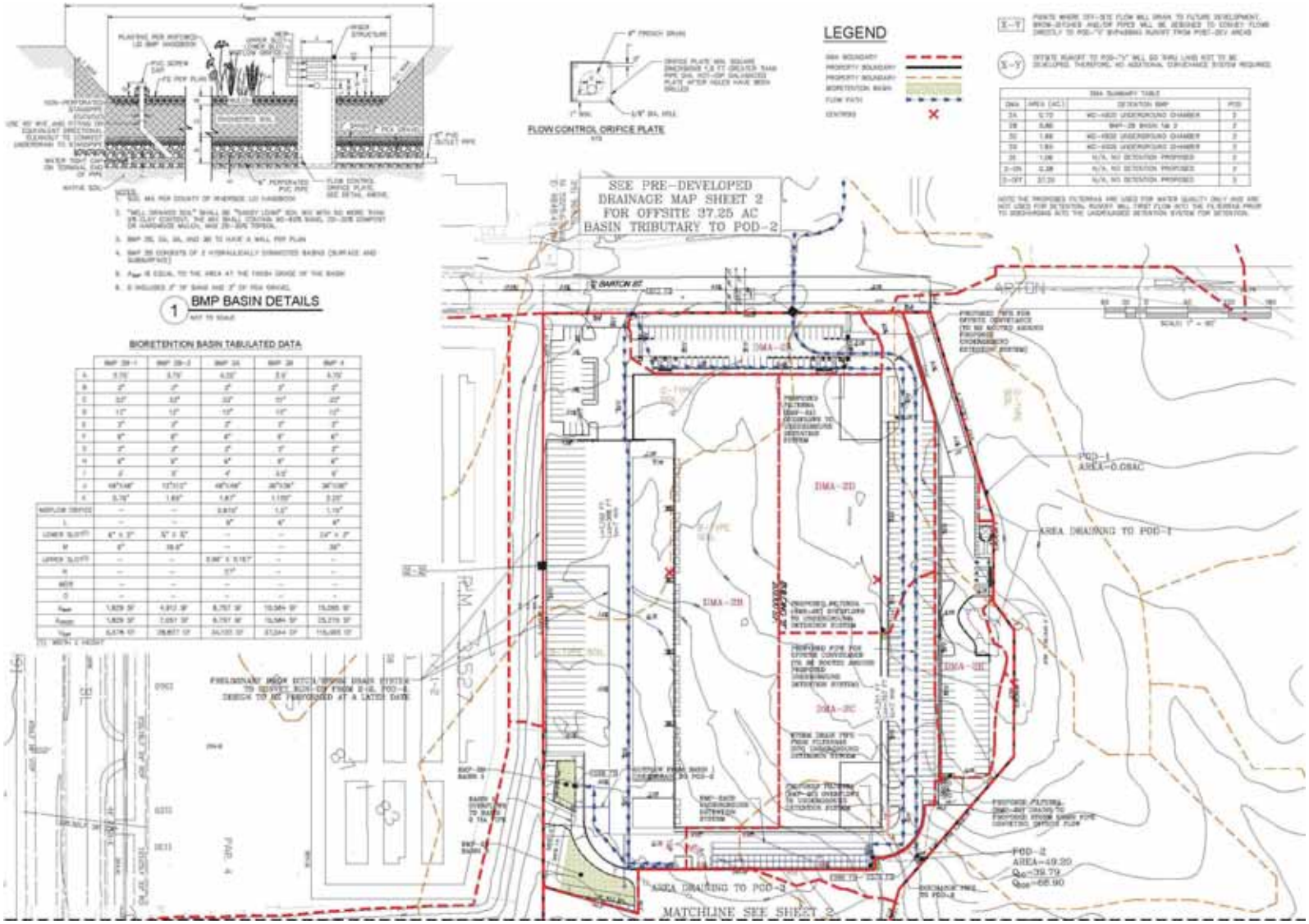
The onsite-tributary areas to PODs 1 and 5 will remain undisturbed in developed conditions and thus are considered self-treating. Similarly, the tributary areas to PODs 2 and 3 (not including sub-areas) are also considered self-treating. All other areas drain to a proposed BMP.

Table 5.9-3 below provides a summary of the areas of each of the aforementioned DMAs (PWQMP, p.8). Table 5.9-3 also describes where the DMAs drains to and the POD. Figure 5.9-4A and Figure 5.9-4B contain maps of the Project Site and Proposed Hydrology.

Table 5.9-3 – Summary of DMAs

DMA	Pervious (sf)	Impervious (sf)	Total (sf)	Drains to	POD
1	3,218	-	3,218	A-ST	1
2A	12,340	18,986	31,236	D-BMP-2A	2
2B	27,456	227,517	254,973	D-BMP-2B	
2C	6,566	80,222	86,788	D-BMP-2C	
2D	6,028	78,733	84,760	D-BMP-2D	
2E	14,528	31,761	46,289	D-BMP-2E	
2F	16,652	-	16,652	A-ST	
3	270,590	-	270,590	A-ST	3
3A	11,721	187,121	198,842	D-BMP-3A	
3B	36,880	113,782	150,662	D-BMP-3B	
4	65,423	536,417	601,840	D-BMP-4	4
4A	8,215	-	8,215	A-ST	
5	347,359	-	347,359	A-ST	5
Total	**811,477**	**1,288,805**	**2,100,282**	-	-

Note: ST= Self Treating



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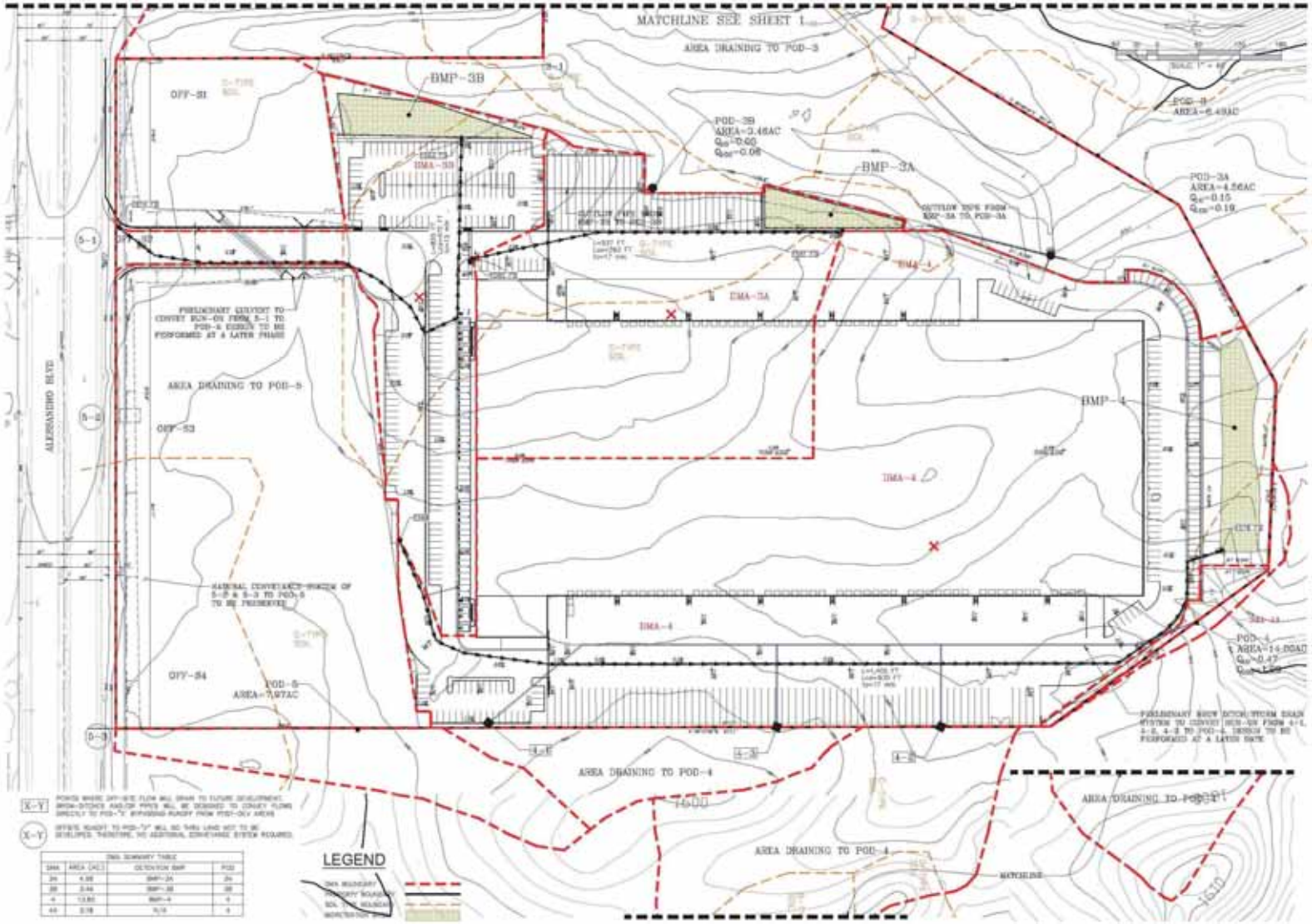
Project Site & Proposed Hydrology

Figure 5.9-4A



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Project Site & Proposed Hydrology

Figure 5.9-4B

A hydromodification study was prepared for the Project to support the PWQMP and is contained in Appendix 7 of the PWQMP. The purpose of this study is to prove that hydromodification conditions are met for the Project when a system with multiple bio-retention basins and an underground system is designed to control the runoff discharge of the post-development conditions. Per the Water Quality Management Plan for the Santa Ana Region of Riverside County, hydromodifications are met when: the post-development peak flows for the 24-hour, 2-year storm event are less, equal, or do not exceed by more than 10 percent, the peak flows for the pre-development conditions of the same storm. Table 5.9-4 below provides a comparison of the existing tributary area of each POD and the tributary area proposed with development of the site (Figures 5.9-3a and 5.9-3b).

Table 5.9-4 – Area Comparison Per POD

Location	Existing (acres)	Proposed (acres)	Difference (acres)
POD-1	1.24	0.07	- 1.17
POD-2	9.97**	11.96**	+1.99
POD-3*	9.65	6.21	-3.44
POD-3A	4.03	4.55	+0.52
POD-3B	1.61	3.46	+1.85
POD-4	12.12	13.82	+1.7
POD-5	9.59	7.96	-1.63
Total	**48.22**	**48.22**	**0.00**

***** Does not include the area of 3A and 3B
** This includes the proposed parking lot that will be dedicated to the City (DMA-E) and the area draining to POD-2 that will remain undisturbed. Hence, these areas do not match the area shown on the calculations for the routing portion (but is reported in the table to verify total area)

The proposed conditions tributary area to PODs 1, 3, and 5 is reduced compared to existing conditions. The land use (i.e. undeveloped) remains the same in both existing and proposed conditions. Therefore, the flows to these PODs are going to be lower in the proposed conditions as compared to the existing conditions. Thus, no further analysis is necessary at PODs 1, 3 and 5. Additionally, DMA-2E consists of a parking lot to be dedicated to the City which was not analyzed in this study. (PWQMP Appendix 7, p. 5)

Table 5.9-5 – Existing and Proposed Conditions Peak Flows (in cfs)

Condition	2-Year, 24-Hour Hydrograph Results			
	POD-2	POD-3A	POD-3B	POD-4
Existing	0.46	0.20	0.08	0.61
Proposed: Post-Unmitigated	2.16	0.98	0.63	2.87
Proposed: Post-Routed*	0.46	0.19	0.06	0.43
Difference: routed – existing	0.00	-0.01	-0.02	-0.18
*: result after modified puls and combination of hydrographs				

Prior to discharging from the Project site, first flush runoff will be treated via four bioretention based BMPs and four Filterra proprietary bioretention BMPs which drain to one combination underground detention system in accordance with the standards set forth by the Regional Water Quality Control Board and the County of Riverside's BMP Design Manual. The multi-purpose bioretention basins and combination underground detention plus proprietary bioretention BMPs are located within the Project site and are responsible for addressing water quality (including HCOC) and flood control requirements. (PWQMP Appendix 7, p. 5)

Table 5.9-5 shows the mitigated outflows for the 2-Year, 24-Hour storm analyzed POD, including a comparison between the existing and mitigated-proposed conditions outflows. As seen in the table, the 2-Year, 24-Hour peak flow rate for all analyzed PODs have decreased compared to the pre-developed condition. The remaining three PODs (1, 3 and 5) were not analyzed because the overall contributing area reduced and no impervious areas were draining to those PODs, which implies a reduction of the peak of the 2-Year, 24-Hour storm. Therefore, the proposed BMPs satisfy the conditions needed for hydromodification compliance: all PODs have peaks smaller, or not in excess of 110% of the pre-development peak flow generated by the 2-Year, 24-Hour storm event. (PWQMP Appendix 7, p. 7)

Water Quality

The PWQMP (Appendix J) identifies Site Design, Source Control, and Treatment Control BMPs, which would be implemented as part of the Project.

Site Design BMPs

Site Design BMPs are features that reduce the creation or severity of potential pollutant sources or reduce the alteration of a site's natural flow. Site Design BMPs are identified in the PWQMP to protect downstream water quality by minimizing the amount of urban runoff, minimizing the impervious footprint of the Project, and minimizing directly-connected impervious areas.

The Project proposes five (5) DMAs that drain to "self-treating" areas. The on-site tributary areas to PODs 1 and 5 will remain undisturbed in developed conditions and thus are considered self-treating. Similarly, the tributary areas to PODs 2 and 3 are also considered self-treating (PWQMP, p. 8). All other areas drain to a proposed BMP basins. Self-treating areas are natural areas that do not drain to stormwater BMP basins, but rather drain directly off site or to a system of conveyances known as a MS4 facility. By having the self-treating areas drain to MS4 facilities it prevents runoff from joining with runoff from the Project's impervious surfaces. Self-treating areas include landscaped slopes that drain off-site to an existing public street, natural conveyance, or MS4 facility. In general, self-treating areas include no impervious areas, unless very small, and slopes are gentle enough to ensure runoff from impervious areas will be absorbed into the vegetation and soil.

According to the WQMP Guidance Document for the Santa Ana Region of Riverside County, the minimum effective area required to be made available for LID BMPs at a "Mixed-Use, Commercial/Industrial land use with Floor-to-Area Ratio less than 1.0" is 10 percent (WQMP Guidance, Table 2-5, p.41). The Project meets this description, with an assumed impervious area of 29.58 acres. The Project design exceeds the minimum requirement by providing approximately 14.83 acres of self-treating areas, which are considered LID Principles (PWQMP, p.8).

Because the Project includes parking/loading/unloading areas for trucks, substation of pavement for landscaping is not feasible. The Project does not propose overflow parking where substitution of pavement for landscaping would be optimal.

Source Control BMPs

Generally speaking, Source Control BMPs are activities or programs intended to limit the contact between pollutant sources and stormwater. The PWQMP identifies Permanent Structural and Operational Source Control BMPs to be implemented by the Project. Permanent Structural Source Control BMPs identified for the Project include:

- On-site storm drain inlet markings;
- Interior floor drains;
- Landscape plan designs which include native species and minimize irrigation/runoff;
- Landscape areas that retain or detain stormwater while using minimum to no pesticides;
- Refuse areas such as dumpster enclosures which have signs on or near dumpsters with the words "Do not dump hazardous materials here" or similar;
- Adequate number of receptables;
- No processes to drain to exterior;
- Maintain clean loading docks;
- Draining fire sprinkler test water;
- Draining lines which do not discharge to the storm drain system;
- Maintenance of clean plazas, sidewalks, and parking lots (PWQMP p. 30-33).

Operational Source Control BMPs identified for the Project include:

- On-site storm drain inlet maintenance;
- Stormwater pollution prevention information to new occupants;
- Annual inspections of interior flood drains and elevator shaft sump pumps;
- Landscape maintenance with minimal pesticides use and providing Integrated Pest Management (IPM) information to new occupants;
- Minimum or no pesticide use for the maintenance of landscaping;
- Erosion prevention by planting fast-growing native vegetation while also reducing water;
- Daily maintenance or repair of waste receptacles;
- All industrial activities shall be performed indoors;
- Moving loaded and unloading items indoors as soon as possible;
- Periodically inspect storm drain system;
- Maintenance of debris from entry into the storm drain system (PWQMP, pp. 30-33).

Treatment Control BMPs

Treatment Control BMPs are engineered systems designed and constructed to remove pollutants from urban runoff (RWQCB(c), Appendix 4, p. 18). Per the site's geotechnical engineering investigation and working knowledge of poor infiltration characteristics throughout the March Joint Powers Authority (JPA) area, infiltration was determined to be infeasible for the LID BMP design. Therefore, treatment for developed condition's runoff is to be provided by four standard bioretention basins and one volume-based treatment control BMP. BMPs 2B, 3A, 3B, and 4 are standard bioretention basins. BMP-2A is the treatment control BMP and the chosen model is "MWS-L-4-19-V". The MWS was selected due to unavailable footprint for a standard bioretention basin. Furthermore, the selected MWS has sufficient capacity to both treat the project "Design Capture Volume" (DCV) and maintain "Hydrologic Conditions of Concern" (HCOC) compliance (PWQMP, p. 8). A HCOC exists when a site's hydrologic regime is altered and there are significant impacts on downstream channels and aquatic habitats, along or in conjunction with impacts of other projects. This typically occurs when the post-construction runoff rates are greater than the pre-development runoff rates. The Santa Ana Regional Board requires permittees (i.e., the City) to implement LID techniques to minimize the HCOC (RWQCB(c), p.30)

The Project site has minimal capability for infiltration based BMPs because it overlies granitic bedrock. In such a case, there is "Alternative Compliance," including "Stormwater Credits" for alternatives to infiltration, hydromodification (HCOC), and the other WQMP requirements (WQMP Guidance, p. 63). In the future, the City may establish such a water credit program.

Water Conservation and Efficiency Features of the Proposed Project

The proposed Project includes the following water conservation and efficiency features:

- Create water-efficient landscapes in compliance with the City's Water Efficient Landscape and Irrigation Ordinance 19.570;

- Install water-efficient irrigation systems and devices, such as soil moisture based irrigation controls and sensors for landscaping according to the City's Water Efficient Landscape and Irrigation Ordinance 19.570 developed pursuant to the California Department of Water Resources' Model Efficient Landscape Ordinance;
- Design buildings to be water-efficient; install water-efficient fixtures and appliances;
- Restrict watering methods (e.g., prohibit systems that apply water to non-vegetated surfaces) and control runoff;
- Provide education about water conservation and available programs and incentives to the building operators to distribute to employees.

5.9.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the *State CEQA Guidelines*. The City generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the State CEQA Guidelines. The Environmental Checklist prepared by the City for the Project (Appendix A of this DEIR) indicates that there are no impacts related to flood hazard, tsunami or seiche zones or project inundation but impacts related to the Sycamore Hills Distribution Center Project may be considered potentially significant if the proposed project would:

- (Threshold A) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality;
- (Threshold B) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin;
- (Threshold C) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: i) result in substantial erosion or siltation on-or off-site; ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off site; iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or; iv) impede or redirect flood flows; and
- (Threshold D) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

5.9.5 Environmental Impacts

Threshold A: *Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?*

Construction of the Project has the potential to result in discharges from soil disturbance, which could violate water quality standards if not adequately addressed. Therefore, the Project would be required to comply with the NPDES Statewide General Construction Permit (Order No. 09-09-

DWQ). The permit requires preparation of an effective Storm Water Pollution Prevention Plan (SWPPP), which describes erosion and sediment control BMPs to prevent stormwater pollution during construction. The SWPPP must be prepared by a Qualified SWPPP Developer and implemented on site by a Qualified SWPPP Practitioner. Through compliance with the regulatory requirements of the NPDES Statewide General Construction Permit and on-site drainage facilities, the Project is not expected to violate any water quality standards or waste discharge requirements during construction; thus impacts would be **less than significant** in this regard.

Once the Project is constructed, operation of the site will have the potential to generate types of pollutants sourced from roof and parking lot runoff typical of a warehouse distribution center. These pollutants include: trash and debris, oil and grease, sediment/turbidity, nutrients, oxygen-demanding substances, pesticides, organic compounds (specifically petroleum hydrocarbons), bacteria and viruses, and metals. However, as discussed in Section 5.9.3 – Project Design Considerations, the Project will follow Site Control, Source Control, and Treatment Control BMPs. Additionally, the on-site tributary areas to POD 1 and 5 will remain undisturbed in developed conditions and are considered self-treating. Similarly, the tributary areas to PODs 2 and 3 (not including sub-areas) are also considered self-treating (PWQMP, p. 8).

The PWQMP (Appendix J) has been reviewed and deemed approved by the City. The PWQMP identifies the BMPs that will be used to address hydrologic conditions of concern and water quality from site development. Prior to the issuance of a grading permit for the Project, a Final Project-Specific WQMP would be prepared and submitted to the City for review and approval. The Final WQMP will contain the same measures identified in the PWQMP that would effectively treat all pollutants of concern (from the Project's land use), and hydrologic conditions of concern, but it will also include some additional details related to operations, maintenance of the BMPs, and educational materials for site tenants.

As described in Section 5.9.3 – Project Design Considerations, some on site runoff generated during operation will be captured by self-treating landscaping, which will facilitate settling of non-dissolved pollutants and some infiltration. Self-treating landscaping will consist of drought tolerant and undisturbed native vegetation (PWQMP, p. 13). Therefore, through compliance with the regulatory requirements of the NPDES permits and implementation of Site Control, Source Control, and Treatment Control BMPs as identified in the PWQMP, and the forthcoming Final WQMP, the Project's potential to violate water quality standards or waste-discharge requirements is considered to be **less than significant.**

Threshold B: *Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

The Project water service source would be provided by Western, which provides water to an approximately 527-square mile area in San Bernardino County and Riverside County. The Western derives its water sources from the Sacramento-San Joaquin Bay-Delta and from the Colorado River. Western also has a groundwater supply in its Murrieta Division, which is combined with imported water for the region's residents. Western also has rights to the

groundwater in the Bunker Hill Basin, which is transported into the Riverside Division through an agreement with the City.

The Project will increase the amount of impervious surface on the Project site, which could indirectly affect the ability of groundwater to be recharged locally through infiltration. However, the subsurface condition has been described as fill, natural undisturbed soil, and granitic bedrock as a result of exploratory trenches. Due to the existing conditions, no groundwater was encountered during the geotechnical survey (NorCal, p. 3). Additionally, per the review of the City of Riverside Public Safety Element – Liquefaction Zones (2006), the site is not situated in an area of generalized liquefaction susceptibility. Therefore, the historical groundwater depth is greater than 50 feet.

As discussed in Threshold A, landscaping will consist of drought tolerant species and will be provided in designated areas. Given that the site is not used for groundwater recharge for water supply reasons, and because the site is not suited for groundwater recharge geologically, development of the Project will not impact a local groundwater recharge condition. Therefore, the Project will not cause a net deficit in aquifer volume or a lowering of the local groundwater table level and impacts related to groundwater will be **less than significant.**

Threshold C: *Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surface, in a manner which would:*

i) result in substantial erosion or siltation on- or off-site;

Increased peak flows could be potentially problematic for safety considerations of increased erosion. However, as previously discussed in Table 5.9-6 under Section 5.9.3 – Project Design Considerations, peak flows will be reduced to or below pre-development levels via routing as all developed runoff will be conveyed to proposed BMPs for treatment and detention (Drainage Study, p. 4). LID BMPs will also be implemented on site and off site to mitigate for potential erosion (PWQMP, p. 29). Preventative landscape erosion will be incorporated composing of fast-growing, dense ground covering plants (PWQMP, p. 31). In addition, implementation of a SWPPP will prevent runoff from the construction site and will prevent water degradation of water quality during storm events through erosion, siltation, and other contaminations. Erosion, siltation, and other possible pollutants are addressed as part of the PWQMP. Therefore, the Project will not result in substantial erosion or siltation on- or off-site and impacts will be **less than significant**.

ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

As previously discussed in Section 5.9.3 – Project Design Considerations, runoff volume for each POD was analyzed under a 2-year 24-hour duration storm (Table 5.9-6). The flows to PODs 1,3, and 5 are going to be lower in proposed conditions compared to existing conditions. Runoff volume will increase in PODs 2, 3A, 3B, and 4. Table 5.9-6 shows the peak flows rates are decreased in the proposed condition outflows with BMPs . The proposed BMPs and storm drain systems have been designed to mitigate the Hydrologic Conditions of Concern by matching, or reducing, the flowrates within the post-development hydrograph with the pre-development

hydrographs peak rates for the 2-year 24-hour storm event. (PWQMP, p. 29) Therefore, flooding is not anticipated on- or off site and impacts will be **less than significant**.

iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;

The Project is not anticipated to create additional runoff and existing runoff will be contained within the Project site. As indicated above in Section 5.9.3 – Project Design Consideration, the on-site tributary areas to PODs 1 and 5 will remain undisturbed in developed conditions and thus are considered self-treating. Similarly, the tributary areas to PODs 2 and 3 (not including subareas) are also considered self-treating. All other areas drain to a proposed BMP as previously shown on Table 5.9-3.

As outlined in the PWQMP, treatment for developed condition's runoff is to be provided by four (4) standard bioretention basins and four (4) volume-based treatment control BMP basins. BMPs 2B, 3A, 3B, and 4 are the standard bioretention basins. BMPs 2A, 2C, 2D, and 2E are the Filterra proprietary bioretention treatment control BMPs.

In order to determine design capture volumes and flow rates, the Project site was divided into a total of ten DMAs. Per the PWQMP, Table 5.9-6 shows the required area and flow rate for the proposed standard bioretention basins that would be needed to accommodate the design capture volume for the Project. As shown under the proposed volume column the standard bioretention basins will be able to contain more than the design capture volume.

Table 5.9-6 – Design and Proposed Volume for BMPs

BMP Type: Standard Bioretention Basins	Design Capture Volume, V_{BMP} (cubic feet)	Proposed Volume on Plans (cubic feet)
2B	10,316	11,818
3A	8,424	12,163
3B	5,287.2	15,876
4	24,326	27,432

Source: PWQMP

Pollutant sources are projected to include on-site storm drain inlets, landscape/outdoor pesticide use, refuse areas, plazas, sidewalks, loading docks, and parking lots (PWQMP, p.9). With the implementation of the BMPs, the Project will not exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Therefore, potential impacts are **less than significant.**

iv) and/or impede or redirect flood flows?

There are no streams or rivers located within the Project site. Although the site will be graded and improved, the Project would not significantly alter drainage patterns currently developed on or off the site. As outlined in the PWQMP, stormwater is generally conveyed through storm drainpipes into a proposed water quality infiltration basin as discussed above in threshold C iii. . The existing Project site is comprised of five (5) drainage management areas (DMAs), which each drain to their respective points of discharge (POD), along the northern and eastern Project site boundary as identified in Section 5.9.3 - Project Design Considerations. The planned onsite storm drain system for the site will convey stormwater runoff that drains onto the site from upland areas, as well as stormwater runoff from the site itself, to existing natural drainage courses that extend north into the Sycamore Canyon Wilderness Park, and an existing low lying area that extend east to adjacent private property. As the Project's stormwater runoff is not conveyed uphill and towards Alessandro Boulevard or Barton Street, the Project site would not connect to the existing public storm drain system or require the construction of stormwater management facilities in the public right of way. Flood flows will not be impeded or redirected, therefore, impacts are **less than significant**.

Threshold D: *Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

The Project is located within the Santa Ana RWQCB planning and management boundaries. Local water management plans must, at a minimum, comply with water quality thresholds and measures as defined by the Santa Ana Basin Plan. The Santa Ana Basin Plan has factors to be considered for establishing water quality objectives which includes the following (RWQCB(b); chapter 4; p.1): 1. Past, present, and probable future beneficial uses of water; 2. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto; 3. Water quality conditions that could reasonable be achieved through the coordinated control of all factors which affect water quality in the area; 4. Economic consideration; 5. The need for developing housing within the region; and 6. The need to develop and use recycled water.

Per the County's WQMP template, future projects must submit a PWQMP to the City which contains BMPs, design the site to minimize imperviousness, cover or control sources of stormwater pollutants, use LID to infiltrate, ensure runoff does not create a hydrological condition of concern (HCOC). Implementation of the WQMP is enforceable under the City of Riverside Water Quality Ordinance (Municipal Code Section 14.12.315). With implementation of the Project's PWQMP, the Project is not anticipated to conflict with or obstruct implementation of the Santa Ana Basin Plan.

The Project will not conflict or obstruct implementation of a sustainable groundwater management plan. Per the Sycamore Canyon Business Park Specific Plan, Western has stated that there is adequate water volume available to serve any potential industrial development within the Specific Plan Area. Additionally, per Metropolitan's 2015 UWMP report, Western will have sufficient water supply available to serve the Project including any reasonably foreseeable future development during normal, dry and multiple dry years (outlined in further detail in the Utilities Section, 5.14.5

Environmental Impacts, Threshold B). Therefore, sufficient water supplies exist to serve the Project. Therefore, impacts are **less than significant.**

5.9.6 Proposed Mitigation Measures

An EIR is required to describe feasible mitigation measures which could minimize significant adverse impacts (*State CEQA Guidelines, Section 15126.4*.) No mitigation measures related to hydrology and water quality have been identified, as Project design features, implementation of a Final Project-Specific WQMP, SWPPP, and compliance with NPDES permit requirements would eliminate or reduce potential significant adverse impacts related to hydrology and water quality to **less than significant**.

5.9.7 Cumulative Environmental Effects

The cumulative impact area for hydrology and water quality impacts is the Santa Ana River watershed hydrologic unit. The City is located within the Santa Ana Region (Region 8) of the Regional Water Quality Control Board and Reach 3 of the Santa Ana River is the ultimate receiving water body for runoff from the Project site.

Cumulative impacts to water quality could be significant with the addition of substantial increases in development and temporary construction activities in the Santa Ana River watershed. These cumulative effects include increasing the amount of flow, sedimentation, and urban pollutants that are transmitted via storm flows to the Santa Ana River and its tributaries. The Project, along with all of the cumulative development projects, are required to comply with current storm water requirements for construction-related activities and operation of the site. Erosion and sediment control BMPs will be implemented during construction of the Project in compliance with the NPDES General Permit for Construction Activities. After construction, the Project would implement the permanent treatment systems identified in the PWQMP. As noted in Section 5.9.3 Project Design Considerations, the PWQMP identifies site design, source control, and treatment control BMPs to be implemented as part of the proposed Project. These include minimization of impervious area at the Project site as well as depressed landscape for infiltration, when appropriate, at the Project site. Permanent Structural Source Control BMPs include but are not limit to: onsite storm drain inlet markings, interior floor drains, and regular maintenance of refuse areas**,** as well as standard bioretention basins, volume-based treatment control BMP basins. BMPs 2B, 3A, 3B, and 4 are the standard bioretention basins, and Filterra proprietary bioretention treatment control BMPs. Therefore, Project construction and operation would not considerably contribute to a significant cumulative water quality impact.

Because the Project is not located within a groundwater recharge area, the increase in the amount of impermeable surfaces within the watershed resulting from the proposed Project has only the nominal potential to affect groundwater recharge and there would be no cumulative impacts in this regard. Per the Sycamore Canyon Business Park Specific Plan, Western has stated that there is adequate water volume available to serve any potential industrial development within the Specific Plan Area. Additionally, per Metropolitan's 2015 UWMP report, Western will have sufficient water supply available to serve the Project including any reasonably foreseeable future development during normal, dry and multiple dry years (outlined in further detail in the Utilities Section, 5.14.5 Environmental Impacts, Threshold B). Therefore, sufficient water supplies exist to serve the Project and the Project's water demand is not considered cumulatively considerable. For these reasons, cumulative impacts with regard to groundwater are **less than significant.**

The proposed Project will alter Drainage A due to the construction of Building B (see Figure 5.3-5 Drainages Map). The proposed Project will install a 48-inch pipe which will cross through Building A and capture runoff which will then discharge to POD-2. The remainder of the runoff will be collected by other PODs and a proposed brow-ditch/pipe system. No substantial erosion or siltation is expected either during Project operation or construction considering the proposed Project and erosion control methods that will be in place during construction. Through compliance with the terms of the NPDES general construction permit and the City's MS4 permit, the Project's impact to altering existing drainage patterns is not cumulatively considerable. Therefore, cumulative impacts with regard to alteration of existing drainage patterns are **less than significant.**

The Project site is not located within a flood hazard area or dam inundation zone; therefore, the Project would not contribute to cumulative flood or dam inundation hazards. Through implementation of the final PWQMP, SWPPP, and compliance with NPDES permit requirements, the Project's contribution to cumulative flood or dam inundation hazards is not cumulatively considerable. Therefore, cumulative impacts with regard to flood or dam inundation hazards are **less than significant**.

5.9.8 References

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

GAP	City of Riverside. *Green Action Plan*. 2012. (Available at http://www.greenriverside.com/green-action/default.asp, accessed February 3, 2020.)
GP 2025	City of Riverside, General Plan 2025, certified November 2007 with subsequent amendments to various elements. (Available at http://www.riversideca.gov/planning/gp2025program/general-plan.asp, accessed February 2020.)
GP 2025 FPEIR	City of Riverside, General Plan 2025 Program Environmental Impact Report (SCH# 2004021108), certified November 2007. (Available at http://www.riversideca.gov/planning/gp2025program/, accessed February 2020.)
NorCal Engineering	*NorCal Engineering, Geotechnical Engineering Investigation*, prepared March 2019 and updated September 2020 (Appendix G).

PWQMP	*Project Specific Water Quality Management Plan, Revised* March 5, 2020. (Appendix J)
REC(a)	REC Consultants, Inc. Drainage Study for Sycamore Hills Business Center March Joint Powers Authority County of Riverside, California, Revised May 7, 2020. (Appendix J)
Res No. 88-63	State Water Resources Control Board. Sources of Drinking Water Policy, Resolution No. 88-63. (Available at www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/1988/rs1988_0063.pdf, accessed September 16, 2020)
RPU(a), 2015	City of Riverside Public Utilities, Water Quality Report 2015, June 2016. (Available at www.riversideca.gov/utilities/pdf/wqar/2015-Water-Quality-Annual-Report.pdf, accessed September 14, 2020)
RPU(b), 2015	Water Systems Consulting, Inc., 2015 Urban Water Management plan for Riverside Public Facilities, Water Division, July 2016. (Available at http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/docs/303d/2010_303d.pdf, accessed September 16, 2020)
RUWMP	Regional Urban Water Management Plan, June 2016. (Available at http://www.mwdh2o.com/PDF_About_Your_Water/2.4.2_Regional_Urban_Water_Management_Plan.pdf, accessed September 9, 2020)
RWQCB(a)	Santa Ana Regional Water Quality Control Board, 2010 Santa Ana Region 303(d) List of Water Quality Limited Segments, October 11, 2011. (Available at http://www.waterboards.ca.gov/santaana/water_issues/programs/tmdl/docs/303d/2010_303d.pdf, accessed February 3, 2020)
RWQCB(b)	Santa Ana Regional Water Quality Control Board, *Water Quality Control Plan Santa Ana River Basin,* February 11, 2008 update. (Available at www.swrcb.ca.gov/rwqcb8/water_issues/programs/basin_plan/index.shtml, accessed February 3, 2020)
RWQCB(c)	Santa Ana Regional Water Quality Control Board, Order No. R8-2010-0033, NPDES No. CAS 618033, National Pollutant Discharge Elimination System (NPDES) Permit and Waste Discharge Requirements for the Riverside County Flood Control and Water Conservation District, the County of Riverside, and the Incorporates Cities of Riverside County Within the Santa Ana Region, Area-Wide Urban Runoff Management Program, January 29, 2010. (Available at http://www.waterboards.ca.gov/santaana/board_decisions/adopted_orders/orders/2010/10_033_RC_MS4_Permit_01_29_10.pdf, accessed September 16, 2020)
SAR-DAMP	Riverside County Drainage Area Management Plan, Santa Ana Region. June 30, 2017. (Available at http://content.rcflood.org/downloads/NPDES/Documents/SA_SM_DAMP/SAR_DAMP.pdf, accessed September 14,2020)

SCBPSP	Beland Associates, Inc. with Takata/Associates, Inc. City of Riverside., Specific Plan/EIR Sycamore Canyon Business Park (Originally known as the Box Springs Industrial Park), originally adopted on April 10, 1984, edited to include Specific Plan Amendments as of May 1993 by the City of Riverside Planning Department. (Available online at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/spec-plans/syc-bus-park/plan_doc.pdf, accessed September 16, 2020)
UWMP	Western Municipal Water District, 2015 Urban Water Management Plan Update, Adopted June 1, 2016. (Available online at http://www.wmwd.com/215/Urban-Water-Management-Plan, accessed February 3, 2020)
Western Regional Climate Center	Western Regional Climate Center. 2020. Desert Research Institute. (Available online at: http://www.wrcc.dri.edu/coopmap. Accessed September 16, 2020)
Wood	Wood Environmental & Infrastructure, Inc., *Jurisdictional Delineation Report, Sycamore Hills Distribution Center, City of Riverside, Riverside County, California,* December 2020. (Appendix D)
WQMP Guidelines	Water Quality Management Plan, A Guidance Document for the Santa Ana Region of Riverside County. Approved by Santa Ana RWQCB October 22, 2012. (Available online at http://rcflood.org/downloads/NPDES/Documents/SA_WQMP/SantaAnaWQMPGuidance.pdf, accessed September 16, 2020)

5.10 Land Use and Planning

Based on Appendix G of the *State CEQA Guidelines,* the analysis in the Initial Study (IS/NOP) prepared for this Project (Appendix A), and comments received during the NOP public comment period, this section evaluates potential impacts related land use and planning, and more specifically the Project's potential to conflict with any applicable land use plan, policy, or regulation, adopted for the purpose of avoiding or mitigating an environmental effect.

5.10.1 Setting

Existing Land Uses

The Project site is currently undeveloped and vacant, but has been used historically as open space. It has a General Plan land use designation of B/OP – Business Office Park as shown on Figure 3.0-5 - Land Use Designation Map and is zoned BMP-SP – Business and Manufacturing Park Specific Plan (Sycamore Canyon Business Park) Overlay Zones as shown on Figure 3.0-7 - Zoning Map, found in Section 3.0, Project Description. The Project site is also within the Industrial land use category of the Sycamore Canyon Business Park Specific Plan as shown on Figure 3.0-6, also found in Section 3.0, Project Description.

The Project site contains an existing Restricted Property area totaling 11.6 acres, as shown in Figure 3.0-3 – Project Site Map. The 11.6-acre Restricted Property area supports a jurisdictional drainage and associated riparian habitat, which was required as a condition of the Clean Water Act Section 404 permit from the US Army Corps of Engineers for construction of the Grove Community Church at an off-site location.

Surrounding Land Uses

The Project site is bordered on the north by the Sycamore Canyon Wilderness Park, vacant property to the east, Barton Street and a wastewater treatment plant to the west, and the Citywide Self Storage facility and Alessandro Boulevard to the south. Commercial and residential uses are located further south (across Alessandro Boulevard), within the City and County of Riverside jurisdiction. The land uses and zoning designations of the Project site and properties adjacent to the Project site are described in Table 5.10-1 below.

Table 5.10-1 – Project Site & Surrounding Land Uses

	Existing Land Use	General Plan Designation	Zoning Designation
Project Site	Vacant	B/OP – Business/Office Park	BPM-SP – Business and Manufacturing Park and Specific Plan (Sycamore Canyon Business Park) Overlay Zones
North	Sycamore Canyon Wilderness Park	P – Public Park	PF-SP – Public Facilities and Specific Plan (Sycamore Canyon Business Park) Overlay Zones
East	Vacant and Citywide Self-Storage	B/OP – Business/Office Park, and P – Public Park	BPM-SP – Business and Manufacturing Park and Specific Plan (Sycamore Canyon Business Park) Overlay Zones, and PF-SP – Public Facilities and Specific Plan (Sycamore Canyon Business Park) Overlay Zones
South	Citywide Self-Storage Across Alessandro Blvd. commercial and residential (in County of Riverside)	C – Commercial	CG-X-20 – Commercial General, Building Setback (20 feet from Barton Street) Overlay Zones, and CR – Commercial Retail Zone
West	Wastewater Treatment Plant	PF – Public Facilities/Institutions and C – Commercial	PF – Public Facilities Zone, CG-X-20 – Commercial General, Building Setback (20 feet from Barton Street) Overlay Zones, and CR-X-50/20 – Commercial Retail and Building Setback (50 feet from Alessandro Blvd. and 20 feet from other streets) Overlay Zones

5.10.2 Related Regulations

5.10.2.1 Federal Regulations

No Federal regulations would be applicable to land use and planning with respect to the Project.

5.10.2.2 State Regulations

Article XI, Section 7 of the California State Constitution is the primary authority for cities and counties to regulate land use. California State Planning and Land Use Law (Government Code § 65000 et seq.) sets forth minimum standards to be observed in local land use regulatory practices, reserving in cities and counties the maximum degree of control in such matters.

5.10.2.3 Regional Regulations

March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan

The Riverside County Airport Land Use Commission (ALUC) is the lead agency responsible for airport land use compatibility planning in Riverside County. The fundamental purpose of ALUC is to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses. The basic function of the airport land use compatibility plans is to promote compatibility between airports and the land uses that surround them. Compatibility plans serve as a tool for use by airport land use commissions in fulfilling their duty to review proposed development plans for airports and surrounding land uses. Additionally, compatibility plans set compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to landowners in their design of new development. On November 13, 2014, ALUC adopted the March Air Reserve Base Land Use Compatibility Plan (MARB/IPA LUCP). The compatibility zones and associated criteria set forth in the LUCP provide noise and safety compatibility protection.

5.10.2.4 Local Regulations

City of Riverside General Plan 2025

The *City of Riverside General Plan 2025* (GP 2025) serves as a guide for land use decision making and the implementation of the community's vision for the City. Each of the 12 elements in the GP 2025 contains objectives and policies to help guide development and decisions in the City.

Land Use and Urban Design Element

Objective LU 4: Minimize the extent of urban development in the hillsides, and mitigate any adverse impacts associated with urbanization to the extent feasible.

> **Policy LU-4.5:** Seek opportunities for new or enhanced trail/pedestrian linkages between hillside areas and other components of Riverside Park.

Policy LU-4.6: Ensure protection of prehistoric resources through consultations with the Native American tribe(s) identified by the Native American Heritage Commission pursuant to Government Code § 65352.3 and as required by the California Environmental Quality Act.

Objective LU-7: Preserve and protect significant areas of native wildlife and plant habitat, including endangered species.

Policy LU-7.1: Continue to maintain Sycamore Canyon Wilderness Park as primarily a functioning wildlife habitat.

Policy LU-7.2: Design new development adjacent and in close proximity to native wildlife in a manner which protects and preserves habitat.

Policy LU-7.3: Continue to require natural open space easements in conjunction with new development in hillside and arroyo areas over non-graded areas of the development.

Policy LU-7.4: Continue to participate in the Western Riverside County Species Habitat Conservation Plan (MSHCP).

Objective LU-9: Provide for continuing growth within the General Plan Area, with land uses and intensities appropriately designated to meet the needs of anticipated growth and to achieve the community's objective.

Policy LU-9.1: Identify sufficient locations for residential and non-residential development to accommodate growth anticipated through the year 2025 on the General Plan Land Use Policy Map (Figure LU-10).

Policy LU-9.3: Designate areas for urban land uses where adequate urban levels of public facilities and services exist or are planned, in accordance with the public facilities and service provisions policies of this General Plan.

Objective LU-22: Avoid land use/transportation decisions that would adversely impact the long-term viability of the March Air Reserve Base/March Inland Port, Riverside Municipal Airport, and Flabob Airport.

Policy LU-22.2: Work cooperatively with the Riverside County Airport Land Use Commission in developing, defining, implementing and protecting airport influence zones around the MARB/MIP, Riverside Municipal and Flabob Airports and in implementing the new Airport Land Use Compatibility Plan.

Objective LU-24: Maximize the economic impact of Riverside's industrial land by careful use of industrial properties, giving priority to clean enterprises that yield large numbers of highly skilled, high-paying jobs relative to site size.

Policy LU-24.1: Tailor zoning regulations for industrial and business/office park uses to ensure that future uses are in concert with the City's wider policy goals.

Objective LU-25: Add to the City's industrial land base where logically and physically possible to do so.

Policy LU-25.2: Encourage and facilitate appropriate annexations to the Hunter Business Park and Sycamore Canyon Business Park.

Objective LU-27: Enhance, maintain, and grow Riverside's inventory of street trees.

Policy LU-27.1: Require appropriately sized landscaped parkways in all new development. Parkway areas shall be of sufficient width to allow planting of trees that will become large canopy trees.

Policy LU-27.4: Encourage trees on private property to add to the City's urban forest.

Objective LU-30: Establish Riverside's neighborhoods as the fundamental building blocks of the overall community, utilizing Neighborhood and Specific Plans to provide a more detailed design and policy direction for development projects located in particular neighborhoods.

Policy LU-30.2: Ensure that every neighborhood has a unique community image that is incorporated and reflected in all public facilities, streetscapes, signage and entryways proposed for each neighborhood.

Policy LU-30.3: Encourage trees on private property to add to the City's urban forest.

Objective LU-79: Preserve and enhance the natural character and qualities of Sycamore Canyon Wilderness Park.

Policy LU-79.2: Ensure that development on the periphery of the park is minimally disruptive and maximally screened from the Park.

Policy LU-79.5: Enhance access points and encourage recreational use in accordance with the adopted Sycamore Canyon Wilderness Park – Stephen's Kangaroo Rat Management Plan and Updated Conceptual Development Plan.

Objective LU-80: Establish Sycamore Canyon Business Park and Canyon Springs as a center for economic growth.

Policy LU-80.3: Minimize any adverse land use conflicts between industrial uses and the residential and open space properties that abut specific plan areas.

Policy LU-80.6: Promote the development of Sycamore Canyon to achieve economic success defined by a diverse and compatible industrial base that provides economic opportunities for all its citizens. The City preferred outcome is to promote light industrial/flex space to maximize employment opportunities and utilization of the limited land supply. To achieve this goal, the City must first overcome complex infrastructure issues that limit development in the area. Large "big box" distribution or warehouse facilities will be necessary on a limited basis to create the critical mass required to solve some of these infrastructure issues.

Circulation and Community Mobility Element

Objective CCM-2: Build and maintain a transportation system that combines a mix of transportation modes and transportation system management techniques, and that is designed

to meet the needs of Riverside's residents and businesses, while minimizing the transportation system's impacts on air quality, the environment, and adjacent development.

Policy CCM-2.3: Maintain LOS D or better on Arterial Streets wherever possible. At key locations, such as City Arterials used by regional freeway bypass traffic and at heavily traveled freeway interchanges, allow LOS E at peak hours as the acceptable standard on a case-by-case basis.

Policy CCM-2.4: Minimize the occurrence of streets operating at LOS F by building out the planned street network and by integrating land use and transportation in accordance with the General Plan principles.

Objective CCM-12: Facilitate goods movement as a means of economic expansion, while protecting residents and visitors from the negative effects typically associated with truck operations and rail service.

Policy CCM-12.1: Discourage the use of public streets for heavy freight loading and unloading.

Policy CCM-12.2: Ensure that new development projects provide adequate truck loading and unloading facilities.

Policy CCM-12.4: Strive to minimize through truck traffic in residential areas and enforce City codes that restrict trucks on certain streets.

Public Safety Element

Objective PS-1: Minimize the potential damage to existing and new structures and loss of life that may result from geologic and seismic hazards.

Policy PS-1.1: Ensure that all new development in the City abides by the most recently adopted City and State seismic and geotechnical requirements.

Objective PS-2: Reduce potential flood hazards within Riverside.

Policy PS-2.1: Reduce flood risks for residents and businesses within urbanized areas, as feasible.

Policy PS-2.2: Encourage flood control infrastructure that does not reduce the natural character or limit the use of the site.

Policy PS-2.3: Minimize additional flood risk exposure in developing areas.

Objective PS-3: Minimize risks associated with the storage, transport and disposal of hazardous materials.

Policy PS-3.1: Ensure that hazardous materials used in business and industry are handled properly.

Policy PS-3.3: Work with responsible Federal, State, and County agencies to identify and regulate the disposal of toxic materials.

Policy PS-3.4: Reduce the risks associated with ground transportation hazards, where feasible.

Policy PS-3.5: Encourage sewer service to minimize groundwater contamination.

Objective PS-4: Protect the community from hazards related to air and ground transportation.

Policy PS-4.1: Minimize the risk of potential hazards associated with aircraft operations at the Riverside Municipal Airport, March Air Reserve Base/March Inland Port, and Flabob Airport through the adoption and implementation of the Airport Protection Overlay Zone, and the Riverside County Airport Land Use Compatibility Plan, which includes the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan.

Policy PS-4.2: When planning for development near airports, anticipate possible increases in airport activity and expansion of airport facilities and services and the effects these changes may have on public safety.

Policy PS-4.3: Encourage development in the vicinity of the Riverside Municipal Airport that would not cause land use conflicts, hazards to aviation or hazards to the public and that is in compliance with the Riverside County Airport Land Use Compatibility Plan for the airport.

Policy PS-4.6: Ensure that development within airport influence areas is consistent with the Airport Protection Overlay Zone development standards and the Riverside County Airport Land Use Compatibility Plan, which includes the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan.

Policy PS-4.7: Ensure compatible land uses near March Air Reserve Base/March Inland Port through implementation of the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan, adopted in November, 2014.

Objective PS-6: Protect property in urbanized and nonurbanized areas from fire hazards.

Policy PS-6.1: Ensure that sufficient fire stations, personnel and equipment are provided to meet the needs of the community as it grows in size and population.

Policy PS-6.2: Endeavor to meet/maintain a response time of five minutes for Riverside's urbanized areas.

Policy PS-6.3: Integrate fire safety considerations in the planning process.

Policy PS-6.4: Evaluate all new development to be located in or adjacent to wildland areas to assess its vulnerability to fire and its potential as a source of fire.

Policy PS-6.5: Mitigate existing fire hazards related to urban development or patterns of urban development as they are identified and as resources permit.

Policy PS-6.6: Continue to implement stringent brush-clearance requirements in areas subject to wildland fire hazards.

Policy PS-6.7: Continue to involve the City Fire Department in the development review process.

Policy PS-6.8: Pursue strategies that maintain and improve the City's Class 2 ISO rating.

Policy PS-6.9: Provide outreach and education to the community regarding fire safety and prevention.

Policy PS-6.10: Identify noncontiguous streets and other barriers to rapid response and pursue measures to eliminate the barriers.

Policy PS-6.11: Promote the prevention, detection, investigation and prosecution of accidental and arson fires through coordinated investigative and training partnerships with fire and law enforcement agencies and prosecuting authorities.

Objective PS-8: Improve community safety and reduce opportunities for criminal activity through appropriate physical design.

Policy PS-8.1: Maximize natural surveillance in all new development through physical design features that promote visibility.

Objective PS-9: Minimize the effects from natural and urban disasters by providing adequate levels of emergency response services to all residents in Riverside.

Policy PS-9.8: Reduce the risk to the community from hazards related to geologic conditions, seismic activity, flooding and structural and wildland fires by requiring feasible mitigation of such impacts on discretionary development projects.

Noise Element

Objective N-1: Minimize noise levels from point sources throughout the community and, wherever possible, mitigate the effects of noise to provide a safe and healthful environment.

Policy N-1.2: Require the inclusion of noise-reducing design features in development consistent with standards in Figure N-10(Noise/Land Use Compatibility Criteria), Title 24 California Code of Regulations and Title 7 of the Municipal Code.

Policy N-1.3: Enforce the City of Riverside Noise Control Code to ensure that stationary noise and noise emanating from construction activities, private developments/residences and special events are minimized.

Policy N-1.4: Incorporate noise considerations into the site plan review process, particularly with regard to parking and loading area, ingress/egress points and refuse collection areas.

Policy N-1.5: Avoid locating noise-sensitive land uses in existing and anticipated noise-impacted areas.

Policy N-1.8: Continue to consider noise concerns in evaluating all proposed development decisions and roadway projects.

Objective N-2: Minimize the adverse effects of airport-related noise through proper land use planning.

Policy N-2.1: Ensure that new development can be made compatible with the noise environment by using noise/land use compatibility standards (Figure N-10 – Noise/Land Use

Noise Compatibility Criteria) and the airport noise contour maps (found in the riverside County Airport Land Use compatibility Plans) as guides to future planning and development decisions.

Policy N-2.5: Utilize the Airport protection Overlay Zone, as appropriate, to advise landowners of special noise considerations associated with their development.

Objective N-3: Ensure the viability of March Air Reserve Base/March Inland Port.

Policy N-3.1: Avoid placing noise-sensitive land uses (e.g., residential uses, hospitals, assisted living facilities, group homes, schools, day care centers, etc.) within the high noise impact areas (over 65dB CNEL) for March Air Reserve Base/March Inland Port in accordance with the Riverside County 2014 March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan.

Policy N-3.2: Work with the Riverside County Airport Land Use Commission and the March Joint Powers Authority to develop noise/land use guidelines and City land use plans that are consistent with ALUC policies.

Policy N-3.3: Carefully consider planned future operations of the March Air Reserve Base and March Inland Port in land use decisions for properties within the airport-influenced area.

Objective N-4: Minimize ground transportation-related noise impacts.

Policy N-4.1: Ensure that noise impacts generated by vehicular sources are minimized through the use of noise reduction features (e.g., earthen berms, landscaped walls, lowered streets, improved technology).

Open Space and Conservation Element

Objective OS-1: Preserve and expand open space areas and linkages throughout the City and sphere of influence to protect the natural and visual character of the community and to provide for appropriate active and passive recreational uses.

Policy OS-1.1: Protect and preserve open space and natural habitat wherever possible.

Policy OS-1.3: Work with Riverside County and adjacent cities, landowners and conservation organizations to preserve, protect and enhance open space and natural resources.

Policy OS-1.4: Support efforts of State and Federal agencies and private conservation organizations to acquire properties for open space and conservation uses. Support efforts of nonprofit preservation groups, such as the Riverside Land Conservancy, to acquire properties for open space and conservation purposes.

Policy OS-1.5: Require the provision of open space linkages between development projects, consistent with the provisions of the Trails Master Plan, Open Space Plan and other environmental considerations including the MSHCP.

Policy OS-1.6: Ensure that any new development that does occur is effectively integrated through convenient street and/or pedestrian connections, as well as through visual connections.

Objective OS-2: Minimize the extent of urban development in the hillsides, and mitigate any significant adverse consequences associated with urbanization.

Policy OS-2.2: Limit the extent and intensity of uses and development in areas of unstable terrain, steep terrain, scenic vistas, arroyos and other critical environmental areas.

Policy OS-2.3: Control the grading of land, pursuant to the City's Grading Code, to minimize the potential for erosion, landsliding and other forms of land failure, as well as to limit the potential negative aesthetic impact of excessive modification of natural landforms.

Policy OS-2.4: Recognize the value of ridgelines, hillsides and arroyos as significant natural and visual resources and strengthen their role as features which define the character of the City and its individual neighborhoods.

Objective OS-5: Protect biotic communities and critical habitats for endangered species throughout the General Plan Area.

Policy OS-5.1: Preserve significant habitat and environmentally sensitive areas, including hillsides, rock outcroppings, creeks, streams, viewsheds, and arroyos through application of the RC Zone standards and the Hillside/Arroyo standards of the City's Grading Code.

Policy OS-5.2: Continue to participate in the MSHCP program and ensure all projects comply with applicable requirements.

Policy OS-5.3: Continue to participate in the Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan including Collection of mitigation fees.

Policy OS-5.4: Protect native plant communities in the General Plan Area, including sage scrub, riparian areas and vernal pools, consistent with the MSHCP.

Objective OS-6: Preserve and maintain wildlife movement corridors.

Policy OS-6.1: Protect and enhance known wildlife migratory corridors and create new corridors as feasible.

Policy OS-6.2: Support regional and local efforts to acquire develop and maintain open space linkages.

Policy OS-6.3: Preserve the integrity of Riverside's arroyos and riparian habitat areas through the preservation of native plants.

Objective OS-8: Encourage the efficient use of energy resources by residential and commercial users.

Policy OS-8.1: Support the development and use of non-polluting, renewable energy sources.

Policy OS-8.2: Require incorporation of energy conservation features in the design of all new construction and substantial rehabilitation projects pursuant to Title 24 and encourage the installation of conservation devices in existing developments.

Policy OS-8.3: Encourage private energy conservation programs that minimize high energy demand and that use alternative energy sources.

Policy OS-8.4: Incorporate solar considerations into development regulations that allow existing and proposed buildings to use solar facilities.

Policy OS-8.5: Develop landscaping guidelines that support the use of vegetation for shading and wind reduction and otherwise help reduce energy consumption in new development for compatibility with renewable energy sources (i.e., solar pools).

Policy OS-8.6: Require all new development to incorporate energy efficient lighting, heating and cooling systems pursuant to the Uniform Building Code and Title 24.

Policy OS-8.9: Encourage construction and subdivision design that allows the use of solar energy systems.

Policy OS-8.10: Support the use of public transportation, bicycling and other alternative transportation modes in order to reduce the consumption of non-renewable energy supplies.

Policy OS-8.11: Support public education programs for City residents and businesses to provide information on energy conservation and on alternative to nonrenewable energy resources.

Policy OS-8.12: Require bicycle parking in new non-residential development.

Air Quality Element

Objective AQ-1: Adopt land use policies that site polluting facilities away from sensitive receptors and vice versa; improve job-housing balance; reduce vehicle miles traveled and length of work trips; and improve the flow of traffic.

Policy AQ-1.3: Separate, buffer and protect sensitive receptors from significant sources of pollution to the greatest extent possible.

Policy AQ-1.8: Promote “Job/Housing Opportunity Zones” and incentives to support housing in job-rich areas and jobs in housing-rich areas, where the jobs are located at non-polluting or extremely low polluting entities.

Policy AQ-1.9: Adhere to the adopted Master Plan for open spaces, trails and bikeways.

Policy AQ-1.15: Establish land use patterns that reduce the number and length of motor vehicle trips and promote alternative modes of travel.

Policy AQ-1.16: Design safe and efficient vehicular access to commercial and uses from arterial streets to ensure efficient vehicular ingress and egress.

Policy AQ-1.17: Avoid locating multiple-family developments close to commercial areas that emit harmful air contaminants.

Policy AQ-1.20: Create the maximum possible opportunities for bicycles as an alternative work transportation mode.

Policy AQ-1.21: Cooperate and participate in regional air quality management plans, programs and enforcement measures.

Policy AQ-1.22: Implement the required components of the Congestion Management Plan (CMP) and continue to work with Riverside County Transportation Commission on annual updates to the CMP.

Objective AQ-2: Reduce air pollution by reducing emissions from mobile sources.

Policy AQ-2.4: Monitor and strive to achieve performance goals and/or VMT reduction which are consistent with SCAG's goals.

Policy AQ-2.6: Develop trip reduction plans that promote alternative work schedules, ridesharing, telecommuting and work-at-home programs, employee education and preferential parking.

Policy AQ-2.8: Work with Riverside Transit Authority (RTA) to establish mass transit mechanisms for the reduction of work-related and non-work-related vehicle trips.

Policy AQ-2.11: Develop ways to incorporate the "Good Neighbor Guidelines for Siting New and/or Modified Warehouse/Distribution Facilities" into the Development Review process and Citywide air quality education programs.

Policy AQ-2.24: Support full compliance with the SCAQMD's Clean Fleet Rules.

Objective AQ-3: Prevent and reduce pollution from stationary sources, including point sources (such as power plants and refinery boilers) and area sources, including (including small emission sources such as residential water heaters and architectural coatings).

Policy AQ-3.6: Support "green" building codes that require air conditioning/filtration installation, upgrades or improvements for all buildings, but particularly for those associated with sensitive receptors.

Policy AQ-3.7: Require use of pollution control measures for stationery and area sources through the use of best available control activities, fuel/material substitution, cleaner fuel alternatives, product reformulation, change in work practices and of control measures identified in the latest AQMP.

Objective AQ-4: Reduce particulate matter, as defined by the Environmental Protection Agency (EPA), as either airborne photochemical precipitates or windborne dust.

Policy AQ-4.1: Identify and monitor sources, enforce existing regulations and promote stronger controls to reduce particulate matter (e.g., require clean fuels for street sweepers and trash trucks, exceed the AQMD requirements for fleet rules).

Policy AQ-4.2: Reduce particulate matter from agriculture (e.g., require use of clean non-diesel equipment and particulate traps), construction, demolition, debris hauling, street

cleaning, utility maintenance, railroad rights-of-way and off-road vehicles to the extent possible, as provided in SCAQMD Rule 403.

Policy AQ-4.3: Support the reduction of all particulates potential sources.

Policy AQ-4.4: Support programs that reduce emissions from building materials and methods that generate excessive pollutants through incentives and/or regulations.

Policy AQ-4.5: Require the suspension of all grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour.

Policy AQ-4.6: Cooperate with local, regional, State and Federal jurisdictions to better control particulate matter.

Objective AQ-5: Increase energy efficiency and conservation in an effort to reduce air pollution.

Policy AQ-5.1: Utilize source reduction, recycling and other appropriate measures to reduce the amount of solid waste disposed of in landfills.

Policy AQ-5.3: Continue and expand use of renewable energy resources such as wind, solar, water, landfill gas, and geothermal sources.

Policy AQ-5.6: Support the use of automated equipment for conditioned facilities to control heating and air conditioning.

Policy AQ-5.7: Require residential building construction to meet or exceed energy use guidelines in Title 24 of the California Administrative Code.

Objective AQ-8: Make sustainability and global warming education a priority for the City's effort to protect public health and achieve State and Federal clean air standards.

Policy AQ-8.17: Develop measures that a minimum of 40 percent of the waste from all construction sites throughout Riverside be recycled by the end of 2008.

Public Facilities and Infrastructure Element

Objective PF-1: Provide superior water service to customers.

Policy PF-1.1: Coordinate the demands of new development with the capacity of the water system.

Policy PF-1.2: Support the efforts of the Riverside Public Utilities Department, Eastern Municipal Water District and Western Municipal Water District to work together for coordination of water services.

Policy PF-1.3: Continue to require that new development fund fair-share costs associated with the provision of water service.

Policy PF-1.4: Ensure the provision of water services consistent with the growth planned for the General Plan area, including the Sphere of Influence, working with other providers.

Policy PF-1.5: Implement water conservation programs aimed at reducing demands from new and existing development.

Objective PF-3: Maintain sufficient levels of wastewater service throughout the community.

Policy PF-3.1: Coordinate the demands of new development with the capacity of the wastewater system.

Policy PF-3.2: Continue to require that new development fund fair-share costs associated with the provision of wastewater service.

Objective PF-4: Provide sufficient levels of storm drainage service to protect the community from flood hazards and minimize the discharge of materials into the storm drain system that are toxic or which would obstruct flows.

Policy PF-4.2: Continue to cooperate in regional programs to implement the National Pollutant Discharge Elimination System program.

Objective PF-6: Provide affordable, reliable, and, to the extent practical, environmentally sensitive energy resources to residents and businesses.

Policy PF-6.1: Continue to support the development of green power and expand the use of green power in the City's energy portfolio.

Policy PF-6.3: Promote and encourage energy conservation.

Policy PF-6.4: Encourage energy-efficient development through its site plan and building design standards guidelines.

Policy PF-6.5: Promote green building design.

Historic Preservation Element

Objective HP-1: To use historic preservation principles as an equal component in the planning and development process.

Policy HP-1.1: The City shall promote the preservation of cultural resources to ensure that citizens of Riverside have the opportunity to understand and appreciate the City's unique heritage.

Policy HP-1.3: The City shall protect sites of archaeological and paleontological significance and ensure compliance with all applicable State and federal cultural resources protection and management laws in its planning and project review process.

Policy HP-1.7: The City shall ensure consistency between this Historic Preservation Element and all other General Plan elements, including subsequent updates of the General Plan.

Objective HP-2: To continue an active program to identify, interpret and designate the City's cultural resources.

Policy HP-2.1: The City shall actively pursue a comprehensive program to document and preserve historic buildings, structures, districts, sites (including archaeological sites), objects, landscapes, and natural resources.

Policy HP-2.3: The City shall provide information to citizens, and the building community about what to do upon the discovery of archaeological resources and burial sites, as well as, the treatment, preservation, and repatriation of such resources.

Objective HP-3: To promote the City's cultural resources as a means to enhance the City's identity as an important center of Southern California history.

Objective HP-4: To fully integrate the consideration of cultural resources as a major aspect of the City's planning, permitting and development activities.

Policy HP-4.3: The City shall work with the appropriate tribe to identify and address, in a culturally appropriate manner, cultural resources and tribal sacred sites through the development review process.

Objective HP-5: To ensure compatibility between new development and existing cultural resources.

Policy HP-5-1: The City shall use its design and plot plan review processes to encourage new construction to be compatible in scale and character with cultural resources and historic districts.

Objective HP-6: To actively pursue funding for a first-class historic preservation program, including money needed for educational materials, studies, surveys, staffing, and incentives for preservation by private property owners.

Objective HP-7: To encourage both public and private stewardship of the City's cultural resources.

Policy HP-7.4: The City shall promote the preservation of cultural resources controlled by other governmental agencies, including those related to federal, state, county, school district, and other agencies.

Parks and Recreation Element

Objective PR-2: Increase access to existing and future parks and expand pedestrian linkages between park and recreational facilities throughout Riverside.

Policy PR-2.2: Implement the revisions to the City's trails system as identified in the 2003 Park, Recreation and Community Services Master Plan.

Policy PR-2.3: Improve and create more connections and increase the safety of the bicycling, equestrian and pedestrian trail system within the City.

Riverside Municipal Code

Title 7 – Noise Control

The proposed Project will be subject to Title 7 the City's Noise Control Code both during construction and afterward during operation. It is determined that certain noise levels are detrimental to the public health, safety and welfare and are contrary to the public interest. Therefore, the City has created the Noise Control Chapter of the Municipal Code. Maintaining that

causing any noise in a manner not in conformity with the provisions of this Code, is a public nuisance and shall be punishable as such. In order to control unnecessary, excessive and/or annoying noise in the City, it is declared to be the policy of the City to prohibit such noise generated by the sources specified in this Chapter. It shall be the goal of the City to minimize noise levels and mitigate the effects of noise to provide a safe and healthy living environment. See Section 5.11 Noise for information on compliance with Title 7.

Title 16 – Buildings and Construction

The purpose of Title 16 is to provide minimum standards to safeguard life or limb, health, property and public welfare by regulating the design, construction, quality of materials, use and occupancy, location and maintenance of buildings, equipment, structures and grading within the City; the electrical, plumbing, heating, comfort cooling and certain other equipment specifically regulated in the City.

Title 17 – Grading Code

Grading of the Project site is regulated by Title 17 of the City of Riverside Municipal Code (Grading Code), which sets forth rules and regulations placed on grading to control erosion, grading, and earthwork construction, including fills and embankments. One of the purposes of the Grading Code is to regulate grading in a manner that minimizes the adverse effects of grading on natural landforms, soil erosion, dust control, water runoff, and construction equipment emissions.

Title 18 – Subdivision Code

The proposed parcel map is regulated by Title 18 of the City of Riverside Municipal Code (Subdivision Code). The Subdivision Code is a long range, general comprehensive guide which regulates and controls the design and improvement of subdivisions in order to assist in implementing the GP 2025. The code provides standards for creating accessible lots of sufficient size and appropriate design, streets of adequate capacity and design for anticipated traffic, and sidewalks for maximum safety of pedestrians and vehicles. The Subdivision Code also includes standards which preserve the natural assets of the City's setting by preventing the indiscriminate clearing of property and the destruction of trees and shrubs and other desirable landscape features.

Title 19 – Zoning Code

Development of the Project site is regulated by the City of Riverside, Zoning Code, Title 19, a key tool to implement the policies of the GP 2025. Many of the goals, policies, and actions of the GP 2025 are achieved through zoning, which regulates public and private development. The Zoning Code contains the regulatory framework that specifies allowable uses for property and development intensities; the technical standards such as site layout, building setbacks, heights, lot coverage, parking, etc.; and the aesthetic impacts related to physical appearance, landscaping, lighting; site design, building design are aspects of the Zoning Code.

Title 20 – Cultural Resources

The Project was reviewed pursuant to Title 20 for the purpose of promoting and providing for the identification, protection, enhancement, perpetuation and use of objects, features, sites, places, areas, works of art, natural features and significant permanent landscaping having special historical, archaeological, cultural, architectural, community, aesthetic or artistic value in the City. Doing so safeguards the City's heritage as embodied and reflected in such resources; encourages public knowledge, understanding and appreciation of the City's past; fosters civic and neighborhood pride and a sense of identity based on the recognition and use of cultural resources; promotes the enjoyment and use of cultural resources appropriate for the education and recreation of the people of the City; protects and enhances the City's attraction to tourists and visitors, thereby stimulating business and industry; identifies as early as possible and resolves conflicts between the preservation of cultural resources and alternative land uses; and integrates the preservation of cultural resources and the extraction of relevant data from such resources into public and private land management and development processes. Further analysis is provided in Section 5.4 for Cultural Resources and Section 5.13 for Tribal Cultural Resources.

Sycamore Canyon Business Park Specific Plan

The *Sycamore Canyon Business Park Specific Plan* (SCBPSP) is intended to guide development within the Plan's boundaries. The intent of the Plan is to establish a high-quality industrial development for the City that would strengthen the City's economic base. The SCBPSP recommends development of light industrial, distribution warehousing, and/or product assembly.

Citywide Design and Sign Guidelines

The *Citywide Design and Sign Guidelines* (CDSG) reinforce the physical image of the City. The CDSG work to reinforce the physical image of Riverside. They are intended to promote quality, well-designed development throughout Riverside that enhances existing neighborhoods, creates identity and improves the overall quality of life within the City.

City of Riverside Good Neighbor Guidelines for Siting New and/or Modified Warehouse Distribution Facilities

The City adopted Good Neighbor Guidelines for Siting New and/or Modified Warehouse/Distribution Facilities (GNG) in October 2008 to focus on the relationship between land use, permitting, and air quality. They also highlight strategies that can help minimize the impacts of diesel emissions associated with warehouse/distribution centers. Specifically, the Guidelines help to minimize the impacts of diesel particulate matter from on-road trucks associated with warehouses and distribution centers on existing communities and sensitive receptors.

On November 10, 2020, the Riverside City Council adopted updates to the GNG, in addition to associated amendments to Title 19 – Zoning Code of the Riverside Municipal Code (RMC), the Hunter Business Park Specific Plan, and the Sycamore Canyon Business Park Specific Plan related to siting industrial uses in the City when located adjacent to sensitive receptors, including residential neighborhoods, schools, parks, playgrounds, day care centers, nursing homes,

hospitals, and other public spaces. City Council action also allowed any project achieving substantial completion within 90 days of the effective date of the implementing ordinance to continue to be subject to the 2008 GNG. As the Project was deemed complete prior to adoption of the updated GNG, it does not need to comply with the updated GNG.

Sycamore Canyon Wilderness Park Stephen's Kangaroo Rat Management Plan and Updated Conceptual Development Plan

The Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan (SCWP SKRMP) was prepared with two purposes: updated the park's conceptual development plan and provide a coordinated Maintenance/Management Plan for the endangered Stephens' kangaroo rat (SKR). Because the Sycamore Canyon Wilderness Park was designated as a core reserve in the Habitat Conservation Plan (HCP) for the SKR, the City was required to prepare a Maintenance/Management Plan for the core reserve.

5.10.3 Project Design Considerations

Design features refer to ways in which the Project will avoid or minimize potential impacts through the design of the Project. The Project has been designed with sensitivity to the adjacent land uses, particularly Sycamore Canyon Wilderness Park to the north, and the existing residential neighborhoods to the south, across Alessandro Boulevard. The existing restricted property will largely[1] be preserved, which includes a natural drainage course and associated riparian woodland vegetation that will serve as a buffer between Building A and Alessandro Boulevard, as well as between Buildings A and B (Refer to Figure 3.0-3 - Site Plan).

Building A is approximately 400,000 square feet and consists of 10,000 square feet of office area and 390,000 square feet of warehouse area. A total of 39 dock doors are proposed on the west side and 49 dock doors on the east side of the building. Building A will be set back approximately 520 feet from Alessandro Boulevard. The restricted property/ conservation area and natural terrain and vegetation are located within the setback. The dock doors will be screened from the public view from the east and west sides of Building A by 8-foot high walls and from the south by 15-foot high walls on both sides of the southern end of Building A that faces Alessandro Boulevard. The 15-foot high walls will screen views of the dock doors and loading areas from Alessandro Boulevard.

Building B is approximately 203,100 square feet and consists of 10,000 square feet of office area and 193,100 square feet of warehouse area. A total of 34 dock doors are proposed on the south side of the building, adjacent to the back wall of Citywide Self Storage. The front of Building B faces Barton Street to the west. Building B will be set back 90 feet from Barton Street. A 6-foot

[1] The proposed Project includes removing 0.81 acre of the existing Restricted Property and adding 1.44 acres for a net gain of 0.63 acres.

high metal fence will be located along the westerly property line, with an 8-foot high metal fence along the southerly property line. An 8-foot high combination screening fence/wall, consisting of a 4-foot high tubular steel metal fence on top of a 4-foot high screen wall, will be located along the northerly property line adjacent to the trailhead parking lot.

On-site landscaping is proposed generally along the perimeters of Buildings A and B and along the proposed access road/driveway from Alessandro Boulevard to Building A as shown in Figure 3.0-10A and 3.0-10B – Landscape Design. The Project site will be landscaped with fire-resistant landscape, drought-tolerant and climate appropriate trees, shrubs, and ground cover that will meet or exceed the City's requirements. The landscape plan is designed to provide visual appeal and screen the views of Buildings A and B from Alessandro Boulevard and residential areas to the south as well as the Sycamore Canyon Wilderness Park. The proposed on-site landscaping does not include any plant species listed as invasive by the *Western Riverside County Multiple Species Habitat Conservation Plan* (MSHCP).

The Project site is within the March Air Reserve Base Land Use Compatibility Plan (MARB/IPA LUCP) with restrictions on heights of buildings, structures and vegetation to comply with low flying aircraft. The Project buildings adhere to the building height limit of 45 feet to reduce potential hazards.

5.10.4 Thresholds of Significance

The City of Riverside has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City of Riverside generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the State CEQA Guidelines. Per the Environmental Checklist/ Initial Study prepared for the City for the Project (Appendix A), the Sycamore Hills Distribution Project may be considered potentially significant if the proposed project would:

- (Threshold A) cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.

Impacts related to Land Use Threshold B (physically divide an established community) were determined to be less than significant with no further analysis in the EIR required during the preparation of the Initial Study

5.10.5 Environmental Impacts

Threshold A: *Would the Project Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

Section 15125(d) of the State CEQA Guidelines requires EIRs to "…discuss any inconsistencies between the proposed Project and applicable general plans, specific plans, and regional plans." The objective of such a discussion is to find ways to modify a proposed Project, if warranted, to reduce any identified inconsistencies with relevant plans and policies. Pursuant to Section

15125(d), this DEIR includes an evaluation of the consistency of the Project with pertinent goals and policies of relevant adopted local and regional plans, as outlined below.

City of Riverside General Plan 2025

Per the GP 2025, the Project site has a current land use designation of B/OP – Business Office Park and is zoned BMP-SP – Business Manufacturing Park and Specific Plan (Sycamore Canyon Business Park) Overlay Zones. The Project will be consistent with both the existing land use designation of the GP 2025 and the Sycamore Canyon Business Park Specific Plan (SCBPSP). The SCBPSP implements the GP 2025 and its intended purpose is to guide development within the SCBPS boundaries while establishing high-quality industrial development for the City that would strengthen the City's economic base. Therefore, the SCBPSP will guide this Project's development through its design guidelines in order to assure that the objectives and standards and guidelines and requirements of the SCBPSP are being met.

The Project is consistent with the objectives and policies in the Land Use and Urban Design Element, including those to mitigate any adverse impacts associated with urbanization, to preserve and protect significant areas of native wildlife and plant habitat, including endangered species, provide for continuing growth with land uses and intensities appropriately designed to meet the needs of anticipated growth and achieve the community's objective, avoid land use/transportation decisions that would adversely impact the long-term viability of the March Air Reserve Base/March Inland Port, maximize the economic impact of industrial land, preserve and enhance the natural character and qualities of Sycamore Canyon Wilderness Park, and to establish Sycamore Canyon Business Park as a center for economic growth. Refer to Appendix B for the analysis of the Project's consistency with applicable General Plan 2025 policies and the Sycamore Canyon Business Park Specific Plan objectives pertinent to this Project.

The Project is consistent with the objectives and policies in the Public Safety Element, including those to minimize potential damage and loss of life from geologic and seismic hazards, minimize risks associated with storage, transport and disposal of hazardous materials, protect the community from hazards related to air and ground transportation, protect property from fire hazards, improve community safety and reduce opportunities for criminal activity through appropriate physical design, and minimize the effects from natural and urban disasters by providing adequate levels of emergency response services.

The Project is consistent with the objectives and policies in the Noise Element, including to minimize noise levels from point sources throughout the community and mitigate the effects of noise to provide a safe and healthful environment, minimize the adverse effects of airport-related noise through proper land use planning, and ensure the viability of March Air Reserve Base/March Inland Port.

The Project is consistent with the objectives and policies in the Open Space and Conservation Element, including those that preserve and expand open space areas and linkages to protect the natural and visual character of the community and to provide for active and passive recreational uses, protect biotic communities and critical habitats for endangered species, preserve and maintain wildlife movement corridors, and encourage efficient use of energy resources.

The Project is consistent with the objectives and policies in the Air Quality Element, including those to improve job-housing balance, reduce vehicle miles traveled and length of work trips, improve flow of traffic, reduce air pollution by reducing emissions from mobile sources, reduce pollution from stationary sources, reduce particulate matter, and increase energy efficiency and conservation.

The Project is consistent with the objectives and policies in the Historic Preservation Element, including those to use historic preservation principles as an equal component in the planning and development process and to fully integrate the consideration of cultural resources as a major aspect of the City's planning, permitting and development activities.

The Project is consistent with the objectives and policies in the Parks and Recreation Element, including those to increase access to existing and future parks and expand pedestrian linkages between park and recreational facilities.

The Project is consistent with the objectives and policies in the Circulation and Community Mobility Element, including cooperate in the implementation of regional and inter-jurisdictional transportation plans and improvements to the transportation system, facilitate the goods movement as a means of economic expansion, while protecting residents and visitors from the negative effects typically associated with truck operations and rail service, and to ensure that adequate on-and off-street parking is provided throughout Riverside.

As outlined in the Transportation section (Section 5.12.5), based on the City's deficiency criteria, the following intersections were found to be deficient:

Driveway 2/Vista Grande Dr. and Alessandro Bl. (#4) – Although this intersection was found to operate at an unacceptable LOS (LOS F) during the AM and PM peak hours under existing traffic conditions, the intersection is anticipated to continue to operate at unacceptable levels during the peak hours with the addition of Project traffic. The increase in peak hour delay is anticipated to be greater than one second. Therefore, there is a deficiency based on the City's peak hour delay criteria for intersections operating at LOS F.

Sycamore Canyon Boulevard and Alessandro Boulevard (#6) – Although this intersection was found to operate at an unacceptable LOS (LOS E) during the AM peak hour under existing traffic conditions, the intersection is anticipated to continue to operate at unacceptable levels (LOS E) during the peak hours with the addition of Project traffic. The increase in peak hour delay is anticipated to be less than two seconds and the project traffic is less than 2% of the total traffic for E+P conditions. However, the intersection of Sycamore Canyon Boulevard and Alessandro Boulevard is currently built out to its General Plan ultimate cross-section and exceeds the General Plan target LOS. As such, the deficiency is considered unavoidable.

As outlined in the Transportation Section 5.12.5, Table 5.12-15 provides a summary of the opening year cumulative without Project conditions roadway segment capacity analysis based on the City of Riverside Traffic Impact Analysis Preparation Guide. As shown on Table 5.12-15, the following roadway segments that are anticipated to operate at an unacceptable LOS under opening year cumulative without Project traffic conditions:

- Alessandro Boulevard, from Barton Street to Private Driveway – LOS E
- Alessandro Boulevard, from Private Driveway to Vista Grande Drive – LOS E
- Alessandro Boulevard, from Vista Grande Drive to San Gorgonio Drive – LOS F
- Alessandro Boulevard, from San Gorgonio Drive to Sycamore Canyon Boulevard – LOS F

The effectiveness of the proposed improvements described in Section 5.12.3 – Project Design Considerations for the deficient intersections of Driveway 2/Vista Grande Drive and Alessandro Boulevard (see Table 5.12-14) is presented in Table 5.12-17 for opening year cumulative traffic conditions. Based on each jurisdiction's deficiency criteria, the Project is anticipated to result in deficiencies at the following intersections, as the Project would contribute to the total opening year cumulative with Project traffic forecasts:

- Driveway 2/Vista Grande Drive and Alessandro Boulevard (#4)
- Sycamore Canyon Boulevard and Alessandro Boulevard (#6)

The proposed improvements described in Section 5.12.3 – Project Design Considerations for the deficient intersection of Driveway 2/Vista Grande Drive and Alessandro Boulevard would bring the intersection out of the deficiency designation. However, as mentioned in Section 5.12.3 above, the addition of a traffic signal is not currently feasible as the intersection is too close in proximity to an existing signalized intersection of a private driveway at Alessandro Boulevard. The adjacent signalized intersection of the private driveway and Alessandro Boulevard does not currently warrant a traffic signal as the volumes on the north and south leg are nominal and are significantly less than the south leg of Vista Grande Drive and Alessandro Boulevard. Therefore, the removal of the existing traffic signal at the private driveway and Alessandro Boulevard would be required in order to install a traffic signal at Vista Grande Drive and Alessandro Boulevard. As outlined in the TA, it is recommended that the existing signal at private driveway and Alessandro Boulevard be removed and that the Project construct a new traffic signal at the intersection of Driveway 2/Vista Grande Drive and Alessandro Boulevard.

The intersection of Sycamore Canyon Boulevard and Alessandro Boulevard is currently built out to its General Plan ultimate cross-section and exceeds the General Plan target LOS. Until additional right-of-way beyond those designated in the General Plan is obtained, there are no anticipated feasible improvements. As such, the deficiency at this existing built out intersection is considered unavoidable.

Based on the applicable jurisdiction's significance criteria, the Sycamore Canyon Boulevard and Alessandro Boulevard intersection was found to be deficient by the Project for opening year cumulative with Project traffic conditions. Although the General Plan target LOS will be exceeded, the intersection is currently built out to its General Plan ultimate cross-section and until additional right-of-way beyond those designated in the General Plan is obtained, there are no anticipated feasible improvements. Although the LOS target in the General Plan Circulation Element cannot be achieved for the Sycamore Canyon Boulevard and Alessandro Boulevard intersection, the

Project would not conflict with any other General Plan policies addressing the circulation system and potential impacts are **less than significant.**

March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan

The Project site is located within the March Air Reserve Base Land Use Compatibility Plan (MARB/IPA LUCP). The proposed Project site is located within Zone C1 of the LUCP, as reflected and discussed in Section 5.8, Hazards and Hazardous Materials. MARB/IPA LUCP identifies prohibited and discouraged uses within each land use compatibility zone as well as density/intensity standards, and open land requirements.

Zone C1 requires airspace review for structures over 70 feet in height (MARB/IPA LUCP, p. 10). FAR Part 77 establishes standards for determining obstructions to navigable airspace and the effects of such obstructions on the safe and efficient use of that airspace. Objects exceeding FAR Part 77 height limits require an FAA obstruction evaluation review. According to the MARB/IPA LUCP, objects over 70 feet tall within Zone C1 require airspace review in accordance with FAR Part 77. Both Building A and Building B have a maximum building height of 45 feet, including parapets. Thus, the proposed buildings would not exceed the FAR Part 77 height limits of structures over 70 feet in height. In addition, the FAA staff has reviewed project information under the provisions of Title 14 of the Code of Federal Regulations, part 77 for Buildings A and B and issued determinations of *No Hazard to Air Navigation* based on the following building heights: Building A, with 1596 feet site elevation (SE), 45 feet above ground level (AGL) and 1641 feet above mean sea level (AMSL); and Building B, with 1609 feet SE, 45 feet AGL, and 1654 AMSL.

Building A and Building B will be subject to the intensity requirements of Zone C1 of ALUC Per Person Average Acre Maximum Occupancy of 100 and ALUC Per Person Single Acre Maximum Occupancy of 250 for warehouse use. Occupancy calculations for the proposed Project utilized Appendix C[2], *Methods for Determining Concentrations of People*, of the *Riverside County Airport Land Use Compatibility Plan Policy Document*, Table C1-*Occupancy Levels, California Building Code, adopted December 2004,* and are shown in Table 5.10-2 below. As shown on Table 5.10-2 – Proposed Project ALUC Occupancy Level Calculations, the maximum occupancy requirements of the C1 Zone will not be exceeded.

[2]http://www.rcaluc.org/Portals/13/PDFGeneral/plan/newplan/23-%20Appendix%20C.%20Determining%20Concentrations%20of%20People.pdf

Table 5.10-2 – Proposed Project ALUC Occupancy Calculations

Building	ALUC Calculation for C1 Zone	ALUC Maximum Occupancy	Minimum Square Feet (SF) per Occupant[2] Calculation	Proposed Project Persons
Building A	Per Person Average Acre	100 persons	Office SF: 10,000/100 = 100 people Warehouse SF: 390,000/500 = 780 people 880 total people/ 24.31 acres = 36	36
Building A	Per Single Acre	250 persons	(210 x 210) SF/ 200 = 221 people	221
Building A	Per Person Single Acre Parking Ratio	100 persons	388 auto stalls x 1.5 persons per stall = 935 persons / 34.63 acres = 24.31	24
Building B	Per Person Average Acre	100 persons	Office SF: 10,000/100 = 100 people Warehouse SF: 193,100/ 500 = 386 people 486 total people / 10.32 acres = 47	47
Building B	Per Single Acre	250 persons	(210 x 210) SF/ 200 = 221 people	221
Building B	Per Person Single Acre Parking Ratio	100 persons	235 auto stalls x 1.5 persons per stall = 353 persons / 10.32 acres = 34.21	34

Riverside Municipal Code

Title 7 – Noise Control

See Section 5.11 Noise for information on compliance with Title 7.

Title 16 – Buildings and Construction

The purpose of Title 16 is to provide minimum standards to safeguard public health, safety and general welfare by regulating the design, construction, quality of materials, use and occupancy, location and maintenance of buildings, equipment, structures and grading within City; the electrical, plumbing, heating, comfort cooling and certain other equipment specifically regulated by the City.

As first outlined in Section 3.2.4 Sustainability Features (See Section 3.0 Project Description), the Project will meet or exceed all applicable standards under California's Green Building Code Title 24 Standards. The Project is required to and will include automatic fire sprinkler systems and a public-safety radio amplification system. Construction plans are required to be submitted and permitted prior to construction. Fire Department access shall be maintained during all phases of construction. Barton Road shall be maintained clear and unobstructed at all times during construction. All required public and private fire hydrants sill be in service and fire flow available prior to building permit release by the Fire Department. The Project will meet the requirements of the Building Codes.

Title 17 – Grading Code

Grading of the Project is regulated by Title 17 – Grading Code of the Riverside Municipal Code (RMC), which sets forth rules and regulations to control erosion, grading, and earthwork construction, including fills and embankments. The purpose of the Grading Code is to regulate grading in a manner that minimizes the adverse effects on natural landforms, soil erosion, dust control water runoff, and construction equipment emissions. A Grading Exception is needed for Building B on Parcel 2 to allow installation of three retaining walls to exceed 6 feet in vertical height, in accordance with Chapter 17.28 of Title 17 - Grading. The three retaining walls, ranging in height from 4.7 feet to 11.5 feet, are required at the northeast and southeast corners of Parcel 2 due to existing topography relief and to avoid sensitive resources as shown on Figure 3.0-10 – Grading Exception & Wall Variance Exhibit. Following is a summary of the requested Grading Exceptions:

- To allow a 6.5 to 11.5-foot retaining wall in the northeast corner on Parcel 2 (Area 1);
- To allow a 4.7 to 8.2 foot high retaining wall and a 6 to 10-foot high retaining wall in the southeast corner of Parcel 2 (Area 2).

Title 18 – Subdivision Code

Subdivision of the Project site is regulated by Title 18 – Subdivision Code of the Riverside Municipal Code (RMC), which sets forth rules and regulations to control the design and improvement of subdivisions for the purpose of providing lots of sufficient size and design for the proposed use, providing streets of adequate capacity to ensure maximum safety for pedestrians

and vehicles, providing sidewalks or pedestrian ways, preserving the natural assets of the City's setting, and encouraging clustering, the preservation of natural features, and limiting grading. The Parcel Map includes the creation of two numbered parcels, and three lettered lots, and will be recorded prior to Building Permit issuance. The Project includes street and sidewalk improvements along Alessandro Boulevard and Barton Street. The Project largely retains and expands the existing Restricted Property which includes the preservation of natural features. Grading of the Project site will be confined to Parcels 1 and 2. The proposed parcel map meets all requirements of the Subdivision Code including lot size, width and depth, and street requirements.

Title 19 – Zoning Code

The Project will require a wall variance to allow installation of combination retaining/freestanding walls where the retaining portion exceeds 4 feet in vertical height. Additionally, a parking variance is needed Building A to allow 388 parking spaces, where 430 parking spaces are required by the City's Municipal Code. All parking will be provided on site. Findings are required for the Project's wall and parking variances. In all other aspects, the Project as proposed complies with the Title 19 – Zoning Code.

Title 20 – Cultural Resources

As described in Section 5.4 Cultural Resources, Title 20 of the Riverside Municipal Code (RMC) is the primary body of local historic preservation laws. The purpose of Title 20 is to promote the public health, safety, and general welfare by providing for the identification, protection, enhancement, perpetuation and use of improvements, buildings, structures, signs, objects, features, sites, places, areas, districts, neighborhoods, streets, works of art, natural features, and significant permanent landscaping having special historical, archaeological, cultural, architectural, community, aesthetic, or artistic value in the City. Title 20 of the Riverside Municipal Code established procedures for preserving, protecting, and designating significant cultural resources should the resource be considered a historic/cultural resource. Title 20 provides definitions of eligible cultural resources, landmarks, structures or resources of merit, and historic districts (see Sections 5.4 for complete definitions). The bedrock milling sites analyzed in Sections 5.4 were found to not meet any of the City's definitions for eligible cultural resources, landmarks, structures or resources of merit, or historic districts. The milling features individually do not meet title 20 definitions for eligibility. Additionally, as is further discussed in Sections 5.4, per feedback from the City and consulting tribes, Project design considerations have been made to avoid and allow to remain intact several of the bedrock outcrops that comprise the bedrock milling sites. Thus, as none of the features identified on site meet Title 20 definitions and as the Project would include design considerations to avoid bedrock outcrops, the Project would not conflict with Title 20's intent to preserve and protect cultural resources.

Citywide Design and Sign Guidelines

The Citywide Design and Sign Guidelines (CDSG) are an implementing tool of the GP 2025 that is intended to improve overall urban design and applies to all properties in the City (CDG, p. I-4). These guidelines work to reinforce the physical image of the City and are intended to promote

quality, well-designed development throughout the City that enhances existing neighborhoods, creates identity, and improves the overall quality of life. Moreover, these guidelines supplement the contents of the City's Zoning Code on matters of design and aesthetics (CDG, p. I-1).

The Project falls within the CDSG related to industrial design guidelines, which includes considerations of the Project's design related to sign design, parking and loading, landscaping, walls and fencing, screening, architectural design, signs, and lighting. The Project's architectural plans (floor plan, roof plan, fencing plan), building elevations, materials board/ color palette, landscape plans, and photometric plan are in compliance with the Citywide Design and Sign Guidelines. The applicant worked with City staff to ensure the CDSG were followed where applicable, such as to enhance the landscaping to provide for additional screening of the buildings from public views along Alessandro Boulevard and Barton Street and to change the color palette to natural colors that occur in and around the Project site.

Sycamore Canyon Business Park Specific Plan

The Project site is designated as Industrial in the SCBPSP, which allows warehouse uses. The Project has been reviewed for compliance with the SCBPSP, in particular the permitted uses, lot standards, setback standards, parking standards, outdoor storage and loading areas, lighting and utilities, sign standards, display medians, screening of mechanical equipment, trash collection areas, walls/fence standards, and rail service standards and has been found to be generally in compliance with the Sycamore Canyon Business Park Specific Plan standards as set forth in Section 3.0 Development Standards and Criteria as modified by Resolution 23240 adopted November 7, 2012.

Appendix B summarizes the Project's consistency with SCBPSP policies.

City of Riverside Good Neighbor Guidelines for Siting New and/or Modified Warehouse Distribution Facilities

The project was evaluated for consistency with the City's *Good Neighbor Guidelines for Siting New and/or Modified Warehouse Distribution Facilities* (Good Neighbor Guidelines; City of Riverside 2008).

The Good Neighbor Guidelines were designed to help minimize the impacts of DPM from on-road trucks associated with warehouses and distribution centers on existing communities and sensitive receptors located in the region. The City's Good Neighbor Guidelines are tailored to the City's unique characteristics and specific needs. The Good Neighbor Guidelines goals and strategies, adopted by the City in 2008, applicable to the Project include: *GOAL 1: Minimize exposure to diesel emissions to neighbors that are situated in close proximity to the warehouse/distribution center.*

- *Recommended strategy: Design facilities to allow for the queuing of truck on-site and away from sensitive receptors. Conversely, prevent the queuing of trucks on streets or elsewhere outside of facility in compliance with Title 10 – Vehicles and Traffic – Chapter 10.44 – Stopping, Standing and Parking.*

  Project consistency: Based on the project location and design, no truck queuing would occur next to sensitive receptors, which are located south of Alessandro Boulevard. Truck queuing would not occur outside the Project site.

- *Recommended strategy: To the extent possible, locate driveways, loading docks and internal circulation route away from residential uses or any other sensitive receptors.*

  Project consistency: Driveways, loading docks, and internal circulation routes are not angled to face sensitive receptors such as the neighboring residential communities or the wilderness park. Further, as calculated in the Project's *Air Quality Analysis* and the *Mobile Source Health Risk Assessment* (Appendix C), emissions due to on-site operations would not expose sensitive receptors to substantial pollutant concentrations.

- *Recommended strategy: Conduct SCAQMD URBEMIS and EMFAC computer models as appropriate, to initially evaluate warehouse and distribution projects on a case by case basis to determine the significance of air quality impacts and whether air quality thresholds would be exceeded as a result of the project. Where thresholds are exceeded, a more detailed air quality analysis/health risk assessment by an air quality specialist is required to be prepared and submitted by the project applicant.*

  Project consistency: As calculated and concluded in Project's *Air Quality Analysis*, the project would not result in significant air quality impacts.

- *Recommended strategy: Enforce compliance with Riverside Municipal Code Section 19.880 – "Transportation Demand Management Regulations". This section of the Code requires trip reduction plans to be submitted for all businesses, including warehouses, with over one hundred employees to reduce work-related vehicles trips by six- and one-half percent from the number of trips related to the project.*

Project consistency: The project would include transportation demand management measures that would reduce emissions associated with employee trips. These include access to public transit (Routes 20 and 208), bicycle parking, clean air/van pool parking spaces, and electric vehicle parking.

GOAL 2: Eliminate diesel trucks from unnecessarily traversing through residential neighborhoods.

- *Recommended strategy: Require warehouse/distribution centers to establish a specific truck route between the warehouse/distribution center and the State Route 60 and Interstate 215 freeways for City approval as part of the Design Review process. In addition, a haul route plan for construction activities should also be provided as part of the Design Review process.*

  Project consistency: The project site is located one mile west of Interstate 215, with direct access via Alessandro Boulevard which is an existing truck route for operations as well as transporting construction equipment to and from the site. As identified on the site plans, an existing 20-foot wide dirt road located between proposed Parcels 1 and 2 will be used temporarily as a haul route during grading activities to move excess earthen material from Parcel 1 to Parcel 2.

- *Recommended strategy: Require warehouse/distribution centers to clearly specify all entrance and exit points on the site plan submitted for City review and approval.*

  Project consistency: The project site plans indicate all entrance and exit points.

- *Recommended strategy: Require warehouse/distribution centers to provide on-site signage for directional guidance to trucks entering and exiting the facility.*

  Project consistency: On-site signage for directional guidance will be provided.

- *Recommended strategy: Require warehouse/distribution centers to provide signage or flyers that advise truck drivers of the closest restaurants, fueling stations, truck repair facilities, lodging and entertainment.*

  Project consistency: The future tenants are unknown at this time; however, this information will be made available to truck drivers.

GOAL 3: Eliminate trucks from using residential areas and repairing vehicles on the streets;

- *Recommended strategy: Enforce compliance with Riverside Municipal Code Section 10.44.155 – "Parking of certain commercial vehicles, trailers and semi-trailers prohibited; exceptions", Section 10.44.160 – "Parking of certain commercial vehicles prohibited in residential districts" and Section 10.44.040 "Parking for certain purposes prohibited".*

  Project consistency: The project would comply with all Municipal Code requirements. No trucks would be parked off-site or drive through residential communities.

GOAL 4: Reduce and/or eliminate diesel idling within the warehouse/distribution center;

- *Recommended strategy: Promote the installation of on-site electric hook-ups to eliminate the idling of main and auxiliary engines during loading and unloading of cargo and when*

trucks are not in use – especially where Transportation Refrigeration Units are proposed to be used.

Project consistency: The project would not include Transportation Refrigeration Units. All trucks would be required to comply with the CARB idling limit of 5 minutes.

- *Recommended strategy: Implement General Plan 2025 Program Final Program Environmental Impact Report, Mitigation Measure MM Air 12. This Mitigation Measure requires that all new truck terminals, warehouses and other shipping facilities requiring the use of refrigerated trucks and with more than 50 truck trips per day shall provide electrical hookups for the refrigerated units to reduce idling and its associated air quality pollutants. Additionally, future tenant improvements involving conversion of a warehouse for refrigeration storage shall include electrical hookups for refrigerated units.*

  Project consistency: The project would not include Transportation Refrigeration Units or refrigeration storage.

- *Recommended strategy: Require signage (posted inside and outside of the warehouse facility) to inform truck drivers of CARB regulations, idling limits, authorized truck route, and designated truck parking locations. Post signs requesting truck drivers to turn off engines when not in use and restrict idling within facilities to less than 5 minutes.*

  Project consistency: The project would include signage regarding idling limits, truck routes, and parking.

Therefore, the Project is consistent with the 2008 City of Riverside Good Neighbor Guidelines.

On November 10, 2020, the Riverside City Council adopted updates to the Good Neighbor Guidelines (GNG), in addition to associated amendments to Title 19 – Zoning Code of the Riverside Municipal Code (RMC), the Hunter Business Park Specific Plan, and the Sycamore Canyon Business Park Specific Plan related to siting industrial uses in the City when located adjacent to sensitive receptors, including residential neighborhoods, schools, parks, playgrounds, day care centers, nursing homes, hospitals, and other public spaces. City Council action also allowed any project achieving substantial completion within 90 days of the effective date of the implementing ordinance to continue to be subject to the 2008 GNG. As this Project was deemed complete prior to adoption of the updated GNG, it does not need to comply with the updated GNG.

The updated 2020 Good Neighbor Guidelines include new requirements for technical studies and new guidelines related to noise and neighborhood character. The following is a short summary of the applicable updates:

- **Technical Studies:** The 2020 GNGs require the preparation of an Air Quality Analysis, and Health Risk Assessments for industrial uses within 1,000 feet of sensitive receptors.

  Project Consistency: The Project has completed an Air Quality Analysis (Appendix C) and Health Risk Assessments (Appendix C) as part of the EIR process.

- **Noise:** The updated guidelines include measures related to minimizing noise from construction activities and ensuring compliance with Title 7 – Noise of the Riverside Municipal Code as it relates to noise in residential neighborhoods.

  Project Consistency: As outlined in Section 5.11 Noise, **Mitigation Measure MM NOI-1** is required to minimize construction noise and operational noise generated by the Project will comply with the noise standards in Title 7 of the RMC.

- **Neighborhood Character:** The new guidelines incorporate tiered development standards in Title 19 – Zoning Code related to building setbacks, height, and size, based on proximity to residential uses. The guidelines also require screening of industrial uses from Sensitive Receptors, and landscaping to soften visual impacts.

  Project Consistency: The tiered development standards of Title 19 do not apply to the Project, as the proposed buildings are located more than 800 feet from residential uses. As outlined in Section 5.1 Aesthetics, extensive design considerations are included in the Project, as well as **Mitigation Measure MM AES-2**, to minimize visual impacts from the Project on nearby sensitive receptors.

Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan (SCWP SKRMP)

The SCWP SKRMP includes the following proposed public use facilities: an interpretive center/day use area, major trailheads and minor trailheads. A minor trailhead is planned at the northerly terminus of Barton Street at the Park boundary and will include a typical trailhead shade structure and is sited in a location conducive to on-street parking. The Project is located adjacent to Barton Street and the Sycamore Canyon Wilderness Park boundary.

As outlined in Section 3.0 Project Description, Parcel C of the Project is proposed to be developed with a trailhead parking lot for the Sycamore Canyon Wilderness Park. It consists of 51,284 square feet (1.18 acres). The proposed trailhead parking lot will include an improved decomposed granite parking lot, landscaping, a shade structure with benches, a bike rack, a drinking fountain (including for pets), and ADA (Americans with Disabilities Act) compliant parking spaces and sidewalk. Trail fencing, gates, and signage will also be installed to direct access, circulation and trail connection to existing trails as well as the master planned multipurpose trail on the west side of Barton Street. The proposed trailhead parking lot is not required but is being provided by the applicant as an amenity and addition to the City's Sycamore Canyon Wilderness Park. Parcel C would be dedicated to the City and operated and managed by the City's Parks, Recreation, & Community Services Department.

The SCWP SKRMP also identifies appropriate edge treatments between the wilderness park and the Project site. Fencing and walls around the Project site have been designed to be compliant with requirements in the SCWP SKRMP.

As outlined above, the Project is consistent with all goals, objectives, and design guidelines of the Sycamore Canyon Business Park Specific Plan and General Plan and other regional and local plans and policies. Therefore, impacts from the Project would **be less than significant.**

5.10.6 Proposed Mitigation Measures

Potential impacts are **less than significant** and mitigation measures are not required.

5.10.7 Cumulative Environmental Effects

As discussed in Section 4.0 Environmental Setting of this EIR, cumulative development in the City and in surrounding cities and the County would include residential development, warehouses, commercial, office, and public facilities. The planned and pending Projects in the area of the Project, listed in Table 4.0-1, include about 27 Projects. Cumulative development in the City and the surrounding area would modify existing land use patterns through the development of vacant lots or through redevelopment. Proposed projects that are consistent with the designated land use and zoning and comply with Citywide Design Guidelines and Sign Guidelines are not considered to have impacts related to land use and planning. Similar to the Project, land use regulations and policy consistency impacts associated with other cumulative Projects would be addressed on a case-by-case basis in order to determine their consistency with applicable plans and policies. As the Project is consistent with the underlying land use regulations, the City's design and sign guidelines, and applicable policies of the GP 2025 and SCBPSP, it would not have a cumulative land use or planning impact. Therefore, cumulative impacts are **less than significant**.

5.10.8 References

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

CDSG	City of Riverside, *Riverside Citywide Design Guidelines and Sign Guidelines* adopted November 2007, Resolution No. 21544. (Available at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/Citywide_Design_and_Sign_Guidelines_web%20version_Amended%2001-15-19_1.pdf, accessed January 2020)
2008 GNG	City of Riverside, *Good Neighbor Guidelines for Siting New and/or Modified Warehouse Distribution Facilities*, Adopted October 14, 2008. (Available at the City of Riverside Planning Department)
GP 2025	City of Riverside, *General Plan 2025*, certified November 2007 with subsequent amendments to various elements. (Available at https://riversideca.gov/cedd/planning/city-plans/general-plan-0,accessed January 2020)

GP 2025 FPEIR	City of Riverside, *General Plan 2025 Program Environmental Impact Report* (SCH# 2004021108), certified November 2007. (Available at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/general-plan/vol2/5-9_Land_Use_Planning.pdf accessed January 2020)
MARB/IPA LUCP	Riverside County Airport Land Use Commission, *March Air Reserve Base / Inland Port Airport Land Use Compatibility Plan,* adopted November 13, 2014. (Available:http://www.rcaluc.org/Portals/13/17%20%20Vol.%201%20March%20Air%20Reserve%20Base%20Final.pdf?ver=2016-08-15-145812-700 accessed January 2020)
RMC	City of Riverside, *Municipal Code*. (Available at http://www.riversideca.gov/municode/, accessed January 2020)
RRG-CAP	Riverside Restorative Growthprint, Economic Prosperity Action Plan and Climate Action Plan, January 2016. (Available at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/other-plans/2016%20Riverside%20Restorative%20Growthprint%20Economic%20Proposerity%20Action%20Plan%20and%20Climate%20Action%20Plan.pdf)
SCBP	City of Riverside, *Sycamore Canyon Business Park Specific Plan*, adopted April 10, 1984, as amended through Amendment No. 14, January 23, 2007. (Available at: https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/spec-plans/syc-bus-park/plan_doc.pdf, accessed January 2020)
SCWP SKRMP	Dangermond & Associates, et. al, Sycamore Canyon Wilderness Park Stephens' Kangaroo Rat Management Plan and Updated Conceptual Development Plan, March 1999. (Available at https://riversideca.gov/cedd/sites/riversideca.gov.cedd/files/pdf/planning/spec-plans/SycCynMnmgtPlan_UpdatedConceptualPlan.pdf, accessed January 2020)

5.11 Noise

Based upon Appendix G of the *State CEQA Guidelines,* the analysis in the Initial Study (IS/NOP) prepared for this Project (Appendix A), and comments received during the NOP public review period (Appendix A), this section analyzes both the temporary noise impacts related to construction activity and long-term impacts associated with Project operations. The analysis in this section is based on the *Noise Analysis for the Sycamore Hills Distribution Center*, prepared by RECON (Appendix K, October 2020) and the *Traffic Operations Analysis* (TA) prepared by Urban Crossroads (Appendix L, September 2020).

5.11.1 Setting

Characteristics of Sound

Noise is most often defined as unwanted sound. Although sound can be easily measured, the perceptibility is subjective and the physical response to sound complicates the analysis of its impact on people. People judge the relative magnitude of sound in subjective terms such as "noisy" or "loud." To the human ear, sound has two significant characteristics: pitch and loudness. Pitch is generally an annoyance, while loudness can affect our ability to hear. The analysis of any project's noise impact defines the noise environment of the project area in terms of sound intensity and its effect on adjacent land uses and receivers.

Quantification of Sound

Sound pressure magnitude is measured and quantified using a logarithmic ratio of pressures, the scale of which defines the level of sound in decibels (dB). Because human hearing is not equally sensitive to sound at all frequencies, the A-weighting system is used to adjust quantified or measured sound levels to approximate this frequency-dependent response; A-weighted sound is expressed as dBA. From the noise source to the receiver, noise changes both in level and frequency spectrum. The most obvious is the decrease in noise as the distance from the source increases. The manner in which noise reduces with distance depends on whether the source is a point or line source as well as ground absorption, atmospheric effects and refraction, and shielding by natural and manmade features. Sound from point sources, such as air conditioning condensers, radiates uniformly outward as it travels away from the source in a spherical pattern. The noise drop-off rate associated with this geometric spreading is 6 dBA per each doubling of the distance (dBA/DD). Transportation noise sources such as roadways are typically analyzed as line sources, since at any given moment the receiver may be impacted by noise from multiple vehicles at various locations along the roadway. Because of the geometry of a line source, the noise drop-off rate associated with the geometric spreading of a line source is 3 dBA with each doubling of distance.

As a source of reference, common indoor and outdoor noise sources, presented in terms of dBA, are shown in relation to the approximate corresponding noise level in Table 5.11-1 – Representative Environmental Noise Levels.

Table 5.11-1 – Representative Environmental Noise Levels[1]

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	110	Rock band
Jet fly-over at 1,000 feet	105	
	100	
Gas lawnmower at 3 feet	95	
	90	
Diesel truck, 50 mph at 50 feet	85	Food blender at 3 feet
Noisy urban area during daytime	75	
Gas lawnmower at 100 feet	70	Vacuum cleaner at 10 feet
Commercial area	65	Normal speech at 3 feet
Heavy traffic at 300 feet	60	
	55	Large business office
Quiet urban area during daytime	50	Dishwasher in next room
	45	
Quiet urban area during nighttime	40	Theater, large conference room (background)
Quiet suburban area during nighttime	35	
	30	Library
Quiet rural area during nighttime	25	Bedroom at night, concert hall (background)
	20	
	15	Broadcast/recording studio
	10	
	5	
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Notes: [1]Source: California Department of Transportation, *Technical Noise Supplement,* September 2013, Table 2-5, p. 2 20

Sound is a pressure wave created by a moving or vibrating source that travels through an elastic medium such as air. Specifically, noise is defined as unwanted or objectionable sound which consists of pitch, loudness, and duration. However, the effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and in extreme circumstances, hearing impairment. Although it is difficult to describe noise with a single unit of measure because the human ear is not equally sensitive to all frequencies within the sound spectrum, the unit of measurement used to describe a noise level is the decibel (dB), and the A-weighted noise scale which weights the frequencies to which humans are sensitive is dBA. Furthermore, Federal and State agencies have established noise and land use compatibility guidelines that use averaging methods to noise measurement. Two measurement scales commonly used in California are the Community Noise Equivalent Level (CNEL) and the day-night level (DNL or L_{dn}). CNEL is a 24-hour weighted average measure of community noise; DNL is also a 24-hour average measure, but it only weighs nighttime hours. To account for increased human sensitivity at night, the L_{dn} scale includes a 10 dB weighting penalty on noise occurring during the 10:00 p.m. to 7:00 a.m. time period. The CNEL scale includes a 5 dB weighting penalty on noise occurring during the 7:00 p.m. to 10:00 p.m. time period, and a 10 dB weighting penalty on noise occurring during the 10:00 p.m. to 7:00 a.m. time period. This weighting accounts for the increased human sensitivity to noise during the evening and nighttime hours. As such, it is widely

accepted that average healthy ear can barely perceive changes of 3 dBA; that a change of 5 dBA is readily perceptible; and that an increase or decrease of 10 dBA sounds twice as loud.

Other noise rating scales of importance when assessing the annoyance factor include the peak or maximum noise level (L_{max}), which is the highest exponential, time-averaged sound level that occurs during a stated period. Short-term noise impacts in this discussion are specified in terms of maximum levels, denoted by L_{max} which reflects acoustical peaks during operational conditions and addresses the annoying aspects of constant noise.

Noise is particularly problematic when noise-sensitive land uses are affected. Noise-sensitive land uses are defined as uses where one would typically find activities that are interrupted by noise, such as residential uses, schools, hospitals, churches, performing arts facilities, and hotels and motels. The City deems residential uses particularly noise sensitive because families and individuals expect to use time in the home for quiet rest; intrusive noise can interfere with such pursuits (GP 2025). Although some variability in standards for noise sensitivity may apply to different densities of residential development, specifically infill and mixed-use developments, single-family uses are frequently considered the most sensitive (GP 2025).

Groundborne Vibration

Groundborne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of ground-borne vibration are trains, buses on rough roads, and construction activities such as blasting, pile-driving, and operating heavy earth-moving equipment.

Vibration is an oscillatory motion which can be described in terms of the displacement, velocity, or acceleration. Displacement is the easiest descriptor to understand. For a vibrating floor, the displacement is simply the distance that a point on the floor moves away from its static position. The velocity represents the instantaneous speed of the floor movement and acceleration is the rate of change of the speed.

Although displacement is easier to understand than velocity or acceleration, it is rarely used for describing ground-borne vibration. Most transducers used for measuring ground-borne vibration use either velocity or acceleration. Furthermore, the response of humans, buildings, and equipment to vibration is more accurately described using velocity or acceleration. The effects of ground-borne vibration include “feelable” movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. The rumble is the noise radiated from the motion of the room surfaces. In essence, the room surfaces act like a giant loudspeaker causing what is called ground-borne noise. In extreme cases, the vibration can cause damage to buildings.

There are several different methods 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 and is typically measured in inches per second. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the squared amplitude of the signal. The

PPV and RMS velocity are normally described in inches per second in the United States. Although it is not universally accepted, decibel notation (VdB) is in common use for vibration.

Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of vibration. Man-made vibration issues are therefore, usually confined to short distances (i.e., 500 feet or less) from the source. Sensitive receptors for vibration include structures (especially older masonry structures); people (especially residents, the elderly, and the sick) and vibration sensitive equipment.

Existing Conditions

Existing Site and Surrounding Conditions

The Project site is currently undeveloped and vacant, but has been used historically as open space. The topography consists of natural rolling terrain descending gradually from a west to east direction. There are granitic rock outcroppings throughout the property. The Project site contains two drainages, Drainage A and Drainage B. Drainage A enters the site near the northern portion of the western boundary and flows for approximately 1,183 feet before exiting the site near the middle of the northern boundary. Drainage B enters the site near the middle of the southern boundary and flows for approximately 981 feet before exiting the site near the middle of the northern boundary. The Project site is surrounded by the Sycamore Canyon Wilderness Park to the north; a storage facility to the southwest; a water treatment plant to the west, across Barton Street; vacant land and Alessandro Business Center to the east; and multi-family residences, single-family residences, and retail/commercial uses to the south, across Alessandro Boulevard. The single-family residences across Alessandro Boulevard are located in the County of Riverside jurisdiction.

The Project site has a General Plan land use designation of Business/Office Park (B/OP) as shown in Figure 3.0-5 – Land Use Designation Map and a zoning designation of Business Manufacturing Park and Specific Plan (Sycamore Canyon Business Park) Overlay Zones (BMP-SP) as shown in Figure 3.0-6 – Zoning Map. The Project site is located within the *Sycamore Canyon Business Park Specific Plan* (SCBPSP). The City adopted the SCBPSP on April 10, 1984. The SCBPSP contains land use objectives and design guidelines to provide for planned industrial development, such as the proposed Project, within this area. The Project Site is designated as Industrial within the SCBPSP.

Existing Noise Environment

Noise Contours

Existing noise levels in the vicinity of the Project site are dominated by vehicle traffic noise on Alessandro Boulevard. Alessandro Boulevard is a six-lane arterial roadway with a posted speed limit of 55 miles per hour adjacent to the Project site. The existing traffic volume ranges from 29,467 to 40,796 vehicles between Barton Street and Interstate 215 (I-215). The traffic volumes used for this analysis are from the *Traffic Operations Analysis* (TOA), Appendix L. The existing noise level contours associated with Alessandro Boulevard are shown in Figure 5.11-1, and the

existing noise level contour distances are summarized in Table 5.11-2. The roadway segments in Table 5.11-2 are based on segments analyzed in the TA.

Table 5.11-2 – Existing Alessandro Boulevard Noise Contours (CNEL)

Alessandro Blvd. Roadway Segments	Noise Level at 50 feet from Centerline	Distance to Centerline (feet)			
		75 CNEL	70 CNEL	65 CNEL	60 CNEL
Barton Street to Private Driveway[1] (of Vacant lot SW of Project)	77 CNEL	55 ft.	106 ft.	190 ft.	387 ft.
Private Driveway (of Vacant lot SW of Project) to Vista Grande Drive	77 CNEL	62 ft.	106 ft.	196 ft.	394 ft.
Vista Grande Drive to San Gorgonio Drive	77 CNEL	73 ft.	106 ft.	202 ft.	404 ft.
San Gorgonio Drive to Sycamore Canyon Blvd.	78 CNEL	60 ft.	112 ft.	200 ft.	397 ft.
Sycamore Canyon Blvd. to I-215 Southbound Ramps	79 CNEL	51 ft.	106 ft.	180 ft.	357 ft.
I-215 Southbound Ramps to I-215 Northbound Ramps	78 CNEL	52 ft.	102 ft.	172 ft.	331 ft.

[1] Private Driveway identified in Exhibit 1-1: Preliminary Site Plan in Traffic Operations Analysis (TA), Appendix L

Image Source: Nearmap (flown September 2019)

0 Feet 450

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Existing Vehicle Traffic Noise Contours

Figure 5.11-1

Ambient Noise Measurements

Existing noise levels at the Project site were measured on July 11, 2019, and December 18 and 19, 2019, using one Larson-Davis LxT Sound Expert Sound Level Meters, serial numbers 3827 and 3828. The following parameters were used:

Filter:	A-weighted
Response:	Slow
Time History Period (Short-Term):	5 seconds
Time History Period (Long-Term):	15 minutes

The meters were calibrated before the measurements. The meters were set 5 feet above the ground level for each measurement.

Noise measurements were taken to obtain typical ambient noise levels at the Project site and in the vicinity. The weather was warm and sunny. Three short-term (15-minute) measurements and one long-term (24-hour) measurement were taken, as described below. The primary sources of on-site noise were from traffic on Alessandro Boulevard. The measurement locations are shown on Figure 5.11-2.

Measurement 1 was located near the northern Project boundary on an unofficial trail within the future conservation area within the Project site and near the property line with the Sycamore Canyon Wilderness Park. The measurement location was selected to provide a sample of the noise environment within the Sycamore Canyon Wilderness Park and proposed on-site conservation areas. The sources of noise at this location included wind, occasional aircraft, and vehicle traffic in the distance. Noise levels were measured for 15 minutes; and are taken to identify an average noise level for that location. The average measured noise level was 50.9 dB(A) L_{eq}. The measurement was located more than 1,000 feet from Alessandro Boulevard, and vehicle traffic was not the observed dominant noise source. Thus, existing ambient noise levels at other locations in the Sycamore Canyon Wilderness Park and along the northern property line would be acoustically equivalent to noise levels at Measurement 1.

Image Source: Nearmap (flown September 2019)

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Noise Measurement Locations

Figure 5.11-2

Measurement 2 was located south of the Project site, approximately 60 feet from the centerline of Alessandro Boulevard. The measurement location was selected to provide a sample of the noise environment at the southern project boundary closest to the dominant noise source in the project area (i.e., traffic on Alessandro Boulevard). Noise levels at measurement location 2 are acoustically equivalent to noise levels at the residences located just south of Alessandro Boulevard (Measurement 3). The main source of noise at this location was vehicle traffic on Alessandro Boulevard. Therefore, during the 15-minute measurement period, vehicle traffic on Alessandro Boulevard was also counted. The average measured noise level was 70.3 dB(A) L_{eq}.

Measurement 3 was located at the residential property line south of the Project site, approximately 220 feet from the centerline of Alessandro Boulevard. The measurement location was selected to provide a sample of the noise environment at the residences located directly across from the future site access driveway. The main source of noise at this location was vehicle traffic on Alessandro Boulevard. Therefore, during the 15-minute measurement period, vehicle traffic on Alessandro Boulevard was also counted. The average measured noise level was 59.7 dB(A) L_{eq}.

Measurement 4 was located at the western Project boundary at the existing terminus of Barton Street improvements, at the current entrance to the Sycamore Canyon Wilderness Park. The measurement location was selected to provide a sample of the noise environment at the current entrance to the Sycamore Canyon Wilderness Park, along the Project's western boundary, and closest to the dominant noise source in the project area (i.e., traffic on Alessandro Boulevard). The sources of noise at this location included wind, occasional aircraft, pedestrians accessing the park, and vehicle traffic noise. Nighttime average hourly noise levels (10 p.m. to 7 a.m.) ranged from 46.5 to 54.1 dB(A) L_{eq}.

Noise measurements are summarized in Table 5.11-3 and vehicle traffic counts for measurements 2 and 3 are summarized in Table 5.11-4.

Table 5.11-3 – Noise Measurements

Measurement	Location	Time	Noise Sources	L_{eq}
1	Northern Project boundary, within open space	July 11, 10:56 a.m. – 11:11 a.m.	Wind, aircraft, distant vehicle traffic	50.9
2	South of Project site, 60 feet from Alessandro Blvd. centerline	July 11, 11:24 a.m. – 11:39 a.m.	Vehicle traffic on Alessandro Blvd.	70.3
3	Residential property line south of the Project site, 220 feet from Alessandro Boulevard centerline.	December 18, 10:07 a.m. – 10:22 a.m.	Vehicle traffic on Alessandro Boulevard	59.7
4	Western Project boundary, at the entrance to Sycamore Canyon Wilderness Park	December 18, 10:00 p.m. – December 19, 7:00 a.m.	Wind, aircraft, pedestrians, vehicle traffic	46.5-54.1

Table 5.11-4 – 15-Minute Traffic Count for Noise Measurement Locations Where Traffic is the Main Noise Source

Measurement	Roadway	Direction	Autos	Medium Trucks	Heavy Trucks	Buses	Motorcycles
2	Alessandro Boulevard	Westbound	333	6	2	1	1
		Eastbound	279	1	2	1	1
3	Alessandro Boulevard	Westbound	357	7	3	1	0
		Eastbound	230	2	1	0	1

5.11.2 Related Regulations

5.11.2.1 Federal Regulations

The adverse impact of noise was officially recognized by the federal government in the Noise Control Act of 1972, which serves three purposes:

- Promulgating noise emission standards for interstate commerce;
- Assisting State and local abatement efforts; and
- Promoting noise education and research.

The Federal Office of Noise Abatement and Control was initially tasked with implementing the Noise Control Act. However, the Office of Noise Abatement and Control has since been eliminated, leaving the development of federal noise policies and programs to other federal agencies and interagency committees. For example, the Occupational Safety and Health Administration (OSHA) agency prohibits exposure of workers to excessive sound levels. The United States Department of Transportation assumed a significant role in noise control through its various operating agencies. The Federal Aviation Administration regulates noise of aircraft and airports. Surface transportation system noise is regulated by a host of agencies, including the Federal Transit Administration (FTA) and Federal Highway Administration (FHWA). Finally, the federal government actively advocates that local jurisdictions use their land use regulatory authority to arrange new development in such a way that “noise sensitive” uses are either prohibited from being sited adjacent to a highway or, alternately, that the developments are planned and constructed in such a manner that potential noise impacts are minimized.

Since the federal government has preempted the setting of standards for noise levels that can be emitted by the transportation sources, the City is restricted to regulating the noise generated by the transportation system through nuisance abatement ordinances and land use planning.

The proposed Project will comply with the appropriate OSHA regulations relative to worker exposure to noise during Project construction and operation.

5.11.2.2 State Regulations

California Green Building Standards Code, Title 24, Part 11

Part 11 of Title 24 (California Green Building Standards Code) provides mandatory measures for residential and non-residential buildings. Section 5.507, Environmental Comfort, addresses interior noise control in non-residential buildings. This section provides the minimum Sound

Transmission Class and Outdoor–Indoor Sound Transmission Class for wall, roof–ceiling assemblies, and windows for buildings located within the 65 CNEL contour of an airport, freeway, expressway, railroad, industrial source, or fixed guideway source as determined by the Noise Element of the General Plan. Buildings shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly average equivalent level of 50 dB(A) L_{eq}. Exterior features such as sound walls or earth berms may be utilized as appropriate to the building, addition, or alteration project to mitigate sound migration to the interior. An acoustical analysis documenting complying interior sound levels is required to be prepared by personnel approved by the architect or engineer of record.

State of California General Plan Guidelines 2003

Through not adopted by law, the State of California General Plan Guidelines 2003, published by the California Governor's Office of Planning and Research (OPR) (OPR Guidelines), provide guidance for the computability of projects within areas of specific noise exposure. The OPR Guidelines identify the suitability of various types of construction relative to a range of outdoor noise levels and provide each local community some flexibility in setting local noise standards that allow for the variability in community preferences. Findings presented in the Levels of Environmental Noise Document (EPA 1974) influenced the recommendation of the OPR Guidelines, most importantly in the choice of noise exposure metrics (i.e. L_{dn} or CNEL) and in the upper limits for the Normally Acceptable outdoor exposure of noise-sensitive uses. The OPR Guidelines include a Noise and Land Use Compatibility Matrix that identifies acceptable and unacceptable community noise exposure limits for various land use categories. The City of Riverside has utilized the State's noise/land use compatibility matrix as a model to create their own.

Noise Insulation Standards

The California Commission of Housing and Community Development officially adopted noise standards in 1974. In 1988, the Building Standards Commission revised the noise standards (California Noise Insulation Standards). The Project will comply with the appropriate noise insulation standards.

California Government Code

California Government Code Section 65302 mandates the legislative body of each county and city in California adopt a noise element as part of its comprehensive general plan. The local noise element must recognize the land use compatibility guidelines published by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable. The City's GP 2025 contains a noise element that ranks land use compatibility as required by the California Government Code. The GP 2025 Noise Element is discussed below.

5.11.2.3 Regional Regulations

County of Riverside

The Project site is located adjacent to the boundary between the City of Riverside and the County of Riverside, and noise sensitive land uses (medium density residential) near the Project site are located within the county of Riverside.

The County regulates noise in accordance with Chapter 9.52, Noise Regulations of the Riverside County Municipal Code. Section 9.52.030 of the Municipal Code defines a sensitive receptor as a land use that is sensitive to noise including, but not limited to, residences, schools, hospitals, churches, rest homes, cemeteries, or public libraries. Section 9.52.040 of the Municipal Code states that the maximum noise levels from stationary noise sources at the property line of a sensitive receptor are to remain below 45 dB(A) L_{eq} during the nighttime hours (10:00 p.m. to 7:00 a.m.) and are not to exceed 55 dB(A) L_{eq} during the daytime hours (7:00 a.m. to 10:00 p.m.). Section 9.52.020[I] states that sound emanating from private construction projects located within on-quarter mile from an inhabited dwelling is exempt from the provisions of Chapter 9.52, if construction occurs between the hours of 6:00 a.m. and 6:00 p.m. during the months of June through September, and between the hours of 7:00 a.m. and 6:00 p.m. during the months of October through May.

March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan

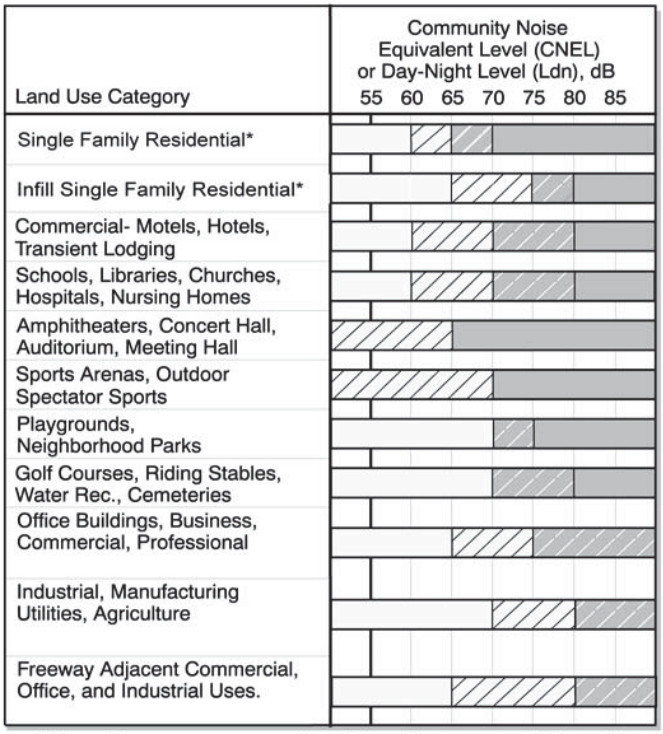
The Riverside County Airport Land Use Commission (ALUC) is the lead agency responsible for airport land use compatibility planning in Riverside County. The fundamental purpose of ALUC is to protect public health, safety, and welfare by ensuring the orderly expansion of airports and the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses. The basic function of the airport land use compatibility plans is to promote compatibility between airports and the land uses that surround them. Compatibility plans serve as a tool for use by airport land use commissions in fulfilling their duty to review proposed development plans for airports and surrounding land uses. Additionally, compatibility plans set compatibility criteria applicable to local agencies in their preparation or amendment of land use plans and ordinances and to landowners in their design of new development. On November 13, 2014, ALUC adopted the March Air Reserve Base/Inland Port Airport Land Use Compatibility Plan MARB/IPA LUCP. The compatibility zones and associated criteria set forth in the LUCP provide noise and safety compatibility protection.

5.11.2.4 Local Regulations

General Plan 2025 Noise Element

The City noise/land use compatibility criteria are outlined in Figure 5.11-3, which provides Figure N-10 of the City's General Plan Noise Element. These criteria establish noise standards for various land use categories. As shown, industrial uses are normally acceptable up to 70 CNEL, conditionally acceptable up to 80 CNEL, and normally unacceptable above 80 CNEL.

Noise/Land Use Noise Compatibility Criteria



Nature of the noise environment where the CNEL or Ldn level is:

Below 55 dB
Relatively quiet suburban or urban areas, no arterial streets within 1 block, no freeways within 1/4 mile.

55-65 dB
Most somewhat noisy urban areas, near but not directly adjacent to high volumes of traffic.

65-75 dB
Very noisy urban areas near arterials, freeways or airports.

75+ dB
Extremely noisy urban areas adjacent to freeways or under airport traffic patterns. Hearing damage with constant exposure outdoors.

Normally Acceptable
Specific land use is satifactory, based on the assumption that any building is of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable
New construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features included in design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Normally Unacceptable
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in design.

Conditionally Unacceptable
New construction or development should generally not be undertaken, unless it can be demonstrated that noise reduction requirements can be employed to reduce noise impacts to an acceptable level. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.

The Community Noise Equivalent Level (CNEL) and Day-Night Noise Level (Ldn) are measures of the 24-hour noise environment. They represent the constant A-weighted noise level that would be measured if all the sound energy received over the day were averaged. In order to account for the greater sensitivity of people to noise at night, the CNEL weighting includes a 5-decibel penalty on noise between 7:00 p.m. and 10:00 p.m. and a 10-decibel penalty on noise between 10:00 p.m. and 7:00 a.m. of the next day. The Ldn includes only the 10-decibel weighting for late-night noise events. For practical purposes, the two measures are equivalent for typical urban noise environments.

* For properties located within airport influence areas, acceptable noise limits for single family residential uses are established by the Riverside County Airport Land Use Compatibility Plan.

Goals, Policies, and Implementation Measures

The City utilizes the following GP 2025 'Noise Element' objectives and policies to assess and evaluate the project's suitability in light of noise impacts.

Objective N-1: Minimize noise levels from point sources throughout the community and, wherever possible, mitigate the effects of noise to provide a safe and healthful environment.

Policy N-1.2: Require the inclusion of noise-reducing design features in development consistent with standards in Figure N-10 (Noise/Land Use Compatibility Criteria; GP 2025 Noise Element), Title 24 California Code of Regulations, and Title 7 of the Municipal Code.

Policy N-1.3: Enforce the City of Riverside Noise Control Code to ensure that stationary noise and noise emanating from construction activities, private developments/residences and special events are minimized.

Policy N-1.4: Incorporate noise considerations into the site plan review process, particularly with regard to parking and loading areas, ingress/egress points and refuse collection areas.

Policy N-1.5: Incorporate noise considerations into the site plan review process, particularly with regard to parking and loading area, ingress/egress points and refuse collection areas.

Policy N-1.8: Continue to consider noise concerns in evaluating all proposed development decisions and roadway projects.

Objective N-2: Minimize the adverse effects of airport related noise through proper land use planning.

Policy N-2.1: Ensure that new development can be made compatible with the noise environment by using noise/land use compatibility standards (Figure N-10, Noise/Land Use Noise Compatibility Criteria) and the airport noise contour maps (found in the Riverside County Airport Land Use Compatibility Plans) as guides to future planning and development decisions.

Objective N-3: Ensure the viability of the March Air Reserve Base/March Inland Port

Policy N-3.2: Work with the Riverside County Airport Land Use Commission and the March Joint Powers Authority to develop noise/land use guidelines and City land use plans that are consistent with ALUC policies.

Policy N-3.3: Carefully consider planned future operations of the March Air Reserve Base and March Inland Port in land use decisions for properties within the airport-influenced area.

Objective N-4: Minimize ground transportation-related noise impacts.

Policy N-4.1: Ensure that noise impacts generated by vehicular sources are minimized through the use of noise reduction features (e.g., earthen berms, landscaped walls, lowered streets, improved technology).

Riverside Municipal Code

Title 7 – Noise Control of the City's Municipal Code regulates stationary noise sources in the City. Chapters 7.25, 7.30, and 7.35 outline noise level limits and general noise requirements (City of Riverside 2018).

Chapter 7.25 – Nuisance Exterior Sound Level Limits

7.25.010 – Exterior Sound Level Limits

A. Unless a variance has been granted as provided in this chapter, it shall be unlawful for any person to cause or allow the creation of any noise which exceeds the following:
    1. The exterior noise standard of the applicable land use category, up to five decibels, for a cumulative period of more than 30 minutes in any hour; or
    2. The exterior noise standard of the applicable land use category, plus five decibels, for a cumulative period of more than 15 minutes in any hour; or
    3. The exterior noise standard of the applicable land use category, plus ten decibels, for a cumulative period of more than five minutes in any hour; or
    4. The exterior noise standard of the applicable land use category, plus 15 decibels, for the cumulative period of more than one minute in any hour; or
    5. The exterior noise standard for the applicable land use category, plus 20 decibels or the maximum measured ambient noise level, for any period of time.
B. If the measured ambient noise level exceeds that permissible within any of the first four noise limit categories, the allowable noise exposure standard shall be increased in five decibel increments in each category as appropriate to encompass the ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level.
C. If possible, the ambient noise level shall be measured at the same location along the property line with the alleged offending noise source inoperative. If for any reason the alleged offending noise source cannot be shut down, then the ambient noise must be estimated by performing a measurement in the same general area of the source but at a sufficient distance that the offending noise is inaudible. If the measurement location is on the boundary between two different districts, the noise shall be the arithmetic mean of the two districts.
D. Where the intruding noise source is an air-conditioning unit or refrigeration system which was installed prior to the effective date of this chapter, the exterior noise level when measured at the property line shall not exceed 60 dBA for units installed before 1-1-80 and 55 dBA for units installed after 1-1-80.

Chapter 7.30 – Nuisance Interior Sound Level Limits

7.30.015 – Interior Sound Level Limits

A. No person shall operate or cause to be operated, any source of sound indoors which causes the noise level, when measured inside another dwelling unit, school or hospital, to exceed:

   1. The interior noise standard for the applicable land category area, up to five decibels, for a cumulative period of more than five minutes in any hour;

   2. The interior noise standard for the applicable land use category, plus five decibels, for a cumulative period of more than one minute in any hour;

   3. The interior noise standard for the applicable land use category, plus ten decibels or the maximum measured ambient noise level, for any period of time.

B. If the measured interior ambient noise level exceeds that permissible within the first two noise limit categories in this section, the allowable noise exposure standard shall be increased in five decibel increments in each category as appropriate to reflect the interior ambient noise level. In the event the interior ambient noise level exceeds the third noise limit category, the maximum allowable interior noise level under said category shall be increased to reflect the maximum interior ambient noise level.

C. The interior noise standard for various land use districts shall apply, unless otherwise specifically indicated, within structures located in designated zones with windows opened or closed as is typical of the season.

Table 5.11-5 summarizes the exterior and interior noise standards contained in the City's Municipal Code.

Table 5.11-5 – Riverside Municipal Code – Title 7 Interior and Exterior Noise Standards

Land Use	Noise Standards	
	Interior	Exterior
Residential	35 dB(A) (night 10 p.m. – 7 a.m.)	45 dB(A) (night 10 p.m. – 7 a.m.)
	45 dB(A) (day 7 a.m. – 10 p.m.)	55 dB(A) (day 7 a.m. – 10 p.m.)
Schools	45 dB(A) (7 a.m. – 10 p.m.) while school is in session	--
Hospitals	45 dB(A)	--
Office/Commercial	--	65 dB(A)
Industrial	--	70 dB(A)
Community Support	--	60 dB(A)
Public Recreation Facility	--	65 dB(A)
Non-Urban	--	70 dB(A)

Chapter 7.35 – General Noise Regulations

7.35.010 – General Noise Regulations

The general noise regulations from Chapter 7.35 that are applicable to the Project are those associated with loading and unloading activities and construction.

Loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans, or similar objects, or permitting these activities between the hours of 10:00 p.m. and 7:00 a.m. in such a manner as to cause a noise disturbance across a residential property line or at any time exceeds the maximum permitted noise level for the underlying land use category is prohibited.

The City's noise ordinance limits construction activities to the hours of 7:00 a.m. to 7:00 p.m. on weekdays, and to 8:00 a.m. to 5:00 p.m. on Saturdays. Construction is not allowed on Sundays and Federal holidays. Provisions of the noise ordinance do not apply to construction, maintenance and repair operations, which are deemed necessary to serve the best interest of the public and which are conducted by public agencies and/or utilities or their contractors.

Construction noise is exempt from the limits shown in Table 5.11-5, and the City has no established noise standards or thresholds for construction. In addition, neither the City of Riverside General Plan nor Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers for CEQA analysis purposes. Therefore, a numerical construction threshold based on FTA "Transit Noise and Vibration Impact Assessment Manual" is used for analysis of daytime construction impacts, as discussed below.

According to the FTA, project construction noise criteria should account for the existing noise environment, the absolute noise levels during construction activities, the duration of the construction, and the adjacent land use. Due to the lack of standardized construction noise thresholds, the FTA provides guidelines that can be considered reasonable criteria for construction noise assessment. The FTA considers a daytime exterior construction noise level of 80 dB(A) Leq as a reasonable threshold for noise sensitive residential land use.

Western Riverside County Multiple Species Habitat Conservation Plan

The Project site is surrounded by the Sycamore Canyon Wilderness Park. The U.S. Fish and Wildlife Service and other resource agencies, such as the U.S. Army Corps of Engineers and California Department of Fish and Wildlife, require limitation of noise levels to the habitats of threatened and endangered birds, such as the least Bell's vireo (*Vireo bellii pusillus*). The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is a comprehensive, multi-jurisdictional Habitat Conservation Plan (HCP) focusing on conservation of species and their associated habitats in western Riverside County. The MSHCP area encompasses approximately 1.26 million acres; it includes all unincorporated Riverside County land west of the crest of the San Jacinto Mountains to the Orange County line, as well as the cities of Temecula, Murrieta, Lake Elsinore, Canyon Lake, Norco, Corona, Riverside, Moreno Valley, Banning, Beaumont, Calimesa, Perris, Hemet, and San Jacinto. Section 6.1.4 of the MSHCP provides guidelines to address indirect effects associated with locating development in proximity to the MSHCP conservation areas. The section states:

> Proposed noise generating land uses affecting the MSHCP Conservation Area shall incorporate setbacks, berms or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations, and guidelines related to land use noise standards. For planning purposes, wildlife within the MSHCP

Conservation Area should not be subject to noise that would exceed residential noise standards.

For operation of the project, the Municipal Code residential noise level standards discussed above were also applied to the Sycamore Canyon Wilderness Park. These noise level limits are 55 dB(A) L_{eq} for noise occurring between 7 a.m. and 10 p.m., and 45 dB(A) L_{eq} for noise occurring between 10 p.m. and 7 a.m. For construction noise, the Western Riverside County Regional Conservation Authority applies a noise level limit of 65 dB(A) L_{eq} (Western Riverside County Regional Conservation Authority, personal communication 2019). These construction and operational limits were applied at the boundary between the Project site and the Sycamore Canyon Wilderness Park and at the edge of the on-site conservation areas.

5.11.3 Project Design Considerations

It is anticipated that excavation of on-site decomposed granite may be performed utilizing conventional earthmoving equipment. Blasting will not be required and is not proposed as part of the Project site preparation activities.

As outlined in Section 5.11.2.2 above, the Project would adhere to all applicable requirements of Part 11 of Title 24 of the California Green Building Standards Code. Section 5.507, Environmental Comfort, addresses interior noise control in non-residential buildings. This section provides the minimum Sound Transmission Class and Outdoor–Indoor Sound Transmission Class for wall, roof–ceiling assemblies, and windows for buildings located within the 65 CNEL contour of an airport, freeway, expressway, railroad, industrial source, or fixed guideway source as determined by the Noise Element of the General Plan. Buildings shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly average equivalent level of 50 dB(A) L_{eq}.

As described in Section 3.0 project Description and shown on Figure 3.0-11 – Fencing Plan, the Project includes perimeter walls to minimize noise from on-site operations to adjacent sensitive uses including the Sycamore Canyon Wilderness Park and on-site conservation areas. Several different fences and walls will be installed with the most northern being a 42-inch cable rail theme fence along the northern property line, adjacent to the Sycamore Canyon Wilderness Park. The 42-inch cable rail theme fence will also extend along the western side of Parcel 1 and the boundary of Parcel A, the Restricted Property/Conservation Area. The 42-inch cable rail theme fence will also run along Parcels A and B Conservation Areas southern boundary and frontage along Alessandro Boulevard and on both sides of the Parcel 1/ Building A driveway on Alessandro Boulevard. An 8-foot-high concrete screen wall will be constructed around the east, north and west sides of Building A at the outer edge of the drive aisles and parking area. A 6-foot to 8-foot-high metal fence will be placed along the outer edge of the drive aisles and parking area on the south side of Building A. An 8-foot-high metal sliding gate and 15-feet high concrete screening walls will be located on both sides of the southern end of Building A that faces Alessandro Boulevard to screen views of the dock doors and loading areas from Alessandro Boulevard.

This 8-foot-high concrete screen wall will be installed around the northeast, east, and southeast sides of Building B, at the outer edge of the drive aisles and parking areas, adjacent to the Parcel

A Conservation Area. A 6-foot to 8-foot-high metal fence will be placed along the northwestern, western, and southern sides of Building B at the outer edge of the drive aisles and parking areas. To separate the Building B northern parking lot/property line and the trail head parking lot an 8-foot-high combination screening fence/wall, consisting of a 4-foot high tubular steel metal fence on top of a 4-foot high screen wall, will be installed. An 8-foot-high metal sliding gate and 15-feet high concrete screening walls will be located on the south side of Building B facing west to Barton Street to screen views of the dock doors and loading area from Barton Street.

5.11.4 Thresholds of Significance

The City has not established local CEQA significance thresholds as described in Section 15064.7 of the State CEQA Guidelines. The City generally utilizes the CEQA significance thresholds in Appendix G ("Environmental Checklist") of the *State CEQA Guidelines*. The Environmental Checklist prepared by the City for the Project (see Appendix A of this document) indicates that two of the three Noise impact thresholds shall be analyzed in this EIR as impacts related to Noise Threshold C (exposure of people residing or working in the Project area to excessive noise levels from an airport) was determined to be less than significant with no further analysis in the EIR required. Thus, per the Environmental Checklist prepared for the Project, the Sycamore Hills Distribution Project may be considered potentially significant if the proposed project would:

- (Threshold A) result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- (Threshold B) result in generation of excessive groundborne vibration or groundborne noise levels;

5.11.5 Environmental Impacts

Threshold A: *Would the Project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

Construction Noise

Project construction noise would be generated by diesel engine-driven construction equipment used for site preparation and grading, building construction, loading, unloading, and placing materials and paving. No blasting is proposed for the Project. Construction noise is exempt from the noise level limits established in Title 7. However, construction noise is calculated in this analysis in an abundance of caution. Neither the City of Riverside General Plan nor Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers for CEQA analysis purposes. For the purposes of this analysis, the Federal Transit Administration (FTA) recommended threshold of 80 dB(A) L_{eq} (A-weighted decibels one-hour equivalent noise level) at noise sensitive residential land uses was used. Further, the Western Riverside County Regional Conservation Authority applies a noise level limit of 65 dB(A) L_{eq}. This limit was analyzed at the boundary between the Project site and the Sycamore Canyon Wilderness Park and at the edge of the on-site conservation areas. Construction noise levels

were modeled at the residential uses, Sycamore Canyon Wilderness Park, and on-site conservation area for comparison to these limits.

To reflect the nature of grading and construction activities, equipment was modeled as an area source distributed over each building footprint and the temporary access road between the two building sites. The total sound energy of the area source was modeled with all pieces of equipment operating simultaneously, which would be a worst-case scenario. Noise levels were modeled at a series of 45 receivers located at the adjacent uses. The results are summarized in Table 5.11-6 – Construction Noise Levels, and modeled receiver locations and construction noise contours are shown in Figure 5.11-4.

Table 5.11-6 – Construction Noise Levels

Receiver	Land Use	Noise Level Limit [dB(A) L_{eq}]	Construction Noise Level [dB(A) L_{eq}][1]
1	Residential	80	55
2	Residential	80	57
3	Commercial	--	59
4	Vacant (Residential Land Use Designation)	--	60
5	Vacant (Residential Land Use Designation)	--	59
6	Residential (County)	80	58
7	Residential (County)	80	58
8	Residential (County)	80	58
9	Residential (County)	80	58
10	Commercial	--	58
11	Commercial	--	57
12	Residential (County)	80	57
13	Residential (County)	80	57
14	Residential (County)	80	56
15	Residential	80	56
16	Residential	80	55
17	Residential	80	54
18	Public Facilities	--	59
19	Public Facilities	--	59
20	Commercial	--	72
21	Commercial	--	72
22	Commercial	--	69
23	On-Site Conservation Area	65	**69**
24	On-Site Conservation Area	65	**68**
25	On-Site Conservation Area	65	**69**
26	On-Site Conservation Area	65	**69**
27	On-Site Conservation Area	65	**69**
28	Business and Manufacturing Zone	--	69
29	Business and Manufacturing Zone	--	70
30	Sycamore Canyon Wilderness Park	65	**68**
31	Sycamore Canyon Wilderness Park	65	**68**
32	Sycamore Canyon Wilderness Park	65	**68**
33	Sycamore Canyon Wilderness Park	65	**68**
34	Sycamore Canyon Wilderness Park	65	**70**
35	Sycamore Canyon Wilderness Park	65	**71**
36	Sycamore Canyon Wilderness Park	65	**69**
37	Sycamore Canyon Wilderness Park	65	**69**
38	Sycamore Canyon Wilderness Park	65	**71**
39	On-Site Conservation Area	65	**71**
40	On-Site Conservation Area	65	**69**
41	On-Site Conservation Area	65	**71**
42	On-Site Conservation Area	65	**72**
43	On-Site Conservation Area	65	**72**
44	On-Site Conservation Area	65	**72**
45	On-Site Conservation Area	65	**74**

[1]**Bold** text indicates when construction noise levels exceed noise level limits.

SYCAMORE HILLS DISTRIBUTION CENTER

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Construction Noise Contours

Figure 5.11-4

Construction Noise to Adjacent Residential Uses

As shown in Table 5.11-6 above, construction noise levels would range from 54 to 60 dB(A) L_{eq} at the adjacent residential land uses. Construction noise levels would not exceed 80 dB(A) L_{eq} at any adjacent residential property lines. Thus, construction noise levels would not exceed the FTA recommended threshold of 80 dB(A) L_{eq} at the residential uses and would not be considered a substantial increase in noise.

The City's noise ordinance (Title 7) limits construction activities to the hours of 7:00 a.m. to 7:00 p.m. on weekdays, and to 8:00 a.m. to 5:00 p.m. on Saturdays. No construction is permitted on Sundays or on federal holidays. Some adjacent residential uses are located within the County of Riverside. Similar to the City, the County exempts construction noise from noise level limits, but restricts construction activity to the hours of 6:00 a.m. to 6:00 p.m. in June through September, and 7:00 a.m. to 6:00 p.m. in October through May. In order to comply with City and County requirements, project construction activities would only occur between 7:00 a.m. and 6:00 p.m. on weekdays and 8:00 a.m. to 5:00 p.m. on Saturdays and would not occur on Sundays or federal holidays. As construction activities would comply with Title 7 and would not be considered a substantial increase in ambient noise, temporary increases in noise levels from construction activities would be **less than significant** at the adjacent residential use areas.

Construction Noise to Adjacent Sycamore Canyon Wilderness Park and On-Site Conservation Areas

Sensitive least Bell's vireo habitat is located within the Sycamore Canyon Wilderness Park and on-site conservation areas. For construction noise, the Western Riverside County Regional Conservation Authority applies a noise level limit of 65 dB(A) L_{eq} (Western Riverside County Regional Conservation Authority, personal communication 2019). This limit was analyzed at the boundary between the Project site and the Sycamore Canyon Wilderness Park and at the edge of the on-site conservation areas. As shown in Table 5.11-6, construction noise levels at the adjacent Sycamore Canyon Wilderness Park and on-site conservation areas would range from 68 to 74 dB(A) L_{eq}. Based on the construction noise contours shown in Figure 5.11-4, construction noise levels would exceed 65 dB(A) L_{eq} within a majority of the Parcel A conservation area, the portion of Parcel B conservation area that is approximately 100 feet or closer to the development footprint, and within the portion of the Sycamore Canyon Wilderness Park that is within up to 300 feet of the project boundary. Should sensitive species be present within the Sycamore Canyon Wilderness Park and on-site conservation areas, construction noise impacts to sensitive species would be potentially significant.

The implementation of mitigation measure **MM NOI-1** would be required should least Bell's vireo be present within 300 feet of the Project site from the Sycamore Canyon Wilderness Park or within 100 feet of the Project site from the conservation areas that are Parcel A and B. Specifically, **MM NOI-1** includes the following:

Prior to issuance of grading permit, should least Bell's vireo be present in the Sycamore Canyon Wilderness Park within 300 feet of the Project site, in Parcel A on-site conservation area, or within

Parcel B on-site conservation area within 100 feet of the development footprint, construction noise impacts shall be minimized through implementation of the following measure:

1. A 12-foot temporary noise barrier shall be installed at the perimeter of the limits of disturbance between the construction activities and the adjacent Sycamore Canyon Wilderness Park to the north and east and the on-site conservation areas as shown in Figure 5.11-5 – Construction Barrier. The barrier must be installed within the Project development limits and not encroach into the adjacent Sycamore Canyon Wilderness Park or the on-site conservation areas. The barrier shall be continuous without openings, holes, or cracks, and shall reach the ground. The barrier may be constructed with 1-inch plywood and provide a reduction of at least 10 dB(A) to ensure noise levels do not exceed 65 dB(A) L_{eq} at the Sycamore Canyon Wilderness Park and on-site conservation areas. Other barrier materials providing the same reduction shall also be permitted.
2. Heavy grade rubber mats/pads shall be used within the bed of the trucks. These mats will help attenuate initial impact noise generated when an excavator drops rock and debris into the bed of the truck. These mats must be maintained and/or replaced as necessary.
3. During all Project site excavation and grading on-site, construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturer standards.
4. The contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receptors nearest the Project site.
5. Equipment shall be shut off and not left to idle when not in use.
6. The contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise/vibration sources and sensitive receptors nearest the Project site during all Project construction.
7. The Project proponent shall mandate that the construction contractor prohibit the use of music or sound amplification on the Project site during construction.
8. The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment (7:00 a.m. to 6:00 p.m. on weekdays, and 8:00 a.m. to 5:00 p.m. on Saturdays).
9. The use of heavy equipment or vibratory rollers and soil compressors shall be limited along the Project boundaries to the greatest degree possible. It is acknowledged that some soil compression may be necessary along the Project boundaries.
10. Any jackhammers, pneumatic equipment and all other portable stationary noise sources shall be shielded, and noise shall be directed away from sensitive receptors.
11. For the duration of construction activities, the construction manager shall serve as the contact person should noise levels become disruptive to local residents. A sign should be posted at the Project site with the contact phone number. This sign shall be posted at the Alessandro Boulevard frontage as well as the Barton Street frontage.

The implementation of the above measures under **MM NOI-1** would reduce construction noise impacts to a level **less than significant**. As described above, mitigation measure **MM NOI-1** will require that work be conducted outside of nesting season whenever possible and/or ensure the adjacent habitat is unoccupied prior to the initiation of breeding season. If least Bell's vireo should be present within the parameters mentioned above, the measure would require the installation of a 12-foot temporary noise barrier at the perimeter of the limits of disturbance between construction activities and the adjacent Sycamore Canyon Wilderness Park to the north and east and the on-site conservation areas (see Figure 5.11-5 – Construction Barrier) to provide a reduction of at least 10 dB(A) to ensure noise levels do not exceed the 65 dB(A) limit at the Sycamore Canyon Wilderness Park and on-site conservation areas. With the implementation of **MM NOI-1**, construction noise impacts at the Sycamore Canyon Wilderness Park and on-site conservation areas would be reduced to **less than significant with mitigation**.

Image Source: Nearmap (flown September 2019)

0 Feet 450

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Construction Barriers

Figure 5.11-5

Operational Noise

Traffic Noise

On-Site Noise/Land Use Compatibility

On-site traffic noise contours were developed using the SoundPLAN program. Noise level contours were modeled at the first-floor level. These contours take into account shielding provided by proposed and adjacent buildings, topography, and proposed grading. Future vehicle traffic noise-level contours are shown in Figure 5.11-6. The main source of noise at the Project site is vehicle traffic on Alessandro Boulevard. As shown in Figure 5.11-6, first-floor exterior noise levels at the proposed buildings are projected to be less than the City's normally acceptable compatibility standard of 70 CNEL.

Off-Site Traffic Noise

The primary factor affecting off-site noise levels would be increased traffic volumes. The Project would increase traffic volumes on Alessandro Boulevard but would not substantially alter the vehicle classifications mix on local or regional roadways or alter the speed on an existing roadway or create a new roadway. Though changes in noise levels would occur along any roadway where project-related traffic occurs, noise levels are assumed to be the greatest nearest the Project site, as this location would represent the greatest concentration of project-related traffic.

Impacts related to a noise level increase from traffic are considered significant if the Project-generated traffic would result in exposure of sensitive receptors to an unacceptable increase in noise levels. Additionally, operational and traffic-generated noise levels would have a significant impact on identified noise-sensitive receptors if the ambient noise levels:

- Are less than 60 CNEL and the project results in an increase of 5 dB(A) or greater;
- Range from 60 to 65 CNEL and the project results in an increase of 3 dB(A) or greater; or
- Exceed 65 CNEL and the project results in an increase of 1.5 dB(A) or greater.

According to the Project's Traffic Operations Analysis, the Project would generate 847 trips. Table 5.11-7 – Traffic Noise Levels with and without Project and Ambient Noise Increase presents a conservative assessment of traffic noise levels based on the existing conditions, year 2023, and year 2040 cumulative traffic volumes with and without the Project along various segments of Alessandro Boulevard. As shown in Table 5.11-7, Project-related traffic would increase ambient noise levels by 0.2 dB(A) or less in existing, year 2023, and year 2040 conditions. The project-related increases in ambient noise would not be audible and would not exceed the thresholds outlined above. **Impacts would be less than significant without mitigation**.