

BIOLOGICAL RESOURCES ASSESSMENT

**YORBA LINDA BOULEVARD IMPROVEMENTS PROJECT
(IMPERIAL HIGHWAY TO LAKEVIEW AVENUE)**

YORBA LINDA, ORANGE COUNTY, CALIFORNIA



March 2024

BIOLOGICAL RESOURCES ASSESSMENT

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YORBA LINDA, ORANGE COUNTY, CALIFORNIA

Submitted to:

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LIST OF ABBREVIATIONS AND ACRONYMS

APN	Assessor's Parcel Number
BRA	Biological Resources Assessment
BSA	biological study area
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
City	City of Yorba Linda
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
County	County of Orange
CWA	Clean Water Act
FESA	Federal Endangered Species Act
IPaC	Information for Planning and Consultation
MBTA	Migratory Bird Treaty Act
NCCP	Natural Community Conservation Plan
NCCP/HCP project	Natural Community Conservation Plan/Habitat Conservation Plan Yorba Linda Boulevard Improvements Project
RWQCB	Regional Water Quality Control Board
TCA	Transportation Corridor Agencies
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

INTRODUCTION

BKF Engineers retained LSA to conduct a Biological Resources Assessment (BRA) for the Yorba Linda Boulevard Improvements (Imperial Highway to Lakeview Avenue) Project (project). This report evaluates the 4.29-acre proposed project limits located in Yorba Linda, Orange County, California. This report has been prepared for compliance with the California Environmental Quality Act (CEQA) and Federal and California Endangered Species Acts (FESA and CESA, respectively).

The proposed project would result in the reconfiguration of a portion of Yorba Linda Boulevard to include a second left-turn pocket at each intersection between Imperial Highway and Lakeview Avenue. This will require minor road widening and realignment of the southern side of Yorba Linda Boulevard.

SITE AND PROJECT DESCRIPTION

The 4.29-acre project limits are located along Yorba Linda Boulevard, with small portions extending onto Imperial Highway—State Route 90 and Lakeview Avenue in the northern and southern directions. The project site is depicted on the United States Geological Survey (USGS) *Yorba Linda, California* 7.5-minute series topographic quadrangle (USGS 1967) in Sections 22 and 27, Township 3 south, Range 9 west (Figure 1; all figures are provided in Appendix A). Additionally, the project site is located on portions of Assessor's Parcel Numbers (APNs) 334-391-05, 343-281-01, -10, -18, 348-161-01, -11, -12, -13, and 348-162-15 and -16.

The project limits are located within a highly developed area and are surrounded by primarily commercial and some residential development. The project anticipates the conversion and addition of turn lanes, modification of the curb line return and the median, utility relocations, traffic signal modification, and construction of a retaining wall and bridge at and between the Yorba Linda Boulevard and Imperial Highway intersection and the Yorba Linda Boulevard and Lakeview Avenue intersection. This project would result in improved traffic flow along Yorba Linda Boulevard and the Imperial Highway and Lakeview Avenue intersections.

METHODS

LITERATURE REVIEW

LSA Assistant Biologist Eva Newby conducted a literature review and record search in January 2024 to identify the existence and potential for occurrence of sensitive or special-status plant and animal species within 3 miles of the project limits. Federal and State lists of sensitive species were also examined. Current electronic database records reviewed included the following:

- **California Natural Diversity Database information (CNDDDB – RareFind 5)** (California Department of Fish and Wildlife [CDFW] 2024a), which is administered by the CDFW, formerly known as the California Department of Fish and Game. This database covers sensitive plant and animal species, as well as sensitive natural communities that occur in California. Records from the *Yorba Linda, California* USGS quadrangle that are within 3 miles of the Biological Study Area (BSA) were obtained from this database to inform the field survey.
- **California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants** (CNPS 2024), which uses four specific categories or “lists” of sensitive plant species to assist with the conservation of rare or endangered botanical resources. All of the plants constituting California Rare Plant Ranks 1A, 1B, 2A, and 2B are intended to meet the status definitions of “threatened” or “endangered” in the California Endangered Species Act (CESA) and the California Fish and Game Code and are considered by CNPS to be eligible for State listing. At the discretion of the California Environmental Quality Act (CEQA) Lead Agency, impacts to these species may be analyzed as such, pursuant to *State CEQA Guidelines* Sections 15125(c) and 15380. Plants in Rank 3 (limited information; review list), Rank 4 (limited distribution; watch list), or that are considered Locally Unusual and Significant may be analyzed under CEQA if there is sufficient information to assess potential significant impacts. Records from the *Yorba Linda, California* USGS quadrangle were obtained from this database to inform the field survey.
- **United States Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) Online System (USFWS 2023a)**, which lists all proposed, candidate, threatened, and endangered species managed by the Endangered Species Program of the USFWS that have the potential to occur on or near a particular site. This database also lists all known critical habitats, national wildlife refuges, and migratory birds that could potentially be impacted by activities from a proposed project. An IPaC resource report was generated for the project limits.

In addition to the databases listed above, historic and current aerial imagery, existing environmental reports for developments in the project vicinity, and regional habitat conservation plans and local land use policies related to biological resources were reviewed. Soil types were determined using the United States Department of Agriculture Natural Resources Conservation Service WebSoil Survey (United States Department of Agriculture [USDA] 2023).

GENERAL BIOLOGICAL RECONNAISSANCE FIELD SURVEY

LSA Biologist Eva Newby conducted a general reconnaissance-level, pedestrian field survey on January 29, 2024. All areas within the 4.29-acre project limits and 500 foot BSA buffer, totaling 60.40 acres were surveyed on foot (Figure 2). Binoculars were used to survey certain portions of the buffer area that were restricted due to the presence of fences or other residential development. Weather conditions were sunny with 0 percent cloud cover, approximately 74° Fahrenheit, and winds ranging from 3–7 miles per hour. Notes were taken on general site conditions, vegetation, and suitability of habitat for various special-interest elements. All plant and animal species observed or otherwise detected during this field survey were noted and are listed in Appendix B. Appendix C summarizes the special-status plant and animal species potentially present within the BSA.

RESULTS

EXISTING SITE CONDITIONS

The BSA is primarily developed with pockets of ornamental vegetation due to pre-existing land uses and surrounding development.

The BSA is bordered by commercially and residentially developed land to the north, south, east, and west. Ornamental vegetation lines Yorba Linda Boulevard, Imperial Highway, and Lakeview Avenue, as well as within pockets between developments.

Topography and Soils

The BSA is relatively flat, with elevation ranging from 375 to 404 feet above mean sea level.

Soils present within the BSA include: Myford sandy loam, 2 to 9 percent slopes; Myford sandy loam, 9 to 15 percent slopes; and Myford sandy loam, thick surface, 2 to 9 percent slopes (Table A and Figure 3). These mapped soils are not considered hydric, have a drainage class of moderately well drained, and have high to very high runoff classes (USDA 2023).

Table A: Mapped Soils Classifications in BSA

Soil	Acreages	Frequency of Ponding	Frequency of Flooding	Drainage Class	Runoff Class
Myford sandy loam, 2 to 9 percent slopes	57.52 acres	None	None	Moderately well drained	High
Myford sandy loam, 9 to 15 percent slopes	1.96 acres	None	None	Moderately well drained	Very High
Myford sandy loam, thick surface, 2 to 9 percent slopes	0.92 acre	None	None	Moderately well drained	N/A

Source: United States Department of Agriculture (2023).

N/A = not applicable

Vegetation and Land Cover

The BSA is almost entirely developed with pockets of ornamental vegetation.

- **Developed:** Developed sites consist of paved areas, buildings, and other areas that are cleared for anthropogenic purposes and generally do not allow for the establishment of vegetation. This land cover type was present throughout the BSA.
- **Ornamental Vegetation:** Ornamental vegetation consists of introduced and regularly maintained trees, shrubs, flowers, and grass. Ornamental cover on the project site was composed of species such as Mexican fan palm (*Washingtonia robusta*), date palm (*Phoenix dactylifera*), Mexican sycamore (*Platanus racemosa*), Canary Island pine (*Pinus canariensis*), and

Brisbane box (*Lophostemon confertus*), and was observed throughout the BSA, primarily lining sidewalks, medians, and other walkways.

Figure 4 shows a map of vegetation and land cover types existing on the project site, and site photographs are provided in Figure 5.

Wildlife

Common wildlife species observed within the BSA during the field survey include: western fence lizard (*Sceloporus occidentalis*), American crow (*Corvus brachyrhynchos*), red-tailed hawk (*Buteo jamaicensis*), Anna's hummingbird (*Calypte anna*), song sparrow (*Melospiza melodia*), and house finch (*Haemorrhous mexicanus*). Each of these species commonly occur in and around developed areas throughout Southern California.

A complete list of species observed is provided in Appendix B.

Special-Status Species

This section discusses special-status species observed or potentially occurring within the limits of the study area. Legal protection for special-interest species varies widely, from the comprehensive protection extended to listed threatened/endangered species, to no legal interest at present. The CDFW, USFWS, local agencies, and special-interest groups such as the CNPS, publish watch lists of declining species. Species on watch lists can be included as part of the special-interest species assessment. Species that are candidates for State and/or Federal listing and species on watch lists are included in the special-status species list. Inclusion of species described in the special-interest species analysis is based on the following criteria:

- Direct observation of the species or its sign in the study area or immediate vicinity during previous biological studies;
- Sighting by other qualified observers;
- Record reported by the CNDDB, published by the CDFW;
- Presence or location information for specific species provided by private groups (e.g., CNPS); and/or
- BSA lies within known distribution of a given species and contains appropriate habitat.

The special-status species analysis revealed one special-status species with the potential to occur within the limits of the study area. Appendix C lists these species with a data summary and determination of the likelihood of each species occurring within the study area.

Threatened/Endangered Species

One federally listed as Threatened species; the coastal California gnatcatcher (*Poliophtila californica californica*) was identified as potentially present (Appendix C) within the vicinity of the project. However, habitat within the BSA is considered unsuitable for the coastal California gnatcatcher.

Non-Listed Special-Status Species

One non-listed special-status species, the American bumble bee (*Bombus pensylvanicus*) has a low probability of occurrence on the project site. The entire project site and the central portion of the BSA overlaps a CNDDDB record for American bumble bee; however, this record is from 1953 when one adult was collected. No other non-listed special-status species identified in the literature review are expected to occur within the BSA due to historic and ongoing anthropogenic disturbances leading to the lack of suitable habitat for these species.

Nesting bird species are protected by California Fish and Game Code Sections 3503, 3503.5, and 3800, and by the Migratory Bird Treaty Act (MBTA) (16 United States Code 703–711). These laws regulate the take, possession, or destruction of the nest or eggs of any migratory bird or bird of prey. However, the USFWS has recently determined that the MBTA should apply only to “...affirmative actions that have as their purpose the taking or killing of migratory birds, their nests, or their eggs” and will not be applied to incidental take of migratory birds pursuant to otherwise lawful activities.

Critical Habitat

The study area does not lie within federally designated critical habitat.

Jurisdictional Waters

No potential jurisdictional waters regulated pursuant to the Federal Clean Water Act (CWA) by the U.S. Army Corps of Engineers (USACE) or the Regional Water Quality Control Board (RWQCB), and no lake, rivers, or streambeds regulated pursuant to the California Fish and Game Code by the CDFW are present within the BSA.

Local Policies and Ordinances Protecting Biological Resources

City of Yorba Linda (City) and County of Orange (County) General Plans and development ordinances may include regulations or policies governing biological resources. For example, policies may require tree preservation or designate local species survey areas, species of interest, or significant ecological areas.

Yorba Linda Municipal Code Title 16, Chapter 16.08

Under the City of Yorba Linda Municipal Code (Section 16.08.030):

- A. No person shall cut down, destroy or remove any tree growing within the City limits in the public right-of-way without a permit issued by the Community Development Director.
- B. No person shall cut down, destroy or remove any tree growing within the City limits on an individual vacant lot without a permit issued by the Community Development Director in conjunction with any required building, excavation or grading permits. (Prior code § 33A-3)

Several non-native trees would be removed from the center median space within the project boundary as a result of construction.

Regional Regulations

Natural Community Conservation Plan and Habitat Conservation Plan, County of Orange, Coastal Subregion

The Natural Communities Conservation Planning Act was enacted to encourage broad-based planning to provide for effective protection and conservation of the State's wildlife resources while continuing to allow appropriate development and growth.¹ Natural Community Conservation Plans (NCCPs) may be implemented that identify measures necessary to conserve and manage natural biological diversity within the planning area while allowing compatible and appropriate economic development, growth, and other human uses. The County of Orange, in conjunction with State and federal resource agencies, local jurisdictions, utility companies, the Transportation Corridor Agencies (TCA), and major private landowners, prepared the Natural Community Conservation Plan/Habitat Conservation Plan (NCCP/HCP) for the Central-Coastal NCCP Subregion. The NCCP/HCP was approved on April 16, 1996, and the Implementation Agreement was executed on July 17, 1996. The NCCP/HCP is intended to ensure the long-term survival of special-status coastal sage scrub-dependent plant and wildlife species and certain other identified species and habitats while allowing for reasonable economic growth in accordance with State-sanctioned NCCP and federally sanctioned HCP program guidelines. While the project site is within the NCCP/HCP planning boundaries and is an enrolled City, the natural resources that are conserved/addressed by the NCCP/HCP are absent from the already developed site; therefore, no further analysis is required.

¹ Natural Communities Coalition. 2023. *Natural Community Conservation Plan & Habitat Conservation Plan*. County of Orange Central & Coastal Subregion Parts I & II: NCCP/HCP. Website: <https://occonservation.org/wp-content/uploads/2015/04/NCCP-Parts-I-II-Plan.pdf> (accessed October 2023).

IMPACT FINDINGS

VEGETATION AND HABITAT IMPACTS

The project would not result in any direct impacts to native habitats or sensitive natural communities. Permanent direct impacts to landcover and vegetation within the limits of the project site are listed in Table B. No impacts are expected to occur outside the project site boundary.

**Table B: Mapped Impact Vegetation/Land Cover
Classifications in Project Site**

Vegetation/Land Cover	Project Site Impact Acreage
Developed	3.85
Ornamental Vegetation	0.45
Total	4.29*

Source: LSA (2024).

*Total may not equal sum due to rounding.

Several non-native trees would be removed from the center median space within the project site during construction. As there is a potential for these trees to support nests for various nesting bird species, LSA recommends a nesting bird survey be conducted within 72 hours of scheduled tree removal, and that a qualified biologist be present on site for any vegetation removal.

THREATENED AND ENDANGERED SPECIES

Under provisions of Section 7(a)(2) of the federal Endangered Species Act, a federal agency that permits, licenses, funds, or otherwise authorizes a project activity must consult with the USFWS to ensure that its actions would not jeopardize the continued existence of any listed threatened or endangered species or destroy or adversely modify critical habitat. The USFWS designates as threatened or endangered species that are at risk of extinction and may also adopt recovery plans that identify specific areas that are essential to the conservation of a listed species. Critical habitat areas that may require special management considerations or protections can also be designated.

CESA is administered by the CDFW and prohibits the “take” of plant and animal species identified as either threatened or endangered in the State of California by the Fish and Game Commission (Fish and Game Code Sections 2050 to 2097). “Take” is defined as to hunt, pursue, catch, capture, or kill. Sections 2091 and 2081 of CESA allow the CDFW to authorize exceptions to the prohibition of “take” of State-listed threatened or endangered plant and animal species for purposes such as public and private development. The CDFW requires formal consultation to ensure that a proposed project’s actions would not jeopardize the continued existence of any listed species or destroy or adversely affect listed species’ habitats.

As described in Appendix C, no federally or State Threatened or Endangered species are anticipated to be impacted by the proposed project due to the lack of suitable habitats and the developed/disturbed conditions within the BSA.

NON-LISTED SPECIAL-STATUS SPECIES

Non-listed special-status species have limited population distribution in Southern California and development is further reducing their ranges and numbers. These species have no official State or Federal protection status, but they merit consideration under CEQA. As described in Appendix C, one regionally occurring non-listed special-status animal species, American bumble bee (*Bombus pensylvanicus*) has a low probability to occur within the vegetation on the project site. Very limited, highly disturbed habitat exists for this species within the project site and BSA. Given that the most recent CNDDDB record is from 1953 and that habitat quality on site is very low, construction activities are not likely to impact American bumblebee. As this species was not observed within the BSA during the general biological reconnaissance survey and relatively small project footprint and surrounding development, impacts from the project are anticipated to have a less than significant effect on non-listed special-status species.

Several large ornamental trees within the BSA provide suitable nesting habitat for a variety of native and migratory bird species that are protected while nesting. To ensure compliance with the federal Migratory Bird Treaty Act and California Fish and Game Code Sections 3500–3516, a pre-construction nesting bird survey is recommended prior to any project activities planned during the nesting bird season (February 15 through August 31). With successful implementation of the recommended impact avoidance measures (see below), impacts to nesting birds would be avoided.

- **Construction Activity:** If possible, vegetation removal should be avoided during the nesting bird season (February 1–August 31). If nesting bird season is unavoidable, prior to construction activities, including vegetation removal, a pre-construction nesting bird survey will be conducted by a qualified biologist no more than 3 days (72 hours) prior to any construction activities and vegetation removal. Should nesting birds be found, an exclusionary buffer will be established by the qualified biologist. The buffer will be clearly marked in the field by construction personnel under guidance of the qualified biologist. No construction activities will be allowed within this zone until the qualified biologist determines that the young have fledged, or the nest is no longer active.
- **Tree Trimming and Removal:** To the greatest extent feasible, tree trimming/removal activities will be performed outside of the nesting season for birds (February 1–August 31). If trimming or removal of trees during the nesting bird season cannot be avoided, a qualified biologist will monitor tree trimming and removal activities.
- **Night Work Lighting:** If possible, night work should be avoided during the nesting bird season (February 1–August 31). If night work (i.e., between dusk and dawn) is anticipated within 100 feet of an active bird nest and/or nest exclusionary buffer, night lighting will be used only in areas of active work and focused on the direct area(s) of work and away from nesting locations to the greatest extent practicable. The qualified biologist may adjust the exclusionary buffer size to decrease the possibility of disturbance by night work, if warranted. This measure would minimize disturbance and prevent nest failure. If birds are showing signs of distress, such as flushing from their nests, work activities shall be modified to prevent the nest from being abandoned.

CRITICAL HABITAT

No federally designated critical habitat is present within the study area; thus, there will be no project-related effects to critical habitat.

JURISDICTIONAL WATERS

No potential jurisdictional waters of the United States regulated by the USACE or RWQCB, or CDFW jurisdictional lakes, rivers, or streams are present on the proposed project site. Thus, there would be no project-related effects to jurisdictional waters.

WILDLIFE MOVEMENT

Wildlife species that occur in the project vicinity are adapted to the urban-wildland interface. The noise, vibration, light, dust, or human disturbance within construction areas would only temporarily deter wildlife from using areas in the immediate vicinity of construction activities. These indirect effects could temporarily alter migration behaviors, territories, or foraging habitats in select areas. However, because these are temporary effects, it is likely that wildlife already living and moving close to urban development would alter their normal functions for the duration of the project construction and then re-establish these functions once all temporary construction effects have been removed. As the project site is surrounded by existing commercial and industrial development, the proposed project's activities would not place any permanent barriers within any known wildlife movement corridors or interfere with habitat connectivity. The impact is considered less than significant, and no mitigation is warranted.

LOCAL POLICIES AND ORDINANCES PROTECTING BIOLOGICAL RESOURCES

Local Tree Ordinance

Yorba Linda Municipal Code Title 16, Chapter 16.08

Under the City of Yorba Linda Municipal Code (Section 16.08.030):

- A. No person shall cut down, destroy or remove any tree growing within the City limits in the public right-of-way without a permit issued by the Community Development Director.
- B. No person shall cut down, destroy or remove any tree growing within the City limits on an individual vacant lot without a permit issued by the Community Development Director in conjunction with any required building, excavation or grading permits. (Prior code § 33A-3)

The project applicant shall obtain a permit from the Community Development Director prior to grading or excavation.

Regional Regulations

Natural Community Conservation Plan and Habitat Conservation Plan, County of Orange, Coastal Subregion

While the project site is within the NCCP/HCP planning boundaries and is within an enrolled City, the natural resources that are conserved/addressed by the NCCP/HCP are absent from the already developed site. Thus, there will be no project-related effects as a result of the project.

CUMULATIVE IMPACTS

According to Section 15130 of the *State CEQA Guidelines*, “cumulative impacts” refers to incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. Due to the disturbed nature of the project site and its proximity to commercial and residential development, impacts are not considered to be cumulatively significant.

REFERENCES

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APPENDIX A

FIGURES 1–5

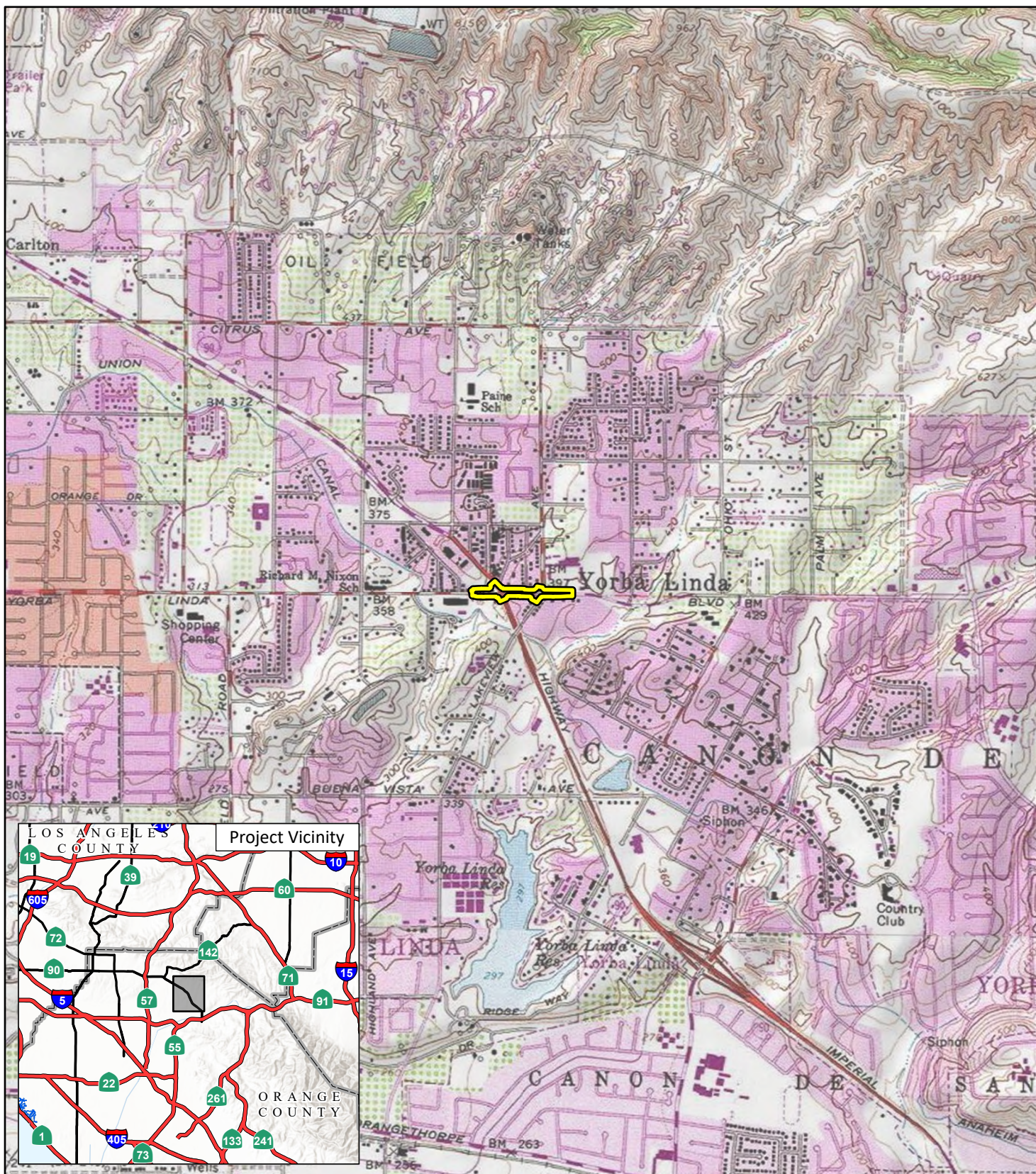
Figure 1: Project Location and Vicinity

Figure 2: Study Area

Figure 3: Soils

Figure 4: Vegetation and Land Cover

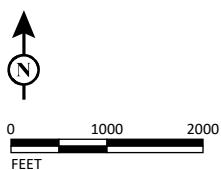
Figure 5: Site Photographs



LSA

 Project Location

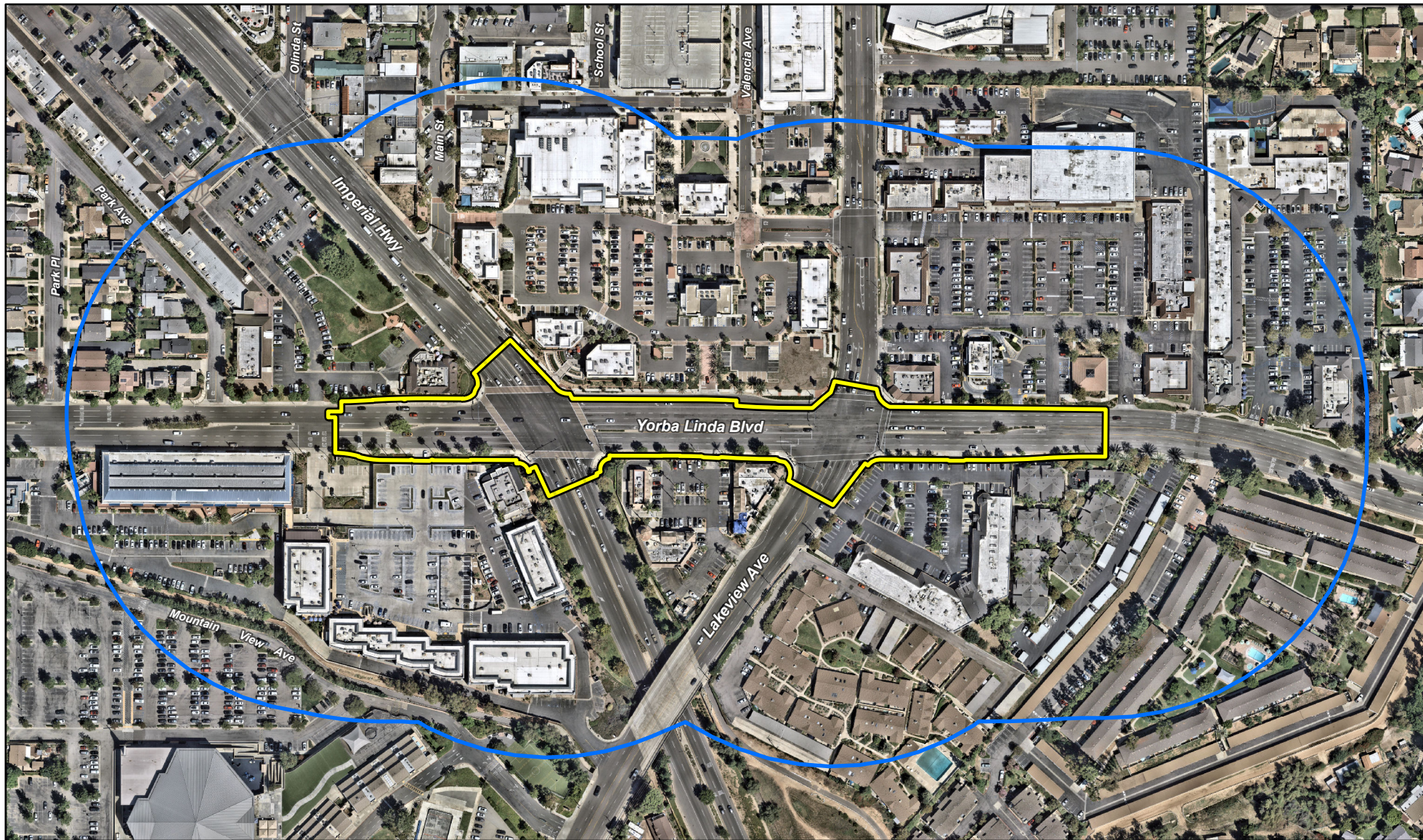
FIGURE 1



SOURCE: USGS 7.5' Quad - Yorba Linda (1981) and Orange (1981), CA

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Yorba Linda Blvd Project
Project Location and Vicinity



LSA

- Project Location
- 500-Foot Survey Radius



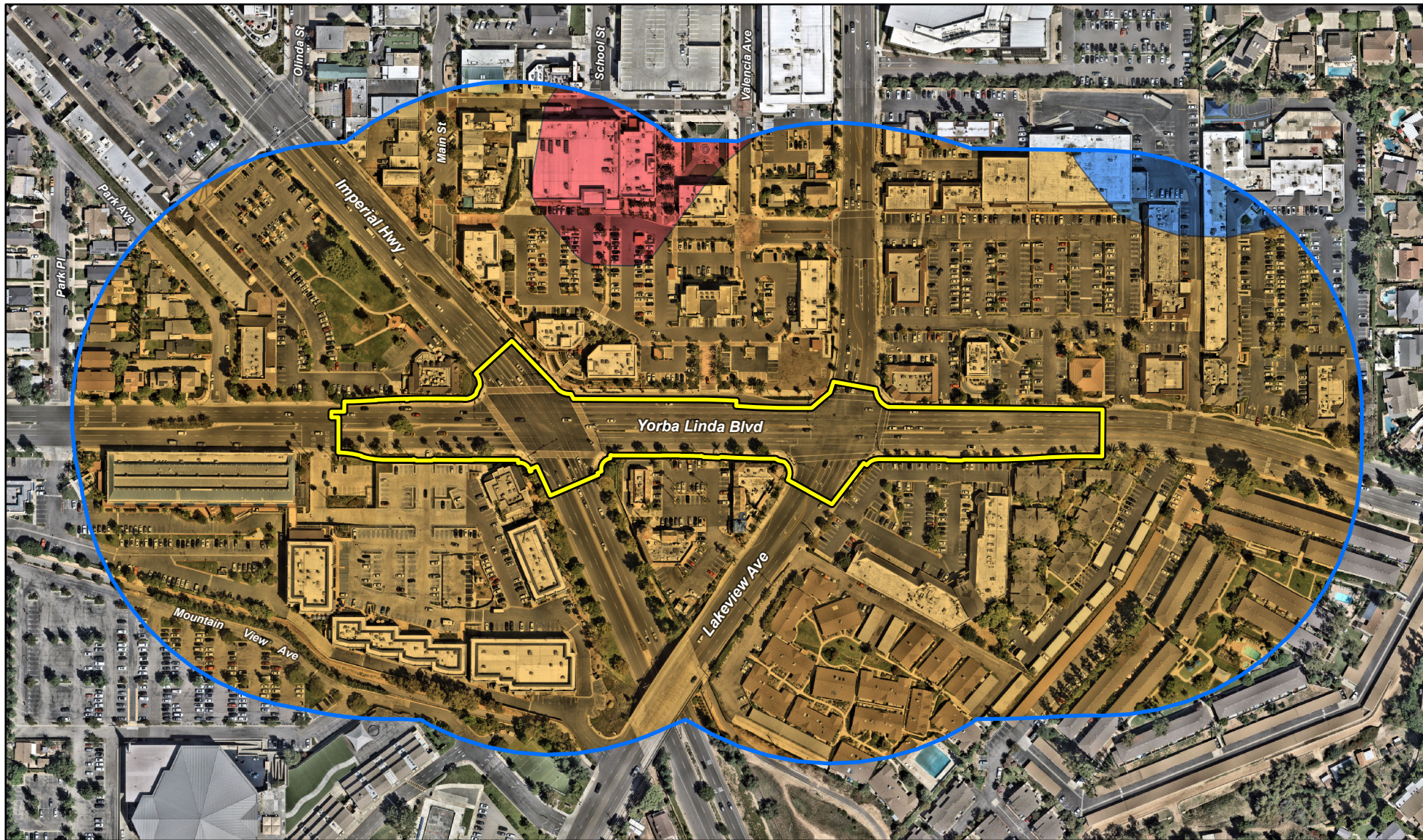
0 130 260
FEET

SOURCE: Nearmap Aerial Imagery (September 8, 2023)

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FIGURE 2

Yorba Linda Boulevard Improvements Project
Study Area



LSA

- Project Location
- 500-Foot Survey Radius

- Soils
- Myford sandy loam, 2 to 9 percent slopes (57.52 ac)
 - Myford sandy loam, thick surface, 2 to 9 percent slopes (0.92 ac)
 - Myford sandy loam, 9 to 15 percent slopes (1.96 ac)



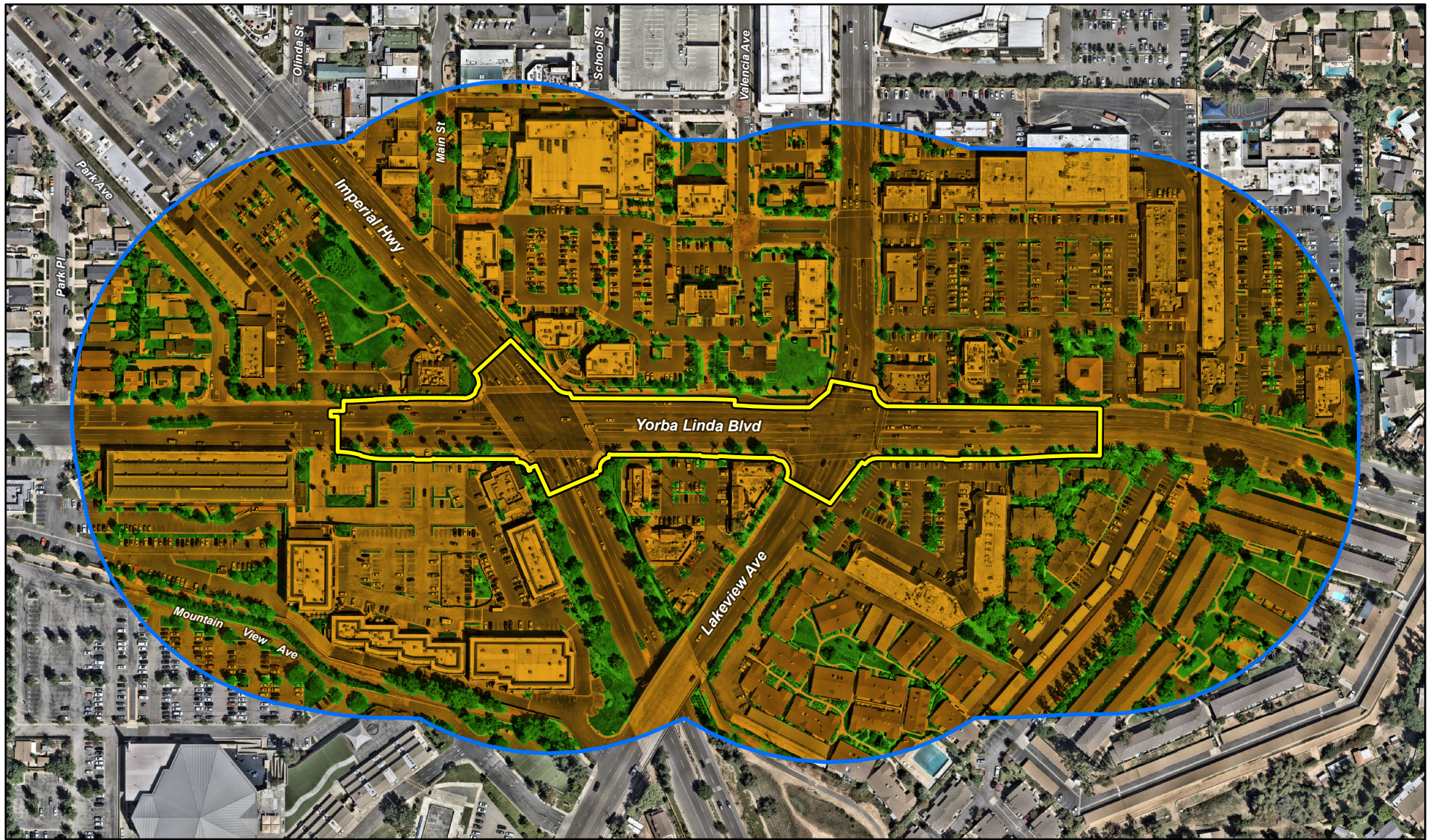
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FIGURE 3

Yorba Linda Boulevard Improvements Project
Soils

SOURCE: Nearmap Aerial Imagery (September 8, 2023), Natural Resources Conservation Service SSURGO dataset (October 2022).

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LSA



0 130 260
FEET

 Project Location

 500-Foot Survey Radius

Vegetation and Land Cover

 Developed (47.84 ac, including 3.85 ac within Project Area)

 Ornamental (12.56 ac, including 0.45 ac within Project Area)

FIGURE 4

Yorba Linda Boulevard Improvements Project
Vegetation and Land Cover

SOURCE: Nearmap Aerial Imagery (September 8, 2023), LSA (January 2024)

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Photo 1: View of Yorba Linda Boulevard at the eastern section of the project area, facing southwest.



Photo 2: View of Yorba Linda Boulevard and Lakeview Avenue intersection, facing northwest.



Photo 3: View of Yorba Linda Boulevard and Imperial Highway intersection, facing northwest.



Photo 4: View of ornamental vegetation along the southern side of Yorba Linda Boulevard, facing west.



Photo 5: View of ornamental and developed land along Yorba Linda Boulevard, facing west.



Photo6: View of Yorba Linda Boulevard at the western section of the project area, facing northeast.

APPENDIX B

VASCULAR PLANT AND ANIMAL SPECIES OBSERVED

LSA Assistant Biologist Eva Newby observed the following vascular plant species on the project site and BSA during the general biological reconnaissance survey on January 29, 2024.

* Introduced species not native to California

VASCULAR PLANT SPECIES OBSERVED

GYMNOSPERMS	
Pinaceae	Pine Family
* <i>Pinus canariensis</i>	Canary Island pine
* <i>Pinus</i> sp.	Pine
EUDICOTS	
Aizoaceae	Family
* <i>Carpobrotus edulis</i>	Iceplant
Bignoniaceae	Trumpet Creeper Family
* <i>Jacaranda mimosifolia</i>	Blue Jacaranda
Grossulariaceae	Currant Family
* <i>Escallonia rubra</i>	Redclaws
Lamiaceae	Mint, Deadnettle, and Sage Family
* <i>Rosmarinus officinalis</i>	Rosemary
Myrtaceae	Myrtle Family
* <i>Eucalyptus</i> sp.	Eucalyptus
* <i>Lophostemon confertus</i>	Brisbane box
Nyctaginaceae	Four O'clock Family
* <i>Bougainvillea</i> sp.	Bougainvillea
Platanaceae	Sycamore Family
<i>Platanus mexicana</i>	Mexican sycamore
Rosaceae	Rose Family
* <i>Pyrus calleryana</i>	Callery pear
* <i>Rhaphiolepis indica</i>	Indian hawthorn
MONOCOTS	
Arecaceae	Palm Family
* <i>Washingtonia robusta</i>	Mexican fan palm
* <i>Phoenix dactylifera</i>	Date palm
Asparagaceae	Asparagus Family
* <i>Dasyllirion longissimum</i>	Mexican grass tree
Asphodelaceae	Aloe Family
* <i>Aloe striata</i>	Coral aloe
Poaceae	Family
* <i>Pennisetum clandestinum</i>	Kikuyu grass

Taxonomy and scientific nomenclature generally conform to Baldwin, B.G., D.H. Goldman et al., eds. (2012; The Jepson Manual: Vascular Plants of California, 2nd edition; University of California Press, Berkeley and Los Angeles, California). Common names for each taxa generally conform to Roberts, F.M., Jr. (2008; The Vascular Plants of Orange County, California: An Annotated Checklist; F.M. Roberts Publications, San Luis Rey, California) except where Abrams, L. (1923, 1944, and 1951; Illustrated Flora of the Pacific States: Washington, Oregon, and California, vols. I–III; Stanford University Press, Stanford, California) and Abrams, L. and Ferris, R.S. (1960; Illustrated Flora of the Pacific States: Washington, Oregon, and California, vol. IV; Stanford University Press, Stanford, California) were used, particularly when species-specific common names were not identified in Roberts, F.M., Jr. (2008).

ANIMAL SPECIES OBSERVED

BIRDS	
Accipitridae	Hawks, Eagles, and Kites
<i>Buteo jamaicensis</i>	Red-tailed hawk
Corvidae	Crows, Jays, and Magpies
<i>Corvus brachyrhynchos</i>	American crow
Fringillidae	Finches
<i>Haemorhous mexicanus</i>	House finch
Passerellidae	New World Sparrows
<i>Melospiza melodia</i>	Song sparrow
Trochilidae	Hummingbirds
<i>Calypte anna</i>	Anna's hummingbird
REPTILES	
Phrynosomatidae	North American Spiny Lizards
<i>Sceloporus occidentalis</i>	Western fence lizard

APPENDIX C

SPECIAL-STATUS SPECIES OCCURRENCE PROBABILITY TABLE

Special-Status Species Occurrence Probability

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Plants				
<i>Abronia villosa</i> var. <i>aurita</i> Chaparral sand-verbena	US: - CA: SP CNPS: 1B.1	Annual herb that inhabits sandy, chaparral, coastal scrub, and desert dune habitats between 245 and 5,250 feet in elevation.	Blooms January, March through September.	Absent: Project site and vicinity lack suitable habitat. This species was not observed during site survey. No CNDDDB records within 1 mile, few within 3 miles.
<i>Calochortus weedii</i> var. <i>intermedius</i> Intermediate mariposa-lily	US: - CA: SP CNPS: 1B.2	Perennial bulbiferous herb that occurs in rocky, calcareous areas within chaparral, coastal scrub, and valley and foothill grassland habitat between 345 and 2,805 feet in elevation.	Blooms May through July.	Absent: Project site and vicinity lack suitable habitat. This species was not observed during site survey. No CNDDDB records within 1 mile, few within 3 miles
Reptiles				
<i>Crotalus ruber</i> Red-diamond rattlesnake	US: - CA: SSC	Found in southwestern California, from Morongo Valley west to the coast and south along the peninsular ranges into Baja California. Terrestrial species inhabiting arid scrub, coastal chaparral, oak and pine woodlands, rocky grasslands, desert slopes, and rocky desert flats.	Primarily nocturnal and crepuscular with excessive daytime heat, not active in cooler periods of Winter.	Absent: Project site and vicinity lack suitable habitat. The closest observation was approximately 1.4 northeast in the foothills in 1995.
<i>Salvadora hexalepis virgulata</i> Coast patch-nosed snake	US: - CA: SSC	Found along the western coast from central California to northern Baja California. Primarily terrestrial species, can climb shrubs in pursuit of prey, make burrows in loose soil.	Diurnal.	Absent: Project site and vicinity lack suitable habitat. The closest observation was approximately 1.66 miles north in the open foothills in 1993.
<i>Actinemys pallida</i> Southwestern Pond Turtle	US: PT CA: SSC	Found in a variety of freshwater sources such as lakes, ponds, rivers, streams, creeks, reservoirs, and marshes. Mating generally takes place in spring, when females travel to more upland areas to lay a clutch of eggs.	Can be active year-round, with some wintering from November through March.	Absent: Project site and vicinity lack suitable habitat. The closest observation was approximately 2.2 miles north in 1987. Suitable habitat at that location no longer exists.
Fishes				
<i>Catostomus santaanae</i> Santa Ana Sucker	US: FT CA: SSC	Currently, there are only 3 known populations of this species that occupy portions of the San Gabriel, Los Angeles, and Santa Ana River basins. Rely on perennial flows with suitable water quality to support breeding activities, feeding, and seeking shelter.	Spawning from March through July, peak activity in April.	Absent: Project site and vicinity lack suitable habitat. The closest observation was approximately 2.42 miles south at the Santa Ana River in 2000.

Special-Status Species Occurrence Probability

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Birds				
<i>Poliophtila californica</i> Coastal California gnatcatcher	US: FT CA: SSC	Inhabits coastal sage scrub in low-lying foothills and valleys up to about 1,640 feet in elevation in cismontane of southwestern California.	Year-round resident. Nests February through August.	Absent: Project site and vicinity lack suitable habitat. The closest CNDDDB record occurs approximately 0.73 miles northeast of the BSA.
<i>Icteria virens</i> Yellow-breasted chat	US: - CA: SSC	Riparian thickets of willow, brushy tangles near watercourses. Nests in riparian woodland throughout much of western North America. Winters in Central America. Active April through September.	April through September.	Absent: Project site and vicinity lack suitable habitat. The closest CNDDDB record occurs in Blue Mud Canyon, approximately 2.95 miles east of the BSA.
<i>Setophaga petechia</i> Yellow warbler	US: - CA: SSC	Riparian woodland while nesting in the western U.S. and northwestern Baja California; more widespread in brushy areas and woodlands during migration. Occurs from western Mexico to northern South America in winter. Migrants are widespread and common. Three subspecies breed in California: <i>morcomi</i> , <i>brewsteri</i> , and <i>sonorana</i> . (Sonoran yellow warbler nests along the Colorado River.)	Active during the breeding season in coastal southern California. Generally, May through September.	Absent: Project site and vicinity lack suitable habitat. The closest CNDDDB record occurs in Carbon Canyon Regional Park, approximately 2.15 miles northwest of the BSA.
<i>Elanus leucurus</i> White-tailed kite	US: - CA: SA	Typically nests in riparian trees such as oaks, willows, and cottonwoods at low elevations. Forages in open country. Found in South America and in southern areas and along the western coast of North America.	Year-round.	Absent: Project site and vicinity lack suitable habitat. The closest CNDDDB record occurs in Pelanconi Park, approximately 2.99 miles south of the BSA.
<i>Laterallus jamaicensis coturniculus</i> California Black Rail	US: - CA: ST	Requires shallow water in salt marshes, freshwater marshes, wet meadows, or flooded grassy vegetation. Prefers areas of moist soil vegetated by fine-stemmed emergent plants, rushes, grasses, or sedges, with scattered small pools. Known from coastal California, northwestern Baja California, the lower Imperial Valley, and the lower Colorado River of Arizona and California. Now extirpated from virtually all coastal Southern California.	Year-round.	Absent: Project site and vicinity lack suitable habitat. The closest CNDDDB record is approximately 2.33 miles south of the BSA.

Special-Status Species Occurrence Probability

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
<i>Vireo bellii pusillus</i> Least Bell's Vireo	US: FE CA: CE	Riparian forests and willow thickets. The most critical structural component of least Bell's vireo habitat in California is a dense shrub layer 2 to 10 feet above ground. Nests from central California to northern Baja California. Winters in southern Baja California.	March through August.	Absent: Project site and vicinity lack suitable habitat. The closest CNDDDB record occurs in Telegraph and Blue Mud Canyons approximately 1.35 miles north and 2.80 miles east of the BSA.
<i>Sternula antillarum browni</i> California Least Tern	US: FE CA: CE	Inhabits the shoreline of southern California for the breeding season. Nests on beaches, mudflats, and/or sand dunes, usually near shallow waters with access to nearby large bodies of water, such as the ocean.	April through September.	Absent: Project site and vicinity lack suitable habitat. The closest CNDDDB record occurs at Anaheim Lake, approximately 2.35 miles southwest of the BSA.
<i>Ardea herodias</i> Great blue heron	US: - CA: SA	Inhabits marshes and lagoons, nests in tall trees.	Year-round.	Absent: Project site and vicinity lack suitable habitat. The closest CNDDDB record occurs at the east side of Anaheim Lake, approximately 2.35 miles southwest of the BSA.
<i>Campylorhynchus brunneicapillus sandiegensis</i> Coastal cactus wren	US: BCC CA: SSC	Inhabits coastal sage scrub, nesting almost exclusively in thickets of cholla (<i>Opuntia prolifera</i>) and prickly pear (<i>Opuntia littoralis</i> and <i>Opuntia oricola</i>), typically below 500 feet elevation. Found in coastal areas of Orange and San Diego counties, and extreme northwestern Baja California, Mexico.	Year-round.	Absent: Project site and vicinity lack suitable habitat. The closest CNDDDB record occurs approximately 0.80 mile northeast of the BSA.
Invertebrates				
<i>Bombus pensylvanicus</i> American bumble bee	US: - CA: SA	Inhabit grassland, artificial and terrestrial lands, pollinates several species of wildflowers. Typically nests on the ground in burrows from California ground squirrel (<i>Otospermophilus beecheyi</i>), in abandoned bird nests, or in empty cavities. Widespread throughout the eastern USA, great plains, central USA, and desert west and adjacent areas in California and Oregon. Formerly abundant, recent studies indicate this species has recently declined locally in Southern California.	Year-round.	Low: Although not observed during the general biological reconnaissance survey, CNDDDB records exist in the central portion of the BSA and project limits. However, the most recent record for this area is from 1953. Very limited, highly disturbed ornamental habitat occurs onsite.

Special-Status Species Occurrence Probability

Species	Status	Habitat and Distribution	Activity Period	Occurrence Probability
Mammals				
<i>Eumops perotis californicus</i> Western mastiff bat	US: - CA: SSC	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, chaparral, etc.; roosts in crevices in vertical cliff faces, high buildings, and tunnels, and travels widely when foraging.	Active year-round; nocturnal	Absent: Project site and vicinity lack suitable habitat. No CNDDDB records within 1 mile.
<i>Myotis yumanensis</i> Yuma myotis	US: - CA: SA	Optimal habitat is open forest woodland areas with nearby sources of water. This species feeds on flying insects over various water bodies. Roosts in buildings, mines, caves, crevices, and under bridges.	Nocturnal, hibernates during winter months.	Absent: Project site and vicinity lack suitable habitat. No CNDDDB records within 1 mile, the closest CNDDDB record is located in Yorba Regional Park, approximately 2.85 miles away from the BSA.

Source: Compiled by LSA (2022).

US: Federal Classifications

- FE Listed as Endangered
- FT Listed as Threatened
- BCC Birds of Conservation Concern
- PT Proposed Threatened

CA: State Classifications

- CE Listed as Endangered
- SSC Species of Special Concern. Refers to animals with vulnerable or seriously declining populations.
- SA Special Animal. Refers to any other animal monitored by the California Natural Diversity Database, regardless of its legal or rarity status.
- SP Special Plant. Refers to any other plant monitored by the California Natural Diversity Database, regardless of its legal or rarity status.
- 1B California Native Plant Society Rare Plant Rank 1B – rare, threatened or endangered in California and elsewhere.

BSA = Biological Study Area

CNDDDB = California Natural Diversity Database