

4. Environmental Setting

The purpose of this section is to provide a description of the environmental setting of the Project site and surrounding area as it existed at the time the Notice of Preparation was published, from both a local and regional perspective. In addition to the summary below, detailed environmental setting descriptions are provided in each subsection of Section 5 of this Draft EIR.

4.1 REGIONAL SETTING

The Project site is located in the City of Perris in northwestern Riverside County. The City of Perris encompasses approximately 40 square miles and is located within the Perris Valley, midway between the San Jacinto and the Santa Ana Mountains. Perris is bordered on the north by the City of Moreno Valley and March Air Reserve Base/Inland Port Airport (March ARB/IPA). On the south, it is bordered by the City of Menifee, on the east by unincorporated areas of Riverside County, and on the west by the unincorporated community of Mead Valley in unincorporated Riverside County. One major freeway and one railroad transect Perris. Interstate 215 (I-215) runs north/south near the western edge of the City and the Burlington Northern Santa Fe Southern line from Riverside traverses through the City along I-215 in the north and transitions southeast along Case Road.

4.2 LOCAL SETTING AND PROJECT LOCATION

The Project site is located in the central portion of the City of Perris, southwest of the intersection of West Placentia Avenue and Barrett Avenue. Regional access to the Project site is provided via I-215 located adjacent to the site to the west, State Route 60 (SR-60) approximately 8 miles to the north, and SR-74 approximately 1.5 miles to the south. The Project site and surrounding area is shown in Figure 3-1, *Regional Location*, and Figure 3-2, *Local Vicinity*, in Section 3.0, *Project Description*, of this Draft EIR.

The Project site is comprised of 118 parcels encompassing approximately 358.28 gross acres. These parcels are identified in Table 3-1, *Specific Plan Assessor's Parcel Numbers*, in Section 3.0, *Project Description*. Offsite improvement areas are currently developed with roadways. The Project site includes two single-family residences, remnants of two previously demolished residences, vacant land that has been disturbed from previous agricultural uses, and developed roadways. The Specific Plan Overlay area contains Val Verde Elementary School. The site is relatively flat with a gentle slope downward to the east. The Specific Plan Area's existing conditions are shown in Figures 4-1 and 4-2, *Existing Site Photos*.

4.3 EXISTING LAND USE AND ZONING

The City of Perris General Plan land use designations for the properties within the Project site include Harvest Landing Specific Plan (HL SP), Business Park (BP), and Public (P), as shown on Figure 4-3, *Existing General Plan Land Use Designations*. The Harvest Landing Specific Plan establishes the zoning for the properties within the existing Specific Plan boundaries. The existing zoning designations under the Specific Plan include Community Recreation (CRC), Detention Basin (DB), Harvest Lake (HL), Harvest Landing Sports Park (SP), Multiple Business Use (MBU), High Residential (H), Medium High Residential (MH), Medium Residential (M), Low Residential (L), Park (HLP), and Commercial Community (CC). The existing zoning designations for the proposed annexation parcels are Light Agricultural (A1), and Public (P), as shown on Figure 4-4, *Existing Zoning Designations*.

4.4 SURROUNDING LAND USES AND DEVELOPMENT

The Project site is located within a developed area. The surrounding land uses are described in Table 4-1.



Table 4-1: Surrounding Existing Land Uses

	Existing Land Use	General Plan Land Use Designation	Zoning
North	Placentia Avenue followed by single-family residences and industrial uses	Perris Valley Commerce Center Specific Plan (PVCC SP)	Perris Valley Commerce Center- Light Industrial (LI) Perris Valley Commerce Center- Business Professional Office (BPO)
East	Northeast: Barrett Avenue followed by townhomes, a storage yard, and a commercial center. East: Perris Boulevard followed by commercial uses and vacant land	Multi Family Resident 14 (MFR-14) Light Industrial (LI) Community Commercial (CC)	Multi Family Resident 14 (MFR-14) Light Industrial (LI) CC
South	Southeast: A commercial center followed by Perris Boulevard and residences Southwest: I-215 followed by vacant land	CC	CC
West	I-215 followed by various industrial uses and vacant land within unincorporated Riverside County	Light Industrial (Unincorporated Riverside County)	Manufacturing- Heavy (M-H) Manufacturing – Medium (M-M) Industrial Park (I-P) Scenic Highway Commercial (C-P-S) (Unincorporated Riverside County)

Existing Site Photos



Key

-  Viewpoint Location
-  Direction of Sight



View of the Project Site from Frontage Road, looking northeast.

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Existing Site Photos



Key

-  Viewpoint Location
-  Direction of Sight

View of the Project Site and Val Verde Elementary School, from Indian Avenue.

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Existing General Plan Land Use Designation

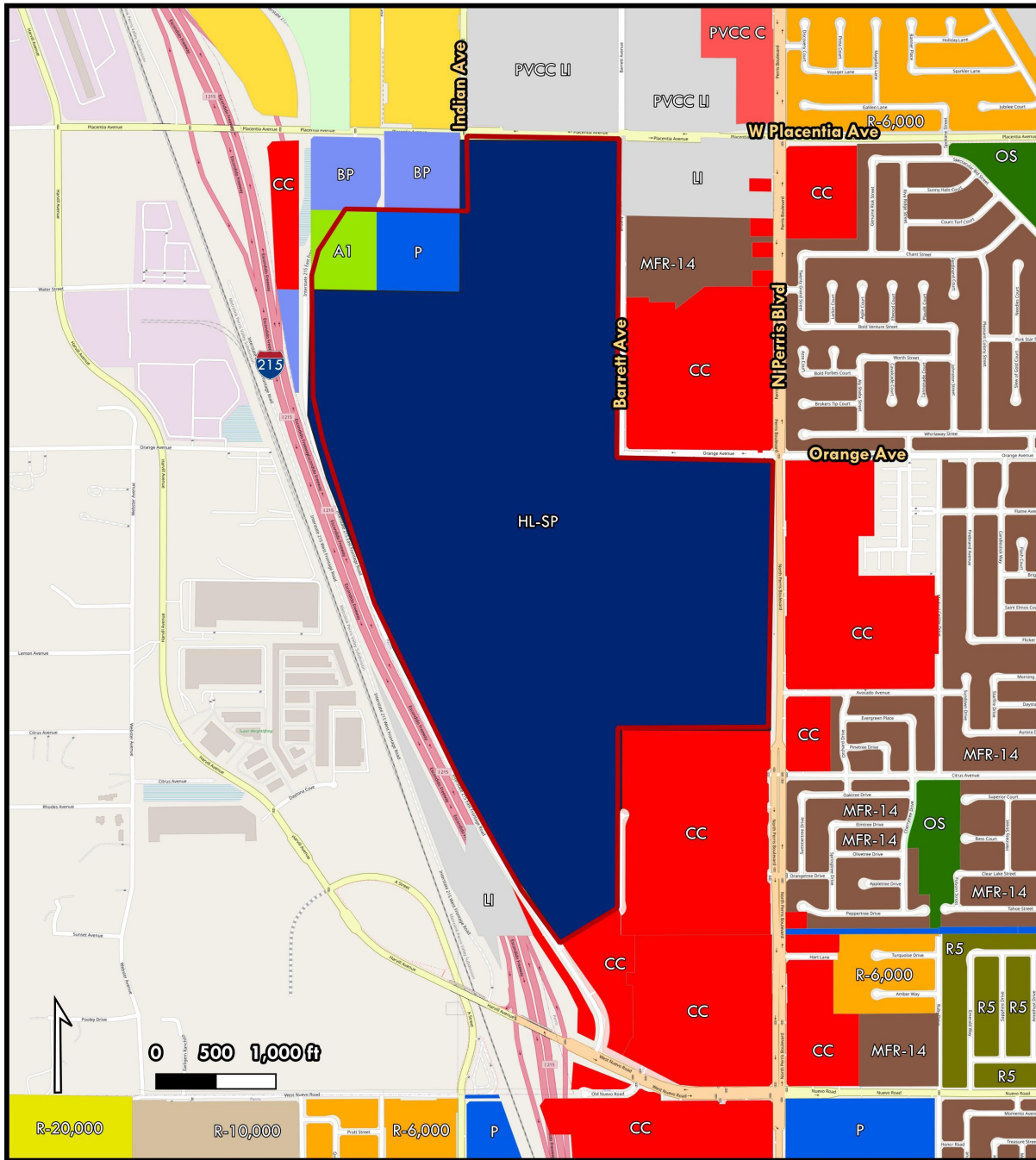



















Harvest Landing Retail Center & Business Park Project
City of Perris

Figure 4-3

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Existing Zoning Designations



- | | |
|---|---|
|  Project Site |  Perris Valley Commerce Center Business Professional Office (PVCC - BPO) |
| Zoning |  Perris Valley Commerce Center Basin (PVCC - Basin) |
|  Light Agriculture (A1) |  Perris Valley Commerce Center Commercial (PVCC - C) |
|  Business Park (BP) |  Perris Valley Commerce Center Light Industrial (PVCC - LI) |
|  Commercial Community (CC) |  Residential 10,000 (R-10,000) |
|  Light Industrial (LI) |  Residential 20,000 (R-20,000) |
|  Multi Family Resident 14 (MFR-14) |  Residential 6,000 (R-6,000) |
|  Open Space (OS) |  Mobilehome Subdivision (R5) |
|  Public (P) |  Harvest Landing Specific Plan (HL-SP) |

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4.5 PHYSICAL ENVIRONMENTAL CONDITIONS

CEQA Guidelines Section 15125(a)(1) states that the physical environmental condition in the vicinity of the Project as it existed at the time the EIR's Notice of Preparation was released for public review normally be used as the comparative baseline for the EIR. The Notice of Preparation for this EIR was released for public review on August 9, 2024 through September 9, 2024. The following pages include a description of the physical environmental conditions ("existing conditions") on a regional and local basis at the approximate time the Notice of Preparation was released. More information regarding the Specific Plan Area's environmental setting is provided in the specific subsections of EIR Section 5, *Environmental Analysis*.

4.5.1 Aesthetics

Scenic Vistas

Scenic vistas are panoramic views of important visual features, as seen from public viewing areas. The Project site is located in a primarily developed area with industrial and commercial uses, residences, and roadways. The City of Perris General Plan does not designate specific scenic resources or scenic vistas. Long distance background views of the surrounding foothills to the east are available from public vantage points along West Placentia Avenue, Orange Avenue, Perris Boulevard, Frontage Road, Barrett Avenue, and Indian Avenue.

State Scenic Highway

The nearest "officially designated" state scenic highway to the City of Perris is the segment of State Route 74 (SR-74) located east of the City of Hemet about 20 miles east of Perris. The closest Eligible State Scenic Highway is a portion of SR-74/West 4th Street, and the I-215 interchange with SR-74, both located approximately 1.3 miles south of the Project site (Caltrans, 2019).

Visual Character of Project Site and Surrounding Area

The Specific Plan Area includes two vacant single-family residences, remnants of two demolished single-family residences, vacant land that has been disturbed from previous agricultural uses, and developed roadways, as shown in Figure 3-3, *Aerial View*, in Section 3.0, *Project Description*. The Specific Plan Overlay Area is currently developed with Val Verde Elementary School. The existing visual character of the area surrounding the Specific Plan Area is dominated by industrial warehouses, commercial buildings, residences, and educational uses. There is no consistent architectural or visual theme within the surrounding area.

Light and Glare

The Specific Plan Area is mostly vacant land that has been disturbed from previous agricultural uses with exception of two single-family residences and remnants of two previously demolished single-family residences at the intersection of Orange Avenue and Indian Avenue, and Val Verde Elementary School located within the Overlay area. The Specific Plan Area is surrounded by sources of nighttime lighting that includes lamination from vehicle headlights, streetlights, off-site exterior industrial/commercial lighting, and interior lighting passing through windows. Sensitive receptors to lighting and glare include motorists and pedestrians passing through the Specific Plan Area and the residences to the east of the Specific Plan Area along Barrett Avenue.

Glare in the Specific Plan vicinity is generated by building and vehicle windows reflecting light. However, there are no substantial buildings or structures near the Specific Plan Area that presently generate substantial glare since most of the buildings are limited to one- to two-story structures that are constructed of non-reflective materials and are not surfaced with a substantial number of windows adjacent to one another that would create a large reflective area.

4.5.2 Agriculture and Forestry Resources

Regional

Natural resources in Riverside County and City of Perris include agricultural and grazing lands. In 2015, the County had approximately 132,183 acres of Prime Farmland, 42,096 acres of Farmland of Statewide Importance, and 37,726 acres of Unique Farmland (Riverside County, 2015). In 2020, the County had approximately 114,616 acres of Prime Farmland, 43,768 acres of Farmland of Statewide Importance, and 30,526 acres of Unique Farmland (DOC, 2020).

Local

Historically, approximately 52 percent of land within the City of Perris was previously or has been used for agricultural purposes. Existing farmland within the City is often used for dry farming or the production of sod, alfalfa, or hay. Many agricultural fields within the City have been out of production for a number of years or have been converted to other uses. The City of Perris General Plan recognized that the City would continue to transform into a more urbanized area, reducing the potential for agriculture and supporting economic activities in the City (City of Perris, 2005).

Project Site

The Specific Plan Area was previously utilized for agricultural uses, but currently includes two single-family residences, remnants of two previously demolished single-family residences, vacant land, Val Verde Elementary School, and roadways. As shown in Figure 5.2-1, *Farmland Resources*, in Section 5.2, *Agriculture and Forestry Resources*, approximately 301.19 acres of the site is designated as Farmland of Local Importance, approximately 10.66 acres of the site is designated as Urban-Built Up Land, and approximately 46.43 acres of the site is designated as Other Lands by the California Department of Conservation Farmland Mapping and Monitoring Program (DOC, 2022a).

Forestry Resources

The Specific Plan Area is located in the city of Perris, a rapidly urbanizing region that generally contains dry, sparsely-vegetated terrain in the natural condition, and does not contain any forest resources (City of Perris, 2005). As shown in Figure OS-3a of the Riverside County General Plan there are no forest or forestry resources in the Project's vicinity under existing conditions (Riverside County, 2015).

4.5.3 Air Quality

The Specific Plan Area is located within the South Coast Air Basin, which is under the jurisdiction of the South Coast Air Quality Management District (AQMD). The South Coast Air Basin is a 6,600-square-mile coastal plain bounded by the Pacific Ocean to the southwest and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The South Coast Air Basin includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, and all of Orange County.

The ambient concentrations of air pollutants are determined by the amount of emissions released by sources and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and sunlight. Therefore, existing air quality conditions in the area are determined by such natural factors as topography, meteorology, and climate, in addition to the amount of emissions released by existing air pollutant sources.

Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants. The topography and climate of Southern California combine to make the South Coast Air Basin an area of high air pollution potential. The South Coast Air Basin is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the west and high mountains around the rest of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The usually mild climatological pattern is disrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds. During the summer months, a warm air mass frequently descends over the cool, moist marine layer produced by the interaction between the ocean's surface and the lowest layer of the atmosphere. The warm upper layer forms a cap over the cool marine layer and inhibits the pollutants in the marine layer from dispersing upward. In addition, light winds during the summer further limit ventilation. Furthermore, sunlight triggers the photochemical reactions which produce ozone.

4.5.4 Biological Resources

The Specific Plan Area includes two vacant single-family residences, remnants of two demolished single-family residences, vacant land that has been disturbed from previous agricultural uses, and developed roadways. The Specific Plan Overlay Area is currently developed with Val Verde Elementary School. The site is relatively flat with elevations ranging from 1,435 to 1,480 feet above mean sea level. Based on the United States Department of Agriculture Web Soil Survey, the Specific Plan Area is underlain by Domino silt loam (saline-alkali), Exeter sandy loam (deep, 0 to 2 percent slopes), Exeter sandy loam (deep, 2 to 8 percent slopes, eroded), Ramona sandy loam (0 to 2 percent slopes), Exeter very fine sandy loam (deep, 0 to 5 percent slopes), Greenfield sandy loam (0 to 2 percent slopes), Greenfield sandy loam (2 to 8 percent slopes, eroded), and Pachappa fine sandy loam (0 to 2 percent slopes). Soils onsite have been mechanically disturbed and heavily compacted from existing and historic land uses including agricultural activities, grading activities, and weed abatement (EIR Appendix D).

Vegetation Communities and Land Covers

According to the Habitat Assessment and MSHCP Consistency Analysis prepared for the Project, no native plant communities occur within the boundary of the Specific Plan Area. The Specific Plan Area includes one plant community, non-native grassland, and two land cover types, disturbed and developed. The majority of the Specific Plan Area supports a non-native grassland that with the exception of the southwest and southeast corners and portions of the perimeter of the site. The non-native grassland community is dominated by non-native grasses such as oats (*Avena* spp.) and bromes (*Bromus* spp.) and supports primarily weedy/early successional species. Common plant species observed in the non-native grassland plant community include red-stemmed filaree (*Erodium cicutarum*), common mustard (*Brassica rapa*), Mediterranean mustard (*Hirschfeldia incana*), stinknet (*Oncosiphon pilulifer*), wild radish (*Raphanus sativa*), fiddleneck (*Amsinckia* sp.), annual lupine (*Lupinus bicolor*), and Mexican palo verde (*Parkinsonia aculeata*). Non-native grasses occur in the highest densities in the southern portion of the site, where they are nearly exclusive along a swale.

As previously mentioned, the majority of the site includes disturbed land which has previously supported agricultural land uses. Vegetative covers vary from dense to barren based on the frequency and nature of

routine disturbance from vehicle access and weed abatement regimes. Common plant species observed within these disturbed areas include stinknet (*Oncosiphon piluliferum*), Russian thistle (*Salsola tragus*), common sunflower (*Helianthus annuus*), tumbleweed (*Amaranthus albus*), telegraph weed (*Heterotheca grandiflora*), horseweed (*Erigeron canadensis*), tocalote (*Centaurea melitensis*), Spanish clover (*Acmispon americanus*), prickly lettuce (*Lactuca serriola*), mustard (*Hirschfeldia incana*), ripgut brome (*Bromus diandrus*), Peruvian pepper tree (*Schinus molle*), tree of heaven (*Ailanthus altissima*), knotweed (*Polygonum aviculare*), jimsonweed (*Datura wrightii*), and slim oat (*Avena barbata*). In addition, a swathe of mulefat (*Baccharis salicifolia*) was observed in a roadside ditch along Orange Avenue, a swathe of desiccated cattails (*Typha* sp.) was observed near a water detention basin near the southwest intersection of Perris Boulevard and Orange Avenue, and pockets of non-native ornamental trees such as Mexican palo verde (*Parkinsonia aculeata*) and gum tree (*Eucalyptus* sp.) are present near existing and former residential developments. Developed areas within the site include roadways and existing residential and school land uses, which include paved and impervious surfaces (EIR Appendix D).

Special-Status Plant Communities

According to the California Natural Diversity Database, three special-status habitats have been identified within the *Steele Peak* and *Perris* quadrangles, in which the Project site is located or is in close proximity to, including Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, and Southern Sycamore Alder Riparian Woodland. According to the Habitat Assessment and Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis, no California Department of Fish and Wildlife (CDFW) special-status habitats or plant species occur within the site or offsite improvement areas (EIR Appendix D).

Special-Status Plant Species

According to the California Natural Diversity Database and California Native Plant Society, 24 special-status plant species have been recorded in the *Steele Peak* and *Perris* quadrangles. No special-status plant species were observed onsite during the field investigation conducted for the Habitat Assessment and MSHCP Consistency Analysis. The site has been subject to decades of anthropogenic disturbances, which has removed native plant communities that have historically occurred. Based on the habitat requirements for the specific species with potential to exist in the quadrangles and the quality of the onsite habitat, the Habitat Assessment and MSHCP Consistency Analysis determined that the Specific Plan Area has a low potential to support smooth tarplant (*Centromadia pungens* ssp. *laevis*) and paniculate tarplant (*Deinandra paniculata*). The assessment determined that the Specific Plan Area and offsite improvement areas do not have potential to support any of the other special-status plant species known to occur in the vicinity of the site and all are presumed to be absent (EIR Appendix D).

Special-Status Wildlife Species

According to the California Natural Diversity Database, 80 special-status wildlife species have been reported in the *Steele Peak* and *Perris* quadrangles. Three special-status wildlife species were observed during the field investigation: burrowing owl, white-tailed kite, prairie falcon. Based on habitat requirements for specific species and the availability and quality of onsite habitats, it was determined that the Specific Plan Area has a high potential to support Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*Accipiter striatus*), Costa's hummingbird (*Calypte costae*), northern harrier (*Circus hudsonius*), and California horned lark (*Eremophila alpestris actia*); and a low potential to support great egret (*Ardea alba*), great blue heron (*Ardea herodias*), snowy egret (*Egretta thula*); loggerhead shrike (*Lanius ludovicianus*). The Habitat Assessment and MSHCP Consistency Analysis determined that all other species are presumed absent based on the lack of habitat onsite (EIR Appendix D).

Jurisdictional Waters and Wetlands

Two ephemeral drainage features occur onsite as shown on Figure 5.4-2. Drainage one enters the site from the lower western boundary of the Specific Plan Area through a 60-inch box culvert originating from underneath Frontage Road. The drainage runs from west to east within the Project site, extending from Frontage Road and terminating within the Specific Plan Area. Additionally, drainage two is a roadside ditch which extends from the western boundary of the site at the northeast corner of Orange Avenue and Frontage Road to the northwest corner of Orange Avenue and Barrett Avenue. The onsite ephemeral drainages are not a relatively permanent, standing, or continuously flowing body of water and does not qualify as waters of the United States. However, the onsite drainages will likely qualify as waters of the State and fall under the regulatory authority of the Santa Ana Regional Water Quality Control Board (Regional Water Board) and CDFW. As demonstrated by the Jurisdictional Delineation, approximately 0.23 acre (2,978 linear feet) of non-wetland waters of the State occur onsite under the jurisdictional authority of the Santa Ana Regional Water Board and CDFW streambeds total 0.25 acres (2,978 linear feet) (EIR Appendix D).

Wildlife Movement

As concluded in the Habitat Assessment, the Specific Plan Area has not been identified as occurring within a wildlife corridor or linkage. The nearest linkage to the Project site is located approximately 0.65 mile from the Project site and is associated with the Motte/Rimrock Reserve. The Specific Plan Area is surrounded by urban development, disturbed vacant lands, and roads. Furthermore, the Specific Plan Area has been disturbed and is isolated from regional wildlife corridors and linkages. There are no riparian corridors, creeks, or useful patches of natural areas within or connecting the site to a recognized corridor or linkage (EIR Appendix D).

Critical Habitat

The nearest designated Critical Habitat is located approximately 2.46 miles southeast of the Specific Plan Area for spreading navarretia and thread-leaved brodiaea (EIR Appendix D).

Western Riverside County MSHCP

The Specific Plan Area is located within the Western Riverside County MSHCP Area. The MSHCP is intended to preserve native habitats for the use of multiple species. Within the Plan Area, approximately 500,000 acres of land is further dedicated as MSHCP Conservation Area for the protection of Covered Species, the species which the MSHCP has selected to conserve. The Specific Plan Area is not within the Conservation Area. In addition, the Specific Plan Area is not located within an MSHCP Criteria Cell or Cell Group. However, the Specific Plan Area is located within MSHCP designated survey areas for burrowing owls as well as the following Narrow Endemic Plant Species: San Diego ambrosia (*Ambrosia pumila*), spreading navarretia (*Navarretia fossallis*), California Orcutt grass (*Orcuttia californica*), and Wright's trichocoronis (*Trichocoronis wrightii* var. *wrightii*), and Criteria Area Species San Jacinto Valley crownscale (*Atriplex coronata* var. *notatior*), Parish's crownscale (*Atriplex parishii*), Davidson's saltscare (*Atriplex serenana* var. *davidsonii*), thread-leaved brodiaea (*Brodiaea filifolia*), round-leaved filaree (*California macrophylla*), smooth tarplant (*Centromadia pungens* ssp. *laevis*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), little mousetail (*Myosurus minimus* ssp. *apus*), and mud nama (*Nama stenocarpa*) (EIR Appendix D).

4.5.5 Cultural Resources

Historical Setting

Euro-American development in San Bernardino County began in the 1800s due to immigration from the Midwest and East Coast of the United States and from Mexico. In the late 18th century, the San Gabriel, San Juan Capistrano, and San Luis Rey missions began colonizing Southern California and gradually expanded their use to the Inland Empire and western Riverside County, for raising grain and cattle to support the missions. In 1869, with the development of the transcontinental railroad, land speculators, developers, and colonists began to invest in Southern California. The first colony in present-day Riverside County was the City of Riverside, where Judge John Wesley North founded Riverside on part of the Jurupa Rancho. In May 1893, voters living within portion of San Bernardino County and San Diego County approved the formation of Riverside County.

In 1881, the California Southern Railroad laid tracks for the Santa Fe Railway transcontinental route through the plains west of Perris. Frederick Thomas Perris, for whom the City of Perris would be named, led the surveying and construction of the railroad route. The railroad was completed in 1882, which brought hundreds of settlers to the area looking to homestead, largely in Pinacate to the south. In 1885, the citizens of Pinacate gathered together to create a more conveniently located station along the railroad route, and in 1886, the town site of Perris was established. In 1911, Perris became an incorporated city, relying heavily upon dry grain farming and citrus groves. In addition to agriculture, the area was also influenced by the development of March Field, which was established on March 1, 1918, as the Alessandro Flying Training Field after the United States entered World War I. Although Perris remained largely agricultural throughout the twentieth century, in recent years, the City has seen a growth in residential and industrial development.

Archaeological Setting

The Phase I Cultural Resources Assessment details that the prehistoric setting begins with the Paleo Indian Period (11,500 to circa 9,000 years ago) (EIR Appendix H). Paleo Indians were likely attracted to multiple habitat types, including mountains, marshlands, estuaries, and lakeshores. These people likely subsisted using more generalized hunting, gathering, and collecting of birds, mollusks, and large and small animals.

The Archaic Period (circa 9,000 to 1,300 years ago) was a period where increased moisture allowed for more extensive occupation of the region. The material culture related to this time period includes mortar and pestle, dart points, and arrow points.

Approximately 1,500 years ago, during the Late Prehistoric Period, bow and arrow technology started to emerge. Brownware and buffware pottery vessels started to diffuse across the Southern California deserts. The shift in material culture assemblages is largely attributed to the emergence of Shoshonean (Takis-speaking) people who entered California from the east.

Sedentism continued to intensify through the Protohistoric Period (410 to 180 years ago). Ceramic technology appeared in the region during the Protohistoric Period, which ended with the beginning of Spanish settlement in 1769.

The Specific Plan Area is within an area where the traditional use territories of the Gabrielino, Luiseño, and Cahuilla meet. The Phase I Cultural Resources Assessment identified 24 prehistoric resources within one mile of the Specific Plan Area. These prehistoric resources include 20 bedrock milling sites, one habitation site with pictographs, two pictograph sites, and one isolate (EIR Appendix H).

Project Site

The Phase I Cultural Resources Assessment details that as early as 1901, at least three structures were developed on the Project site. By 1938, a farm/dairy complex was located at the northeastern corner of Orange and Indian avenues; one rural residential property was located just southeast of the intersection Orange and Indian avenues; and one rural residential property was located just north of Orange Avenue and west of Indian Avenue. By 1959, the residential property located just north of Orange Avenue and west of Indian Avenue was removed and Val Verde School is developed. By 1967, one new residence was developed at the northwest corner of Orange and Indian avenues and two residences at southwest corner. By 1978, an additional residence had been constructed southwest of the intersection Orange and Indian Avenues. Between 1985 and 1997, the rural residential property located just southeast of the intersection Orange and Indian Avenues was removed, and the farm/dairy complex at the northeastern corner of Orange and Indian Avenues was removed by 2000 (EIR Appendix H).

Currently, the Project site contains multiple buildings at Val Verde School, remnants of two previously demolished residential structures (2334 Indian Avenue and 2364 Indian Avenue), and two residential structures (2304 Indian Avenue and 2411 Indian Avenue) that are older than 50 years. At the time of issuance of the Notice of Preparation, three residences existed within the Specific Plan Area. The third residential structure (2334 Indian Avenue) was demolished in October 2024 due to safety reasons. In addition, the foundational remains of the former agricultural complex are located at the southeast corner of Orange Avenue and Indian Avenue (EIR Appendix I).

4.5.6 Energy

Electricity

The Southern California Edison Company (SCE) is the electrical purveyor in the City of Perris. SCE provides electricity service to more than 14 million people in a 50,000 square-mile area of central, coastal and Southern California. California utilities are experiencing increasing demands that require modernization of the electric distribution grid to, among other things, accommodate two-way flows of electricity and increase the grid's capacity. SCE is in the process of implementing infrastructure upgrades to ensure the ability to meet future demands. In addition, as described by the Edison International 2022 Annual Report, the SCE electrical grid modernization effort supports implementation of California requirements to achieve carbon neutrality by 2045. The State has set Renewables Portfolio Standards that require retail sellers of electricity to provide 60 percent of power from renewable resources by 2030. The State also requires sellers of electricity to deliver 100 percent of retail sales from carbon-free sources by 2045, including interim targets of 90 percent by 2035 and 95 percent by 2040. In 2023, approximately 49 percent of power that SCE delivered to customers came from carbon-free resources (SCE, 2023).

The Project site is adjacent to the electricity distribution system that exists within the roadways adjacent to the Project site.

Natural Gas

The Southern California Gas Company (SoCalGas) is the natural gas purveyor in the City of Perris and is the principal distributor of natural gas in Southern California. SoCalGas estimates that gas demand will decline at an annual rate of 0.7 percent from 2024 to 2040 due to Title 20 and 24 Codes and Standards and renewable energy goals that impact gas-fired electricity. The gas supply available to SoCalGas is regionally diverse and includes supplies from California sources (onshore and offshore), Southwestern U.S. supply sources, the Rocky Mountains, and Canada. SoCalGas designs its facilities and supplies to provide

continuous service during extreme peak demands and has identified the ability to meet peak demands through 2040 (CGEU, 2024).

4.5.7 Geology and Soils

The City of Perris generally lies within the Perris block of the Peninsular Ranges of Southern California. The Peninsular Ranges are characterized by steep, elongated ranges and valleys that generally trend northwestward. The bedrock geology that dominates the eastern portion of the Perris Block specifically, consists of Cretaceous and older crystalline and metamorphic rock. The Peninsular Ranges have been significantly disrupted by Tertiary and Quaternary strike-slip faulting along the Elsinore and San Jacinto faults. This tectonic activity has resulted in the present terrain (City of Perris, 2011).

Faults and Ground Shaking

The Project site is not within an Alquist-Priolo Earthquake Fault Zone, nor is it within a Riverside County fault zone. According to the Geotechnical Investigation prepared by Southern California Geotechnical (included as EIR Appendix K), there is no evidence of faulting within the Specific Plan Area, therefore the possibility of ground rupture is onsite low. The nearest active fault zones are the San Jacinto Fault Zone, located approximately 9 miles northeast of the Specific Plan Area, and the Elsinore Fault Zone, located approximately 13.1 miles southwest of the Specific Plan Area. However, both of these faults, as well as other faults in the Southern California region could cause moderate to intense ground shaking in Perris (EIR Appendix K).

Ground Rupture

Ground rupture occurs when movement on a fault breaks through to the surface. Surface rupture usually occurs along pre-existing fault traces where zones of weakness exist. The State has established Earthquake Fault Zones for the purpose of mitigating the hazard of fault rupture by prohibiting the location of most human occupancy structures across the traces of active faults. Earthquake Fault Zones are regulatory zones that encompass surface traces of active faults with a potential for future surface fault rupture. The nearest Earthquake Fault Zone is the San Jacinto Fault Zone. As described above, there are no fault zones within the vicinity of the Specific Plan Area. Therefore, ground rupture potential is considered to be low within and surrounding the Specific Plan Area.

Soils

The Geotechnical Investigation describes that young and old native alluvium was encountered at the ground surface of all boring locations (shown in Appendix A of the Geotechnical Investigation). The young native alluvial soil extends to depths of approximately 2.5 to 5.5 feet below existing site grades and consists of loose to medium dense silty fine sands, silty fine to medium sands, fine sandy silts, and clayey fine sands. Older native alluvium was encountered beneath the younger native alluvial soils at all boring locations, extending at least to the maximum depth explored of 50 feet below ground surface. The alluvium generally consists of medium dense to very dense well- to poorly-graded silty sands with varying clay content, well-graded to poorly-graded sandy silts with varying clay content, well-graded to poorly graded clayey sands with varying silt content, and clayey silts. Additionally, layers of very stiff to hard fine sandy clays and silty clays were encountered (EIR Appendix K).

Expansive Soils

Expansive soils are soils containing water-absorbing minerals that expand as they take in water. These soils can damage buildings due to the force they exert as they expand. Expansive soils contain certain types of

clay minerals that shrink or swell as the moisture content changes; the shrinking or swelling can shift, crack, or break structures built on such soils. Arid or semiarid areas with seasonal changes of soil moisture experience a much higher frequency of problems from expansive soils than areas with higher rainfall and more constant soil moisture. The Geotechnical Investigation describes that the near-surface soils within the Specific Plan Area consist of loose to medium dense silty fine sands, silty fine to medium sands, fine sandy silts, clayey fine sands. The Geotechnical Investigation explains and concludes that these soils are classified as having low to very low expansion potential (EIR Appendix K).

Groundwater

Groundwater was not encountered during drilling at the maximum explored depth of 50 feet below ground surface. The nearest monitoring well is located on the northeast corner of the Specific Plan Area. Water level readings within this monitoring well from March 2023 indicates a groundwater level of approximately 40 feet below ground surface (EIR Appendix K).

Liquefaction, Lateral Spreading, and Settlement

Liquefaction occurs when vibrations or water pressure within a mass of soil cause the soil particles to lose contact with one another. As a result, the soil behaves like a liquid, has an inability to support weight, and can flow down very gentle slopes. This condition is usually temporary and is most often caused by an earthquake vibrating water-saturated fill or unconsolidated soil. Soils that are most susceptible to liquefaction are clean, loose, saturated, and uniformly graded fine-grained sands that lie below the groundwater table within approximately 50 feet below ground surface. Clayey (cohesive) soils or soils which possess clay particles in excess of 20 percent are generally not considered to be susceptible to liquefaction, nor are those soils which are above the historic static groundwater table.

Different phenomena associated with liquefaction are described below:

Lateral Spreading: Lateral spreading is the lateral movement of stiff, surficial blocks of sediments as a result of a subsurface layer liquefying. The lateral movements can cause ground fissures or extensional, open cracks at the surface as the blocks move toward a slope face, such as a stream bank or in the direction of a gentle slope. When the shaking stops, these isolated blocks of sediments come to rest in a place different from their original location and may be tilted.

Ground Oscillation: Ground oscillation occurs when liquefaction occurs at depth but the slopes are too gentle to permit lateral displacement. In this case, individual blocks may separate and oscillate on a liquefied layer. Sand boils and fissures are often associated with this phenomenon.

Bearing Strength Loss: Bearing strength is the maximum stress load, or force, that the soil can support. Bearing strength decreases with a decrease in effective stress, which is the force that allows soil to remain cohesive. Loss of bearing strength occurs when the effective stresses are reduced due to the fluctuating stresses or strains caused by an earthquake. Even if the soil does not liquefy, the bearing of the soil may be reduced below its value either prior to or after the earthquake. If the bearing strength is sufficiently reduced, structures supported on the sediments can settle, tilt, or even float upward in the case of lightly loaded structures such as gas pipelines.

Ground Fissuring and Sand Boils: A ground fissure is a long narrow crack in the earth's surface while a sand boil is an eruption of water from sand. As apparent from the above descriptions, the likelihood of ground fissures developing is high when lateral spreading, ground oscillations, and flow failure occur. Sand boils occur when the high water pressures are relieved by drainage to the surface along weak spots that may have been created by fissuring. As the water flows to the surface, it can carry sediments, and if the pore

water pressures are high enough create a gusher (sand boils) at the point of exit. The following conditions are conducive to the formation of these phenomena:

- Sediments must be relatively young in age and must not have developed large amounts of cementation;
- Sediments must consist mainly of cohesionless sands and silts;
- The sediment must not have a high relative density;
- Free groundwater must exist in the sediment; and
- The site must be exposed to seismic events of a magnitude large enough to induce straining of soil particles.

During the Geotechnical Investigation, groundwater was not encountered within the Specific Plan Area at the maximum explored depth of 50 feet below ground surface. According to the Riverside County Geographic Information System website, the Specific Plan Area is located within a zone of low liquefaction susceptibility (Riverside County, 2023). In addition, the subsurface conditions encountered at the boring locations are not considered to be conducive to liquefaction (EIR Appendix K).

Due to the lack of active faults or fault zones within the vicinity, the Specific Plan Area has low potential for lateral spreading. The Geotechnical Investigation concluded that soils within the Specific Plan Area have a low potential for collapse (EIR Appendix K).

Subsidence

Ground subsidence is the gradual settling or sinking of the ground surface with little or no horizontal movement, and occurs in areas with subterranean oil, gas, or groundwater. Effects of subsidence include fissures, sinkholes, depressions, and disruption of surface drainage. According to the Geotechnical Investigation, an estimated shrinkage potential of 4 to 12 percent would be expected during removal and recompaction of the artificial fill and near-surface native soils. A subsidence of 0.1 feet is estimated to occur within the Specific Plan Area (EIR Appendix K).

Landslides

Landslides are the downhill movement of masses of earth and rock and are often associated with earthquakes; but other factors, such as the slope, moisture content of the soil, composition of the subsurface geology, heavy rains, and improper grading can influence the occurrence of landslides. Earthquake-induced land sliding often occurs in areas where previous landslides have moved and in areas where the topographic, geologic, geotechnical, and subsurface groundwater conditions are conducive to permanent ground displacements. The Specific Plan Area, while relatively flat, slopes downward to the east at a gradient of approximately 1.5 percent (EIR Appendix K). There are no slopes within the immediate vicinity of the Specific Plan Area.

Unique Geologic Features

Unique geologic features refer to unique physical features or structures on the earth's crust. The Specific Plan Area consists of Holocene-aged alluvial fan deposits overlaying Pleistocene (over 11,700 years ago) alluvial fan deposits (Qvof). The geologic processes that occurred on the Specific Plan Area and in the vicinity are generally the same as those in other parts of the city and throughout the state (EIR Appendix L).

Paleontological Resources

Paleontological resources include fossilized remains, traces, or imprints of organisms, preserved in or on the earth's crust, that are of paleontological interest and that provide information about the history of life on

earth. Significant paleontological resources are defined as fossils or assemblages of fossils that are unique, unusual, rare, uncommon, or important to define a particular time frame or geologic strata, or that add to an existing body of knowledge in specific areas, in local formations, or regionally.

The young Holocene-aged alluvial fan deposits mapped at the surface in the Project are considered to have low potential to yield significant paleontological resources. However, the underlying Pleistocene alluvial fan deposits are considered to have high paleontological sensitivity (EIR Appendix L).

A paleontological literature review and records search was conducted for the Specific Plan Area (included as EIR Appendix L). The records search did not identify any previously recorded fossil localities within the boundaries and offsite disturbance areas of the Project. The closest known recorded fossil locality is 1.25 northeast of the Specific Plan Area, consisting of the bones of a pond turtle (*Actinemys cf. pallida*), Pacific mastodon (*Mammut pacificus*), extinct horse (*Equus sp.*), and extinct bison (*Bison sp.*) (EIR Appendix L). Based on the presence of nearby significant fossil localities, the underlying Pleistocene old alluvial fan deposits mapped at the Specific Plan Area are considered to have a high potential to yield significant paleontological resources (EIR Appendix L).

4.5.8 Greenhouse Gas Emissions

Gases that trap heat in the atmosphere are called greenhouse gases (GHGs). The major concern with GHGs is that increases in their concentrations are contributing to global climate change. Global climate change is a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the rate of global climate change and the extent of the impacts attributable to human activities, most in the scientific community agree that there is a direct link between increased emissions of GHGs and long-term global temperature increases.

The principal GHGs are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). Because different GHGs have different warming potential, and CO₂ is the most common reference gas for climate change, GHG emissions are often quantified and reported as CO₂ equivalents (CO₂e). For example, sulfur hexafluoride is a GHG commonly used in the utility industry as an insulating gas in circuit breakers and other electronic equipment. Sulfur hexafluoride, while comprising a small fraction of the total GHGs emitted annually world-wide, is a much more potent GHG, with 22,800 times the global warming potential as CO₂. Therefore, an emission of one metric ton (MT) of sulfur hexafluoride could be reported as an emission of 22,800 MT of CO₂e. Large emission sources are reported in million metric tons (MMT) of CO₂e.

The Project site includes two single-family residences, vacant land that has been disturbed from previous agricultural uses, and developed roadways, as shown in Figure 3-3, *Aerial View*. The Specific Plan Overlay Area is currently developed with Val Verde Elementary School. GHG emissions are currently generated from operation of the existing residences and school, related vehicle trips, and by occasional disking and weed control activities onsite.

The primary GHG emissions within the City of Perris are from on-road transportation, building energy, and waste.

4.5.9 Hazards and Hazardous Materials

Environmental Site Conditions

The Specific Plan Area is currently undeveloped and disturbed from previous agricultural activities. The site is vacant, except for Val Verde Elementary School in the Specific Plan Overlay area and two single-family residences and remnants of two previously demolished single-family residences near the intersection of Indian

Avenue and Orange Avenue. The Specific Plan Area contains ruderal habitat, consisting of non-native grasses. In addition, the site is disked on a regular basis for weed abatement. The site is relatively flat with a slight regional slope toward the east/southeast. The offsite improvement alignments consist of paved roads.

The Specific Plan Area was historically used for agricultural purposes as early as 1901. As such, there is a potential that agricultural chemicals such as pesticides, herbicides, and fertilizers, were used on site and exist in site soils. In addition to the agricultural uses onsite, Evans Transportation, a small business historically located at 1936 Indian Street, near the center of the Specific Plan Area was identified in regulatory databases and regulatory agency files as the location of two former fuel underground storage tanks, one that stored gasoline and the other diesel. The underground storage tanks were moved in 1992 and initial testing indicated the presence of total petroleum hydrocarbons and Volatile Organic Compounds in soil samples. The soil was excavated to a landfill and the confirmation soil sampling showed that total petroleum hydrocarbons concentrations were below regulatory screening levels. This property is considered a historical recognized environmental condition. Val Verde Elementary School, located within the proposed Specific Plan Overlay area has been operational since 1967, and had two 1,000-gallon underground storage tanks removed from the site in 1993. Confirmation soil samples at that time did not show evidence of releases from the tanks, but did indicate that there had been releases from the piping leading to the dispensers. A total of 566 cubic yards of gasoline-impacted soil was excavated to a total depth of 31 feet below ground surface. Based on the results of the remedial excavation work, the California Department of Toxic Substances Control concluded that no actual or potential hazardous substance release was indicated which would pose a threat to human health or the environment. No storage tanks are currently located within the Specific Plan Area.

The use of asbestos-containing material and lead based paint was common in building construction prior to 1978. Because some of the structures on the Specific Plan Area were constructed prior to 1978, there is potential for asbestos containing materials and/or lead based paint to be present. One of the onsite residences, located at 2304 Indian Avenue, had asbestos containing waste removed from the site in 2015 (EIR Appendix N).

Evacuation Routes

According to the City of Perris General Plan Safety Element, Figure S-1: *Potential Evacuation Routes*, Indian Avenue and Perris Boulevard are designated as a City evacuation route (City of Perris, 2021).

4.5.10 Hydrology and Water Quality

Regional Hydrology

The City of Perris is in the Santa Ana River Basin, a 2,700-square-mile area in the Coastal Range Province of Southern California located roughly between Los Angeles and San Diego. The San Jacinto watershed in western Riverside County consists mainly of snowmelt and storm runoff from the Santa Rosa and San Jacinto mountains.

Watershed

The Specific Plan Area is located in the San Jacinto River watershed. The San Jacinto River is a 42-mile-long river in Riverside County. The watershed covers approximately 780 square miles in western Riverside County. The river's headwaters are in Santa Rosa and San Jacinto Mountains National Monument. Water flows downstream and eventually ends in Lake Elsinore. The natural flow of water through the San Jacinto Watershed carries nutrient-rich sediment into our Canyon Lake and Lake Elsinore (LESJWA, 2023).

Groundwater Basin

The Specific Plan Area is located within the West San Jacinto Groundwater Basin, a 248 square mile groundwater basin, and is managed through the West San Jacinto Groundwater Management Plan. Within the West San Jacinto Groundwater Basin, the Specific Plan Area is located within the Perris North groundwater management zone. The Eastern Municipal Water District (EMWD) oversees groundwater monitoring programs within the plan area (EMWD, 2021a).

Surface Water Quality

The nearest surface water is the Perris Valley Storm Channel, located approximately 0.9 miles to the east of the Specific Plan Area. The Perris Valley Storm Channel is the main receiving water for the Project site and is not classified as an impaired water body. Other receiving waters include the San Jacinto River (Reach 1 and 3), which is not impaired, Canyon Lake, and Lake Elsinore. Canyon Lake and Lake Elsinore are classified as impaired water bodies and have been placed on the 303(d) list of impaired waters. Since the development site is a tributary to Canyon Lake and Lake Elsinore, the development site is a contributor of pollutants to the impairments within Canyon Lake and Lake Elsinore.

Groundwater

As identified by the EMWD 2020 Urban Water Management Plan, potable groundwater is produced from the West San Jacinto Basin and the Hemet/San Jacinto Basin. Groundwater in portions of the West San Jacinto Basin is high in salinity and requires desalination for potable use (EMWD, 2020).

There are currently two active water wells located within the Specific Plan Area. One well is located at the 2364 Indian Avenue property and one well is located southeast of the Perris Boulevard and Orange Avenue intersection. Water level readings from 2023 indicate a groundwater level of approximately 40 feet below the ground surface (Southern California Geotechnical, 2023). Historically, the wells produced up to 419 acre-feet per year in 2004 (City of Perris, 2008).

Existing Drainage

Topographically, the site is relatively flat with elevations ranging from 1,435 to 1,480 feet above mean sea level. Existing onsite runoff sheet-flows eastward until reaching Perris Boulevard where it is collected by City and County storm drain facilities and discharged into the Perris Valley Storm Channel (EIR Appendix P). In addition, two ephemeral drainage features occur onsite. Drainage 1 enters the site from the lower western boundary of the Project site (in the Phase 1 area) through a 60-inch box culvert originating from underneath Frontage Road. The drainage runs from west to east within the Project site, extending from Frontage Road and terminating within the Project site. Additionally, Drainage 2 is a roadside ditch which extends from the western boundary of the site at the northeast corner of Orange Avenue and Frontage Road to the northwest corner of Orange Avenue and Barrett Avenue (EIR Appendix F). Drainage 2 is located within the Phase 1 roadway improvement area for Orange Avenue.

Flood Zone

According to the Flood Insurance Rate Map, published by the Federal Emergency Management Agency (FEMA) (06065C1430H and 06065C1440H), the Project site is primarily located in Zone X, which is an area of minimal flood hazard (FEMA, 2024). The eastern portion of the Specific Plan Area is located within a dam inundation hazard zone related to the Perris Dam.

4.5.11 Land Use and Planning

The Project area encompasses approximately 358.28 acres and is generally bounded by I-215 to the west, Perris Boulevard to the east, Nuevo Road to the south, and Placentia Avenue to the north. The Project site has a General Plan land use designation of HL SP – Harvest Landing Specific Plan. The Harvest Landing Specific Plan establishes the zoning for the properties within the existing Specific Plan boundaries. The currently adopted Harvest Landing Specific Plan is a land-use guiding document providing for residential, business, commercial, and open space uses for an area of 341.1 gross acres. As shown on Figure 3-4, within the existing Harvest Landing Specific Plan, the site contains a variety of land use designations including Multiple Businesses (MBU), Harvest Landing Sports Park, Community Recreation, Park, Low Residential, Medium Residential, Medium-High Residential, and High Residential. The Specific Plan Area includes three legal non-conforming single-family residences located within the existing MBU area, vacant land that has been disturbed from previous agricultural uses, and developed roadways, as shown in Figure 3-3, *Aerial View*. The Specific Plan Overlay Area is currently developed with Val Verde Elementary School.

4.5.12 Noise

Existing Noise Levels

Ambient noise levels in the Specific Plan Area are dominated by the transportation-related noise associated with surface streets in addition to background aircraft activities. This includes the auto and heavy truck activities on study area roadways. Existing daytime noise levels range from 52.1 to 67.2 dBA CNEL (EIR Appendix Q).

Existing Vibration

Aside from periodic construction work that may occur in the vicinity of the Specific Plan Area, other sources of groundborne vibration include heavy-duty vehicular travel (e.g., refuse trucks and delivery trucks) on area roadways. Trucks traveling at a distance of 50 feet typically generate groundborne vibration velocity levels of around 63 VdB (approximately 0.006 inch per second PPV) and could reach 72 VdB (approximately 0.016 inch per second PPV) when trucks pass over bumps in the road (FTA, 2006).

Existing Airport Noise

Perris Valley Airport is located approximately 2.3 miles southwest of the Specific Plan Area. The Specific Plan Area is located outside the 55 dBA CNEL airport noise level contour boundaries, as shown in Figure 5.12-2, *Project Site and the Perris Valley Airport Noise Contours*. In addition, March ARB/IPA is located approximately 2.9 miles northwest of the Specific Plan Area. The Specific Plan Area is located outside of the March ARB/IPA 60 dBA CNEL airport noise level contour boundaries.

4.5.13 Population and Housing

Population

According to Connect SoCal 2024, the 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy prepared by the Southern California Association of Governments, the population of the City of Perris is anticipated to increase from 78,000 persons in 2019 to 145,096 persons in 2050; an increase of 67,096 persons (as summarized below in Table 5.13-2). This represents an 86 percent increase between 2019 and 2050. Comparatively, the entire population of Riverside County is anticipated to increase from 2,386,000 persons in 2019 to 2,992,000 persons in 2050, an increase in 606,000 persons. This represents a 25 percent increase.

Housing

According to Connect SoCal 2024, the City of Perris is projected to add approximately 16,000 households between 2019 and 2050. Comparatively, the County as a whole is expected to add approximately 318,000 households between 2019 and 2050.

Employment

According to Connect SoCal 2024, the City of Perris is projected to add approximately 15,000 jobs between 2019 and 2050. This represents an increase of approximately 82 percent. Comparatively, the entire County is projected to add approximately 338,000 jobs (or 40 percent) between 2019 and 2050.

Jobs-Housing Ratio

The approximate 2021 jobs-to-housing ratios for the City of Perris and Riverside County are 0.94 and 0.78, respectively; that is, both the City of Perris and Riverside County are housing-rich. Therefore, it is possible that residents in the City of Perris may need to commute to other incorporated cities or other counties for employment. In 2021, approximately 18 percent of workers within the City of Perris commuted seven or more hours weekly (SCAG, 2022).

4.5.1 4 Public Services

Fire Protection Services

The Riverside County Fire Department (RCFD) provides fire prevention, suppression, and paramedic services to the City of Perris, including to the Project site. The RCFD provides fire suppression, emergency medical services (paramedic and non-paramedic), ambulance services, hazardous materials (HAZMAT) response, arson investigation, technical rescue, winter rescue operations, hazard abatement, and terrorism and weapons of mass destruction. The RCFD provides for the management of community safety services such as fire prevention, building construction plans and permits, household hazardous waste, and local oversight and collection program for hazardous materials. There are four existing stations within seven miles of the Specific Plan Area.

Police Services

The Riverside County Sheriff's Office, under contract with the City of Perris and operating as the Perris Police Department, provides contract law enforcement services to the City of Perris, including the Project site. Twelve sheriff stations are located throughout Riverside County to provide area-level community service (Riverside County Sheriff, n.d.). The Perris Police Station is located approximately 1.8 miles south of the Project site at 137 N Perris Boulevard.

Per correspondence with Lieutenant Wade Lenton from the Perris Police Station, the City has one captain, four lieutenants, seventy-four sworn officers, and thirty-seven non-sworn personnel to provide community policing services. The Riverside County Sheriff's Office and Perris Police Department use a staffing standard of one officer per 1,000 residents (City of Perris, 2005b). The current officer-to-citizen ratio is 0.89 sworn officers per 1,000 residents (Wade Lenton, personal communication, August 22, 2023).

Park Services

The City of Perris Community Services Department operates 25 park facilities within the City. The Perris park system is comprised of 27 parks including four community parks, 15 neighborhood parks, and eight pocket

parks. As of 2021, the City of Perris had a total of 189 acres of parkland resulting in a level of service of 2.4 acres of parks for every 1,000 residents (City of Perris, 2021).

School Services

The Project site is located north of Citrus Avenue and is within the Val Verde Unified School District (VVUSD) boundary (VVUSD, n.d.). The portion of the Project site located south of Citrus Avenue is within the Perris Elementary School District (PESD, 2022) and the Perris Union High School District (PUHSD, n.d.).

The VVUSD currently operates 24 schools, including: one pre-school, 13 elementary schools, four middle schools, and four high schools. As of the 2024-2025 school year, the VVUSD had a total of 19,379 students (VVUSD, 2024). Val Verde Elementary School is currently located at 2656 Indian Avenue, which consists of the proposed Overlay area of the Phase 2 portion of the Project site.

The Perris Elementary School District operates ten schools, including: two preschools, seven elementary schools, and one charter school. As of the 2023-2024 school year, the Perris Elementary School District had a total of 5,538 students (CDE, 2024). The Perris Union High School District operates four schools. As of the 2023-2024 school year, the Perris Unified High School District had a total of 11,973 students (CDE, 2024).

Other Public Facilities

Other facilities include the Riverside County Library System, which provides library services to the Project area. The Riverside County Library System operates a system of 35 libraries and two book mobiles as well as an automated network of library resources that can be accessed by County residents via the Internet. As of 2024, the Riverside County Library System's catalog included 1.3 million items. The Project vicinity is primarily served by the Cesar E. Chavez Library, which is closed until further notice, and the Mead Valley Library, located at 21580 Oakwood Street in Mead Valley (Riverside County Library System, 2024). Public roadways within the City of Perris are maintained by the City of Perris Public Works Department.

4.5.15 Recreation

There are no existing parks within the Specific Plan Area. The City currently has seven parks that provide 82.09 acres of parkland within 2 miles of the Specific Plan Area. Two parks, Paragon Park and Copper Creek Park, are within a 10-minute walking distance.

4.5.16 Transportation

Existing Roadway Network

The Project traffic study area includes roadways bordering the Project site: I-215 to the west, Perris Boulevard to the east, Nuevo Road to the south, and Placentia Avenue to the north. Roadways within the Project site include Orange Avenue, Citrus Avenue, Barrett Avenue, and Indian Street. Roadways within the Project vicinity include Iris Avenue, Krameria Avenue, Knox Boulevard, Markham Street, Ramona Expressway, Morgan Street, and Rider Street to the north and Mildred Street, San Jacinto Avenue, and 4th Street to the south. Roadways in the Project vicinity include Harvill Avenue to the west and Redlands Avenue, Kitching Street, Evans Road, Murrieta Road to the east.

Existing Truck Routes

The City of Perris General Plan Circulation Element designates truck routes. The designated truck routes are intended to indicate arterial streets, which may be used by trucks, tractors, trailers, and other vehicles exceeding a maximum gross weight limit of five tons. The City of Perris General Plan-designated truck route

map is shown on Figure 5.16-2, *Perris Truck Routes*. As shown, I-215 interchanges, Knox Boulevard, Indian Avenue, Redlands Avenue, Morgan Street, portions of Rider Street, San Jacinto Avenue, and Placentia Avenue are identified as designated truck routes.

Existing Site Access

Regional access to the proposed Project site is provided by I-215, south of the Project through W Nuevo Road and North of the Project at Placentia Avenue. Local access to the site is via Frontage Road, Placentia Avenue, Orange Avenue, Barrett Avenue Perris Boulevard and Nuevo Road.

Existing Transit Service

The Project site is currently served by the Riverside Transit Agency with bus services along Perris Boulevard, Morgan Street, Ramona Expressway, Nuevo Road, and I-215 Freeway. Route 19 runs along Indian Avenue, Morgan Street, Ramona Expressway, Perris Boulevard and stops at Perris Station Transit Center, Perris Boulevard and Nuevo Road, and Perris Boulevard and Ramona Expressway. Route 27 runs along I-215, Nuevo Road, Perris Boulevard, and San Jacinto Avenue and stops at Trautwein Road and Van Buren Boulevard, Perris Boulevard and Nuevo Road, and Perris Station Transit Center. Route 30 runs along Morgan Street, Orange Avenue, Nuevo Road, Redlands Avenue, Perris Boulevard and stops at Perris Station Transit Center, 4th Street and Perris Boulevard, Perris Boulevard and Nuevo Road. Route 41 runs along Morgan Street, Indian Avenue, Evans Road, Perris Boulevard, and Ramona Expressway and stops at Mead Valley Community Center, Morgan Street and Indian Avenue, Perris Boulevard and Ramona Expressway, and Evans Road and Rider Street.

Existing Bicycle and Pedestrian Facilities

The City of Perris General Plan Circulation Element identifies the existing and recommended bikeway systems for the City. Within the vicinity of the Specific Plan, Placentia Avenue contains a Class II bicycle lane. Within the Project vicinity, a Bicycle Lane (Class II) is recommended for Placentia Avenue, Indian Avenue, Frontage Road, and Citrus Avenue and a Buffered Bike Lane (Class IIB) is recommended for Perris Boulevard, Orange Avenue, and Nuevo Road. The City's bikeway system is as shown below in Figure 5.16-3. Sidewalks that currently exist along roadways in the vicinity of the Project site are presented in Table 5.16-1.

Existing Vehicle Miles Traveled

The Project site contains two single-family residences, Val Verde Elementary School, and vacant land. The existing residential and school uses currently generate trips that result in vehicle miles traveled (VMT) to and from the site. As shown in Figure 5.16-1, the area east of Indian Avenue is within a Transit Priority Area according to the WRCOG VMT Tool. The Project site is located in traffic analysis zones (TAZ) 1797, 1798, and 1870. TAZ 1797's VMT per Worker is 17, TAZ 1798's VMT per Worker is 16.8, and TAZ 1870's VMT per Worker is 16.6.

4.5.17 Tribal Cultural Resources

The Specific Plan Area is within an area where the traditional use territories of the Gabrielino, Luiseño, and Cahuilla peoples (EIR Appendix H).

Due to the nature of prehistoric archaeological sites identified by the Phase I Cultural Resources Assessment, the prehistoric setting discussion begins at the Paleo Indian Period (11,500 to circa 9,000 years ago). Paleo Indians were likely attracted to multiple habitat types, including mountains, marshlands, estuaries, and lakeshores. These people likely subsisted using more generalized hunting, gathering, and collecting of birds, mollusks, and large and small animals.

The Archaic Period (circa 9,000 to 1,300 years ago) was a period where increased moisture allowed for more extensive occupation of the region. The material culture related to this time period includes mortar and pestle, dart points, and arrow points. The shifts in food processing technologies during each of these phases indicate a change in subsistence strategies; although people were still hunting for large game, plant-based foods eventually became the primary dietary resource.

Approximately 1,500 years ago, during the Late Prehistoric Period, bow and arrow technology started to emerge. This period is characterized by higher population densities and elaborations in social, political, and technological systems. Economic systems diversified and intensified during this period with the continued elaboration of trade networks, the use of shell-bead currency, and the appearance of more labor-intensive, yet effective, technological innovations. The shift in material culture assemblages is largely attributed to the emergence of Takic-speaking people who entered California from the east.

Takic-speaking groups continued to intensify through the Protohistoric Period (410 to 180 years ago). Three Takic-speaking groups occupied portions of Riverside County: the Cahuilla, the Gabrielino, and the Luiseño. The geographic boundaries between these groups in pre- and proto-historic times are difficult to place, but the Project site is located well within the borders of ethnographic Luiseño territory.

The Phase I Cultural Resources Assessment identified 24 prehistoric resources within one mile of the Specific Plan Area. These prehistoric resources include 20 bedrock milling sites, one habitation site with pictographs, two pictograph sites, and one isolate. None of the archeological resources are within the Specific Plan Area.

Currently, the site is mostly vacant except for two single-family residences, remnants of two previously demolished residences, and Val Verde Elementary School. The rest of the Specific Plan Area has been disturbed from past use as agricultural fields and from modern disking. The Project vicinity (within a 1-mile radius of the Specific Plan Area) is listed on the California Native American Heritage Commission Sacred Lands File.

4.5.18 Utilities and Service Systems

Water Supply and Demand

The EMWD has four sources of water supply: imported water from the Metropolitan Water District of Southern California (MWD), local groundwater, desalinated groundwater, and recycled water (EMWD, 2021c). The EMWD's water supply is a combination of purchased or imported water, groundwater, and recycled water. The EMWD estimates that water supplies in the future are anticipated to be obtained through a similar mix of purchased or imported water, groundwater, and recycled water. The EMWD's 2020 Urban Water Management Plan anticipates that the EMWD's water supply will increase from 204,800 acre-feet in 2025 to 239,200 acre-feet in 2045 (increase of 42,600 acre-feet per year) to meet the EMWD's anticipated growth in water demands.

Water Infrastructure

Within the immediate vicinity of the Specific Plan, Indian Avenue contains a 24-inch water line, Placentia Avenue contains a 12-inch water line, North Perris Boulevard contains an 18-inch water line, Orange Avenue west of Indian Avenue contains an 8-inch water line, and Orange Avenue east of Barrett Avenue contains a 12-inch water line.

Wastewater

The EMWD provides wastewater collection, treatment, and recycled water services throughout its service area, including the Project site. The EMWD operates four regional water reclamation facilities within its service area: the San Jacinto Valley Regional Water Reclamation Facility, the Moreno Valley Regional

Water Reclamation Facility, the Temecula Valley Regional Water Reclamation Facility, and the Perris Valley Regional Water Reclamation Facility. The four regional water reclamation facilities have a combined capacity of 84,010 acre-feet per year (EMWD, n.d.). The Perris Valley Regional Water Reclamation Facility is closest to the Specific Plan and has a treatment capacity of 22 million gallons per day or 24,643 acre-feet per year. The typical daily flows to the Perris Valley Regional Water Reclamation Facility are 15.5 million gallons per day of wastewater and the facility has an ultimate capacity of 100 million gallons per day (EMWD, 2021b).

Wastewater Infrastructure

Within the immediate vicinity of the Specific Plan, Orange Avenue contains a 12-inch sewer line, Barrett Avenue contains a 10-inch sewer line, and Indian Avenue contains an 8-inch sewer line north of Orange Avenue. A portion of Perris Boulevard, directly south of Orange Avenue, contains an 8-inch sewer line.

Stormwater

The Specific Plan is partially developed and contains approximately 30,000 square feet of impervious area. Topographically, the site is relatively flat with elevations ranging from 1,435 to 1,480 feet above mean sea level. Existing on-site runoff sheet-flows eastward until reaching Perris Boulevard where it is collected by City and County storm drain facilities and discharged into the Perris Valley Storm Channel (see EIR Appendix P). In addition, two ephemeral drainage features occur on-site. Drainage 1 enters the site from the lower western boundary of the Project site (in the Phase 1 area) through a 60-inch box culvert originating from underneath Frontage Road. The drainage runs from west to east within the Project site, extending from Frontage Road and terminating within the Project site. Additionally, Drainage 2 is a roadside ditch which extends from the western boundary of the site at the northeast corner of Orange Avenue and Frontage Road to the northwest corner of Orange Avenue and Barrett Avenue (see EIR Appendix F). Drainage 2 is located within the Phase 1 roadway improvement area for Orange Avenue.

Solid Waste

The City of Perris contracts with a waste disposal company, CR&R Environmental Services, to collect and transport trash. After collection, solid waste is sorted by CR&R and transported to the El Sobrante Landfill, located approximately 25 roadway miles southwest of the Specific Plan Area, and the Badlands Landfill, located approximately 15 roadway miles northeast of the Specific Plan Area. Table 5.18-6 lists the maximum capacity, maximum permitted capacity, and remaining capacity of each landfill. El Sobrante Landfill is expected to reach capacity by 2051 and Badlands Landfill is expected to reach capacity by 2059 (CalRecycle, 2024).

Dry Utilities

Electricity is provided to the City of Perris by SCE. SCE provides electric power to more than 15 million persons within its 50,000 square mile service area. Based on SCE's 2021 Power Content Label Mix, SCE derives electricity from varied energy resources including: natural gas, solar power generation, wind farms, nuclear power plants, hydroelectric generators, and geothermal power plants. SCE also purchases power from open market transactions, which do not have identifiable sources (SCE, 2022). Existing electricity utilities exists throughout the Specific Plan Area.

The City of Perris is within the service area of SoCalGas. Existing natural gas lines exist throughout the Specific Plan Area.

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