Appendix E

Biological Resources Report

Biological Resources Technical Report

Radford Studio Center Project
Studio City, California

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1.0 INTRODUCTION

This Biological Resources Technical Report has been prepared to support *California Environmental Quality Act* (CEQA) documentation for the Radford Studio Center Project (Project). This report has been prepared in accordance with accepted scientific and technical standards that are consistent with the requirements of the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW).

1.1 PROJECT LOCATION, EXISTING SITE DEVELOPMENT AND SURROUNDING USES

The Project Site is located at 4024-4200 Radford Avenue in Studio City, California, a community within the City of Los Angeles (Project Site). The Project Site is generally bounded by the Los Angeles River and Tujunga Wash[1] to the north and east, Colfax Avenue to the east, an alley of varying width, from approximately 28 feet to 30 feet, to the south with various commercial uses across the alley fronting Ventura Boulevard, and Radford Avenue to the west. The North Lot and the South Lot are separated by the Los Angeles River. The current Project Site area (prior to dedications/mergers that would occur as part of the Project) is approximately 2,377,372 square feet (approximately 55 acres). The Project Site area after dedications/mergers would be approximately 2,276,215 square feet (approximately 52.25 acres). Refer to Exhibit 1 for a map depicting the regional location and local vicinity of the Project Site.[1]

The Project Site is shown on the U.S. Geological Survey's Van Nuys 7.5-minute topographic quadrangle of the San Bernardino Meridian in Township 1 North, Range 14 West, Sections 19 and 30 (Exhibit 2). The Project Site is generally flat with elevations on the Project Site ranging from approximately 585 to 617 feet above mean sea level.

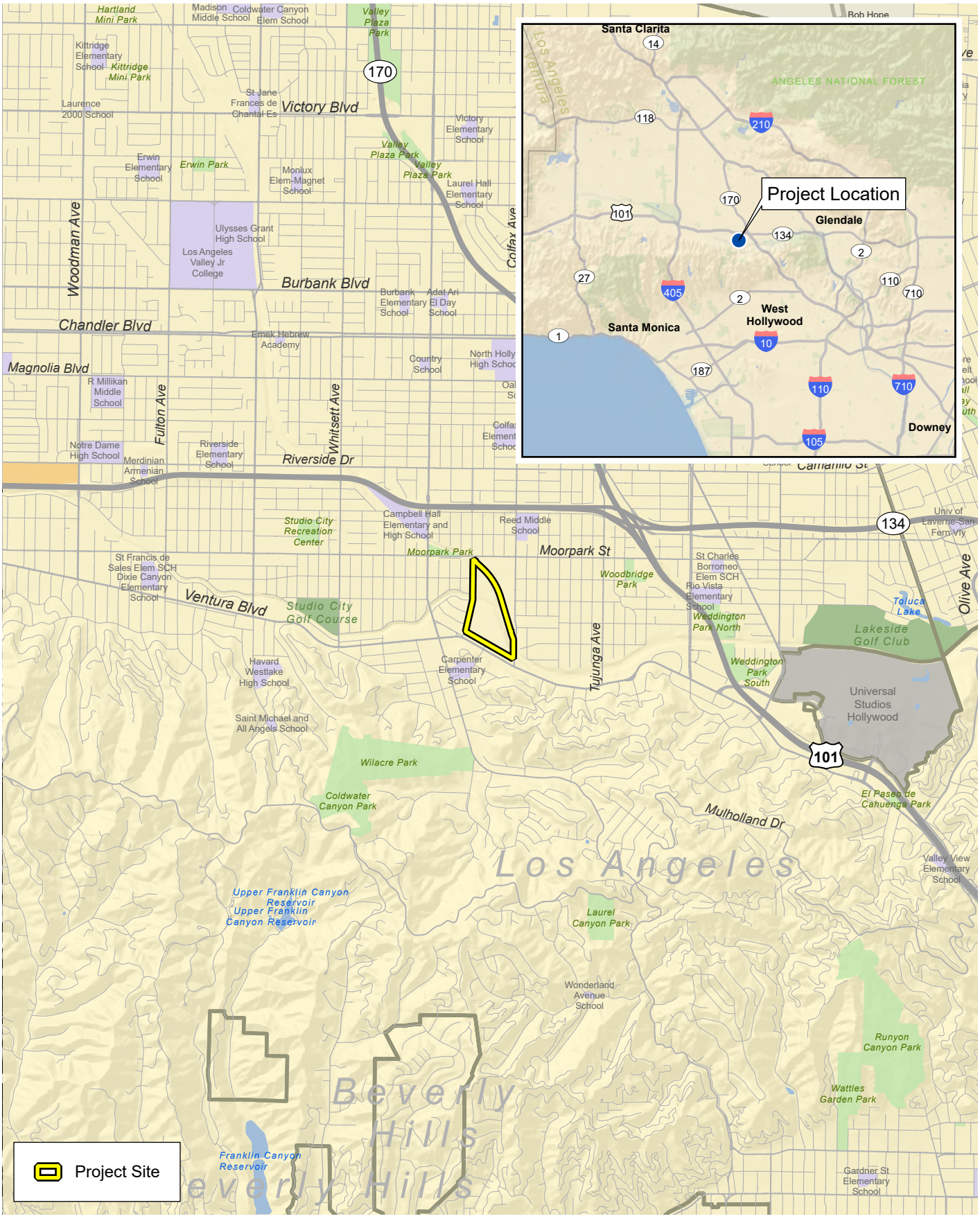
The Project Site is currently improved with approximately 1,179,110 square feet of studio-related uses, including approximately 359,730 square feet of sound stages; 255,510 square feet of production support; 450,060 square feet of production office; and 113,810 square feet of creative office. The North and South Lots are currently improved with multiple buildings. These buildings include 21 sound stages each ranging in size from approximately 7,000 square feet to approximately 25,000 square feet, as well as production support, production office, and creative office uses. The Project Site also contains numerous one- and two-story ancillary buildings and structures, primarily located at the northernmost point of the North Lot and throughout the entirety of the South Lot.

Interior to the Project Site, a bridge traversing the Los Angeles River provides vehicular and pedestrian access between the North Lot and South Lot without having to exit the Project Site to utilize Radford Avenue. Existing automobile parking is located in multiple above-grade automobile parking structures, which are accessible from both Radford Avenue and Colfax Avenue, as well as surface parking areas throughout the Project Site. A total of 3,095 vehicle spaces are currently provided on the Project Site within parking structures and surface parking areas.

Outdoor studio production activities occur throughout the Project Site. These activities include, but are not limited to, setup and take down of sets and various outdoor filming activities, including back lot production activities. These areas also provide flexible space for access, staging, connectivity between active production and supporting uses, housing of production vehicles, equipment storage, basecamps, and emergency vehicle access.

The Project Site perimeter is enclosed with chain link, wrought iron, or combination block wall/chain link fencing, much of which is lined with trees, shrubs, and climbing vines, and

[1] The Tujunga Wash is a tributary of the Los Angeles River and runs along the eastern portion of the North Lot.



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Regional Location and Local Vicinity

Exhibit 1

Biological Technical Report for the Radford Studio Center Project

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S

4,000 2,000 0 4,000 Feet

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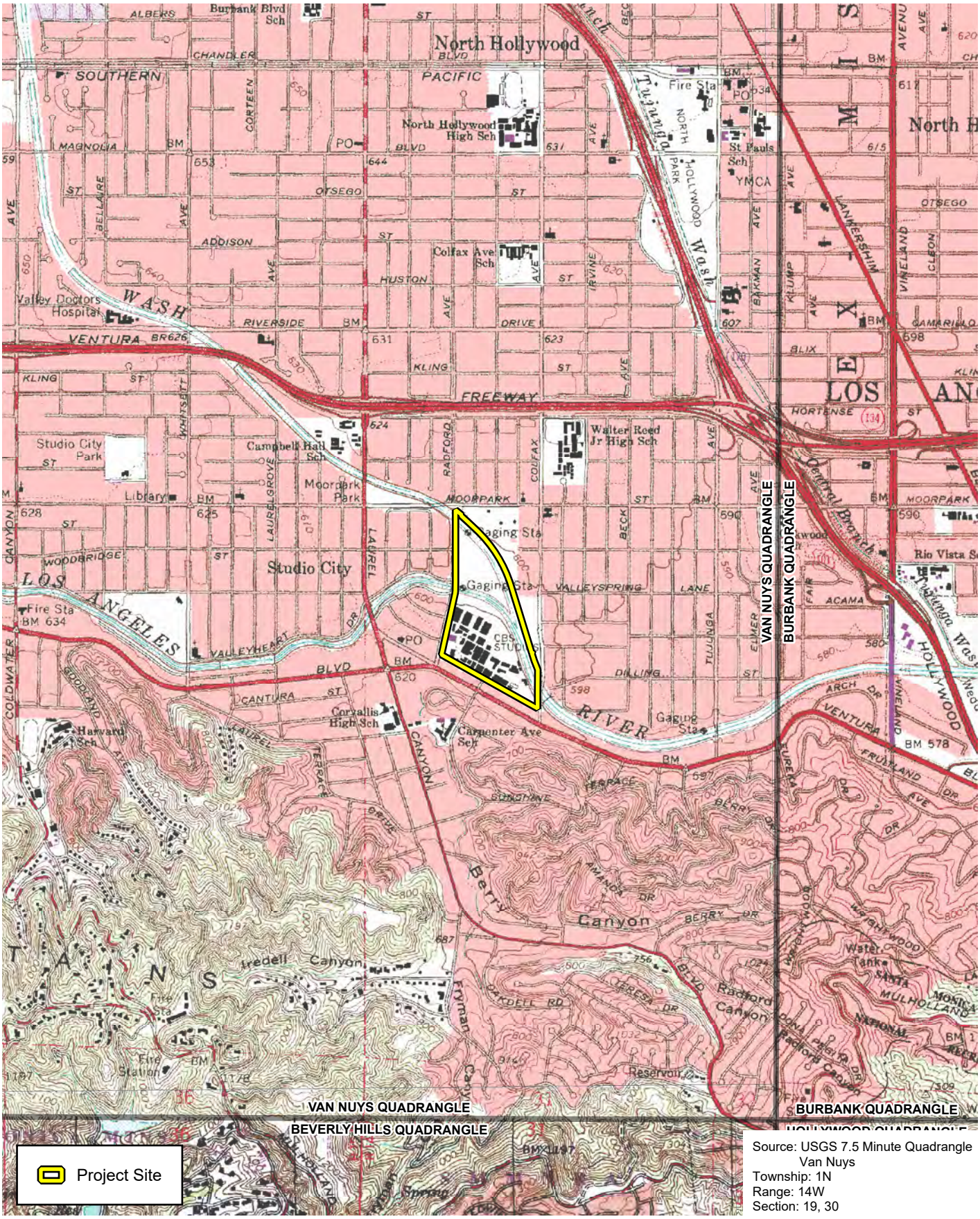

Source: USGS 7.5 Minute Quadrangle
Van Nuys
Township: 1N
Range: 14W
Section: 19, 30

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USGS 7.5-Minute Digital Quadrangle

Exhibit 2

Biological Technical Report for the Radford Studio Center Project

N
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2,000 1,000 0 2,000
Feet

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segments of which include green screening. As discussed in more detail below, additional landscaping within the Project Site interior includes trees and shrubs, and some of the parking areas include landscaped infiltration basins. Street trees are also located along Radford Avenue

The Project Site is located in an urbanized area that is developed with a diverse mix of land uses. Surrounding land uses consist of a combination of residential and commercial development. No natural habitat areas are located adjacent to the Project Site (Exhibit 3).

1.2 PROJECT DESCRIPTION

The Project includes the modernization and expansion of the existing Radford Studio Center through the proposed Radford Studio Center Specific Plan (Specific Plan). The Project includes the development of up to approximately 1,667,010 square feet of new sound stage, production support, production office, creative office, and retail uses within the Project Site as well as associated circulation, parking, landscaping, and open space improvements. The proposed Specific Plan would allow up to approximately 2,200,000 square feet of total floor area within the Project Site upon buildout of the Project (inclusive of approximately 532,990 square feet of existing uses to remain).

In addition, the Project proposes various off-site improvements, including, among other improvements the construction of a new bridge, the Los Angeles River Connector, extending from the northern terminus of Radford Avenue north across the Tujunga Wash to Moorpark Street (no through access for vehicles would be permitted north or south along Radford Avenue) and “green alley” improvements to the alley south of the Project Site. The existing bridge internally connecting the North Lot to the South Lot across the Los Angeles River would also be maintained and widened.

Approximately 109,569 square feet of open space would be provided along the Project Site frontages, including approximately 77,406 square feet of open space along the Los Angeles River and Tujunga Wash frontages, approximately 4,454 square feet of open space along Colfax Avenue, and approximately 27,709 square feet along Radford Avenue. Additional open space and landscaping would be provided within the Project Site, including various ground level open space areas and rooftop terraces. The Project also includes off-site improvements such as utility improvements and improvements to the public realm.

As part of the Project, outdoor production activities, including use of basecamps, would continue to be used throughout portions of the Project Site. In addition, Mobility Hub(s) that would provide features to promote a reduction in vehicle miles traveled would also be implemented. The Project Site would continue to operate on a 24-hour a day/seven days a week basis.

1.3 REGULATORY SETTING

1.3.1 Federal

National Environmental Policy Act

The *National Environmental Policy Act* (NEPA) establishes a broad national framework for protecting the environment. NEPA’s basic policy is to assure that all branches of government give proper consideration to the environment prior to undertaking any major federal action that significantly affects the environment (42 *United States Code* [USC] 4321-4347). NEPA established the U.S. Environmental Protection Agency (USEPA) with the following roles and functions: (1) to establish and enforce environmental protection standards consistent with national environmental goals; (2) to conduct research on the adverse effects of pollution and on methods and equipment for controlling it, the gathering of information on pollution, and the use of this

Aerial Source: NearMap 2023

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Project Site

Exhibit 3

Biological Technical Report for the Radford Studio Center Project

N W E S

400 200 0 400

Feet

PSOMAS

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information in strengthening environmental protection programs and recommending policy changes; (3) to assist, through grants, technical assistance, and other means, in arresting pollution of the environment; and (4) to assist the Council on Environmental Quality in developing and recommending to the President new policies for the protection of the environment.

Federal Endangered Species Act

The *Federal Endangered Species Act* (FESA) protects plants and animals that the USFWS has listed as “Endangered” or “Threatened.” A federally listed species is protected from unauthorized “take,” which is defined in the FESA as acts to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct” (16 USC Sections 1532[19] and 1538[a]). In this definition, “harm” includes “any act which actually kills or injures fish or wildlife, and emphasizes that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife” (50 *Code of Federal Regulations* [CFR], Title 50, Section 17.3). Unless performed for scientific or conservation purposes with the permission of the USFWS, take of listed species is only permissible if the USFWS issues an Incidental Take Permit (ITP). When issuing an ITP, all federal agencies, including the USFWS, must ensure that their activities are “not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species” (16 USC 1536[a][2]). Enforcement of the FESA is administered by the USFWS.

The FESA also provides for designation of Critical Habitat: specific areas within the geographical range occupied by a species where physical or biological features “essential to the conservation of the species” are found and “which may require special management considerations or protection” (16 USC 1532[5][A]). Critical Habitat may also include areas outside the current geographical area occupied by the species that are nonetheless essential for the conservation of the species.

Fish and Wildlife Coordination Act

The *Fish and Wildlife Coordination Act* requires consultation with the USFWS and the fish and wildlife agencies of States where the “waters of any stream or other body of water are proposed or authorized, permitted or licensed to be impounded, diverted . . . or otherwise controlled or modified” by any agency under a federal permit or license. Consultation is to be undertaken for the purpose of “preventing loss of and damage to wildlife resources” (16 USC 661-667e).

Sections 404 and 401 of the Clean Water Act of 1972

Section 404 of the *Clean Water Act* (CWA) (33 USC 1251 et seq.) regulates the discharge of dredged or fill material into "waters of the United States” (WOTUS), including wetlands. The U.S. Army Corps of Engineers (USACE) is the designated regulatory agency responsible for administering the CWA Section 404 permit program and for making jurisdictional determinations. This permitting authority applies to all WOTUS where the material has the effect of (1) replacing any portion of WOTUS with dry land or (2) changing the bottom elevation of any portion of WOTUS. These fill materials would include sand, rock, clay, construction debris, wood chips, and materials used to create any structure or infrastructure in WOTUS. Dredge and fill activities are typically associated with development projects; water resource-related projects; infrastructure development; and wetland conversion to farming, forestry, or urban development.

Under Section 401 of the CWA, an activity requiring a USACE Section 404 permit must obtain a State Water Quality Certification (or waiver thereof) to ensure that the activity will not violate established federal or State water quality standards. The State Water Resources Control Board (SWRCB), in conjunction with the nine California Regional Water Quality Control Boards

(RWQCBs), is responsible for administering the Section 401 Water Quality Certification (Section 401 Certification) program.

Under Section 401 of the federal CWA, an activity involving discharge into a water body must obtain a federal permit and a Section 401 Certification to ensure that the activity will not violate established water quality standards. The SWRCB's and RWQCBs' jurisdiction extends to all "waters of the State" when no WOTUS are present, including wetlands and non-wetland waters of the State (isolated and non-isolated). The USEPA is the federal regulatory agency responsible for implementing the CWA. However, it is the SWRCB, in conjunction with the nine RWQCBs, who essentially has been delegated the responsibility of administering the Section 401 Certification program.

U.S. Code Section 408

The USACE is responsible for authorizing activities by any entity other than the USACE that builds upon, alters, improves, moves, occupies, or otherwise affects the usefulness, or the structural or ecological integrity, of a USACE project as described in Section 14 of the *Rivers and Harbors Act of 1899* and codified in 33 USC 408. Alterations include actions described as encroachments pursuant to 33 USC 208.10. These encroachments include activities that would adversely affect the efficient operation or maintenance of a flood protection structure.

Migratory Bird Treaty Act of 1918

The *Migratory Bird Treaty Act* (MBTA) of 1918 (16 USC 703–711), as amended in 1972, makes it unlawful at any time, by any means or in any manner, unless permitted by regulations, to "pursue; hunt; take; capture; kill; attempt to take, capture, or kill; possess; offer for sale; sell; offer to barter; barter; offer to purchase; purchase; deliver for shipment; ship; export; import; cause to be shipped, exported or imported; deliver for transportation; transport or cause to be transported; carry or cause to be carried; or receive for shipment, transportation, carriage, or export, any migratory bird; any part, nest, or eggs of any such bird; or any product, whether or not manufactured, which consists, or is composed in whole or part, of any such bird or any part, nest, or egg thereof. . . ." (16 USC 703).

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. This regulation seeks to protect migratory birds and active nests. The MBTA protects over 800 species, including geese, ducks, shorebirds, raptors, songbirds, and many relatively common species. Bird species protected under the provisions of the MBTA are identified by the List of Migratory Birds (50 CFR 10.13), as updated by the 1983 American Ornithological Society (AOS) Checklist and published supplements by the USFWS.

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protect all species and subspecies of these families.

Bald and Golden Eagle Protection Act

The *Bald and Golden Eagle Protection Act* (16 USC 668) provides for the protection of the bald eagle (*Haliaeetus leucocephalus*) and the golden eagle (*Aquila chrysaetos*) by prohibiting, except under certain specified conditions, the taking, possession, and commerce of such birds. The 1972 amendments increased penalties for violating provisions of the *Act* and strengthened other

enforcement measures. A 1978 amendment authorizes the Secretary of the Interior to permit the taking of golden eagle nests that interfere with resource development or recovery operations.

A 1994 Memorandum from President William Clinton to the heads of Executive Agencies and Departments establishes the policy concerning collection and distribution of eagle feathers for Native American religious purposes.

1.3.2 State

California Environmental Quality Act

CEQA (13 *Public Resources Code* Sections 21000 et seq.) is a statute that requires State and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible. The CEQA Guidelines (14 *California Code of Regulations* Chapter 3) are the regulations that explain and interpret the law for both public agencies and private development required to administer CEQA.

With regards to plants and animals, Section 15380 of the CEQA Guidelines independently defines "Endangered" and "Rare" species separately from the definitions of the *California Endangered Species Act* (CESA). Under CEQA, Endangered species of plants or animals are defined as those whose survival and reproduction in the wild are in immediate jeopardy, while Rare species are defined as those that (1) have such low numbers that they could become Endangered if their environment worsens or (2) are likely to become endangered within the foreseeable future (i.e., "threatened" as used in the FESA). In addition, a Lead Agency can consider a non-listed species (e.g., species with a California Rare Plant Rank [CRPR], California Species of Special Concern, or species of Local Concern) to be treated as if it were Endangered, Rare, or Threatened for the purposes of CEQA if the species can be shown to meet the criteria in the definition of "Rare" or "Endangered" in the project region.

The CEQA Guidelines designates certain "trustee agencies" that have jurisdiction by law over natural resources affected by a project which are held in trust for the people of California. The CDFW is the trustee responsible for conservation, protection, and management of wildlife, native plants, and habitat necessary to maintain biologically sustainable populations. Trustee agencies are generally required to be notified of CEQA documents relevant to their jurisdiction, whether or not these agencies have actual permitting authority or approval power over aspects of the underlying project. The CDFW shall provide the requisite biological expertise to review and comment upon environmental documents and impacts arising from project activities and shall make recommendations regarding those resources held in trust for the people of California (*California Fish and Game Code* Section1802).

California Endangered Species Act

The State of California implements the CESA which is enforced by the CDFW. While the provisions of the CESA are similar to the FESA, CDFW maintains a list of California Threatened and Endangered species, independent of the FESA Threatened and Endangered species list. It also lists species that are considered Rare and Candidates for listing, which also receive protection. The California list of Endangered and Threatened species is contained in Title 14, Sections 670.2 (plants) and 670.5 (animals) of the *California Code of Regulations*.

State-listed Threatened and Endangered species are protected under provisions of the CESA. Activities that may result in take of individuals (defined in CESA, *California Fish and Game Code Section 86,* as acts to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") are regulated by the CDFW. While habitat degradation or modification is not included in the definition of take under CESA, the CDFW has interpreted take to include the

destruction of nesting, denning, or foraging habitat necessary to maintain a viable breeding population of protected species.

If it is determined that the take would not jeopardize the continued existence of the species, an ITP can be issued by CDFW per Section 2081 of the *California Code of Regulations*. If a State-listed species is also federally listed, and the USFWS has issued an ITP that satisfies CDFW's requirements, CDFW may issue a consistency finding in accordance with Section 2080.1 of the *California Fish and Game Code*.

California Fish and Game Code

The CDFW administers the *California Fish and Game Code*. Particular sections of the Code are applicable to natural resource management.

Native Plant Protection

Sections 1900–1913 of the *California Fish and Game Code* were developed to preserve, protect, and enhance Endangered and Rare plants in the State of California. The *Act* requires all State agencies to use their authority to carry out programs to conserve Endangered and Rare native plants. Provisions of the *Native Plant Protection Act* prohibit the taking of listed plants from the wild and require notification of the CDFW at least ten days in advance of any change in land use that would adversely impact listed plants. This allows the CDFW to salvage listed plant species that would otherwise be destroyed.

Unlawful Take or Destruction of Nests or Eggs

These sections duplicate federal protection under the MBTA. Section 3503 of the *California Fish and Game Code* makes it unlawful to take, possess, or destroy any bird's nest or any bird's eggs. Further, any birds in the orders *Falconiformes* or *Strigiformes* (birds of prey, such as hawks, eagles, and owls) and their nests and eggs are protected under Section 3503.5 of the *California Fish and Game Code*. Section 3513 of the *California Fish and Game Code* prohibits the take and possession of any migratory nongame bird, as designated in the MBTA.

California Fully Protected Species

The State of California created the "Fully Protected" classification in an effort to identify and provide additional protection to those animals that are rare or that face possible extinction. Lists were created for fish, amphibians and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under the State and/or federal Endangered Species Acts; however, some have not been formally listed.

Various sections of the *California Fish and Game Code* provide lists of Fully Protected reptile and amphibian (Section 5050), bird Section 3511), and mammal (Section 4700) species that may not be taken or possessed at any time, except as provided in Sections 2081.7, 2081.9, or 2835. The CDFW is unable to authorize the issuance of permits or licenses to take these species, except for necessary scientific research.

Fur-Bearing Mammals

Section 460 of the *California Fish and Game Code* prohibits the taking of the following fur-bearing mammals: fisher (*Martes pennanti*), American marten [marten] (*Martes americana*), North American river otter [river otter] (*Lontra canadensis*), desert kit fox (*Vulpes macrotis arsipus*), and red fox (*Vulpes vulpes*).

Natural Communities Conservation Planning Act

The *Natural Community Conservation Planning Act*, codified in Sections 2800–2835 of the *California Fish and Game Code* and signed into law in October 1991, authorizes the preparation of Natural Community Conservation Plans (NCCPs). The *Act* is a State of California effort to protect critical vegetative communities and their dependent wildlife species. The purpose of an NCCP is to sustain and restore those species and their habitat identified by the CDFW that are necessary to maintain the continued viability of those biological communities impacted by human changes to the landscape. The NCCP process provides an alternative to protecting species on a "single species basis" as in the federal and State Endangered Species Acts. Under the *Act*, the CDFW is responsible for creating process planning and conservation guidelines for NCCP programs. Local governments and landowners may then prepare the NCCPs so that they comply with the CESA.

California Fish and Game Code (Sections 1600 through 1616)

California Fish and Game Code Sections 1600 et seq. establish a process to ensure that projects conducted in and around lakes, rivers, or streams do not adversely impact fish and wildlife resources or, when adverse impacts cannot be avoided, ensures that adequate mitigation and/or compensation is provided.

California Fish and Game Code Section 1602 requires any person, State, or local governmental agency or public utility to notify the CDFW before beginning any activity that will do one or more of the following:

- substantially obstruct or divert the natural flow of a river, stream, or lake;
- substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake.

Section 1602 of the *California Fish and Game Code* applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State. CDFW's regulatory authority extends to include riparian habitat (including wetlands) supported by a river, stream, or lake regardless of the presence or absence of hydric soils and saturated soil conditions. Generally, the CDFW takes jurisdiction to the top bank of the stream or to the outer limit of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place in or in the vicinity of a river, stream, lake, or their tributaries. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life and watercourses having a surface or subsurface flow that support or have supported riparian vegetation. A Section 1602 Lake or Streambed Alteration Agreement would be required if impacts to identified CDFW jurisdictional areas occur.

California Fish and Game Code (Sections 4150 – 4155)

Under *California Fish and Game Code* Sections 4150-4155, it is unlawful to take most common, non-game mammal species even if it is not considered a sensitive species or otherwise listed as protected (i.e., Fully Protected, Threatened, or Endangered, etc.). There are some exceptions, such as to reduce agricultural harm or maintain compliance with *State Food and Agricultural Code*; however, these exceptions are not typically applicable to new actions or projects. Roosting bats are frequently protected under this Section.

California Porter-Cologne Water Quality Control Act

Pursuant to the *California Porter-Cologne Water Quality Control Act*, the SWRCB and the nine RWQCBs may require permits (known as “Waste Discharge Requirements” or WDRs) for the fill or alteration of the waters of the State. The term “waters of the State” is defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (*California Water Code,* Section 13050[e]). The SWRCB and RWQCB have interpreted their authority to require WDRs to extend to any proposal to fill or alter waters of the State, even if those same waters are not under USACE jurisdiction. Pursuant to this authority, the State and Regional Boards may require the submission of a “Report of Waste Discharge” under Section 13260, which is treated as an application for WDRs.

The *Porter-Cologne Water Quality Control Act* charges the SWRCB and the nine RWQCBs statewide with protecting water quality throughout California. Typically, the SWRCB and RWQCB act in concert with the USACE under Section 401 of the CWA in relation to permitting fill of federally jurisdictional waters. SWRCB and the RWQCBs may require permits (WDRs) for the fill or alteration of the waters of the State.

1.3.3 Local

City of Los Angeles General Plan

California State law (Government Code Section 65300) requires that each city prepare and adopt a comprehensive, long-term general plan for its future development. The Citywide General Plan Framework Element establishes the conceptual basis for the City’s General Plan to address the State requirement to plan for future development, and addresses housing, safety, health, mobility, conservation, air quality, noise, infrastructure systems, public facilities and services, open space, and land use. For purposes of this analysis, the pertinent chapters of the General Plan Framework Element are the Conservation and Open Space elements.

Objective 6.1 of the Open Space and Conservation Chapter of the Framework Element specifies the protection of “the City’s natural settings from the encroachment of urban development, allowing for the development, use, management, and maintenance of each component of the City’s natural resources to contribute to the sustainability of the region.” Policy 6.1.2 requires the coordination of “City operations and development policies for the protection and conservation of open space resources, by ... preserving habitat linkages, where feasible, to provide wildlife corridors and to protect natural animal ranges.”

The City of Los Angeles General Plan Conservation Element, adopted in 2001, contains policies related to the identification and protection of sensitive plant, animal species, significant ecological areas (SEAs), and other resources. State law recognized that State requirements regarding the content of one element may overlap with the requirements of another. As allowed by State law, Los Angeles has opted to incorporate natural open space agricultural and other open space features of the State’s open space requirements into the Conservation Element, which primarily addresses preservation, conservation, protection, and enhancement of the City’s natural resources. Additionally, the Conservation Element recognizes the City’s “primary role in protecting endangered and other at-risk plant and animal species” (Conservation Element of the City of Los Angeles General Plan, 2001). Specific species are identified that receive sensitive species protection and propagation enhancement programs in the City including Belding’s savannah sparrow, California condor, California least tern, El Segundo blue butterfly, and California native oaks.

State law intends that conservation elements address "conservation, development, and utilization of natural resources including water and hydraulic force, forests, soils, rivers and other waters,

harbors, fisheries, wildlife, minerals, and other natural resources." State general plan legislation was amended in 1995 to require that preparation of the water portion of the general plan address water and land reclamation, water (including ocean) pollution, regulation and use of land in stream beds, erosion, watershed protection, flood control and rock, sand and gravel resources. Open space, as defined by the California Government Code Section 65560, is "any parcel or area of land or water that essentially is unimproved and devoted to an open-space use," including: (1) preservation of natural resources (e.g., preservation of flora and fauna [animal habitats], bird flyways, ecologic and other scientific study areas, watershed); (2) managed production of resources (e.g., recharge of ground water basins or containing mineral deposits that are in short supply); (3) outdoor recreation (e.g., beaches, waterways, utility easements, trails, scenic highway corridors); and/or (4) public health and safety (e.g., flood, seismic, geologic or fire hazard zones, air quality enhancement).

The City of Los Angeles General Plan Open Space Element includes goals, objectives, policies, and programs directed towards the regulation of publicly- and privately-owned lands both for the benefit of the public as a whole and for the protection of individuals from the misuse of these lands. The Open Space Element provides guidance and general policies for the conservation and preservation of open space areas containing the City's environmental resources including air and water.

City of Los Angeles Tree Ordinance

The City of Los Angeles regulates trees that are designated as "protected trees" as defined by Chapter IV, Article 6, Section 17.02 of the *Los Angeles Municipal Code*, hereafter referred to as the Los Angeles Native Tree and Shrub Protection Ordinance (Ordinance No. 186,873 of the *Los Angeles Municipal Code*). This category includes all native oak trees (*Quercus* spp.), Southern California black walnuts (*Juglans californica*), western sycamores (*Platanus racemosa*), California bay laurels (*Umbellularia californica*), toyon (*Heteromeles arbutifolia*), and blue elderberry (*Sambucus nigra* ssp. *caerulea*) that have a minimum trunk diameter at four and one-half feet above grade (i.e., diameter at standard height [dsh]) of 4 inches. Furthermore, the City of Los Angeles requires the collection and reporting on additional data beyond that required by the Ordinance, both on- and off-site. Some key requirements of the tree report include inventory and assessment of all on-site non-protected trees with a dsh of at least 8 inches, inventory of off-site trees whose protected zones (12 times the trunk dsh) may be impacted by the Project, inventory of all adjacent street trees, photographs of each tree along with a photograph of a leaf from each tree type, mapping of all trees' locations and their canopies (driplines) plus protected zones, and the tree expert's opinion as to whether the tree occurs naturally or was planted.

Sherman Oaks–Studio City–Toluca Lake–Cahuenga Pass Community Plan

The Project Site is located within the Sherman Oaks–Studio City–Toluca Lake–Cahuenga Pass Community Plan area.[2] The Sherman Oaks–Studio City–Toluca Lake–Cahuenga Pass Community Plan (Community Plan) is one of 35 community and district plans established for different areas of the City to implement the policies of the General Plan Framework Element. There are no goals, objectives or policies in the Community Plan specifically related to biological resources.[3]

[2] City of Los Angeles, Zone Information and Map Access System (ZIMAS) Parcel Profile Reports for APNs 2368-001-028, 2368-001-030, 2368-005-011, and 2368-001-029, March 3, 2023.

[3] City of Los Angeles, Sherman Oaks–Studio City–Toluca Lake–Cahuenga Pass Community Plan, adopted May 13, 1998, last amended September 7, 2016.

(f) River Implementation Overlay

The River Implementation Overlay (RIO) is a citywide zoning ordinance (No. 183,145) that applies to properties in close proximity to the Los Angeles River. Per Section 13.17(a), the purposes of the ordinance include but are not limited to: supporting the goals of the City's Los Angeles River Revitalization Master Plan (LARRMP), contributing to the environmental and ecological health of the City's watersheds, and providing a native habitat and supporting local species. Specific references are made in the ordinance to the LARRMP's native landscaping guidelines.

(g) Los Angeles River Revitalization Master Plan

The City adopted the Los Angeles River Revitalization Master Plan (LARRMP) in 2007 with the goal of restoring the ecological and hydrological functioning of the river, through the re-creation of a riparian habitat corridor in the channel, and through the removal of concrete walls where feasible. This would help restore a continuous, functioning riparian ecosystem that supports vegetation as well as birds and mammals, and developing fish passages, fish ladders, and riffle pools.

Implementation of the LARRMP would maintain the river as a resource that provides flood protection and opportunities for recreational and environmental enhancement, as well as improve the aesthetics of the region, enrich the quality of life for residents, and help sustain the economy of the region. Goals of the plan include to:

- Revitalize the river by enhancing flood storage and water quality, enabling safe public access, and restoring a functional ecosystem.
- Green the neighborhoods by creating a continuous river greenway; connecting neighborhoods to the river; extending open space, recreation, and water quality features into neighborhoods; enhancing river identify; and incorporating public art along the river.
- Capture community opportunities by making the river the focus of activity, fostering civic pride, engaging residents in the community planning process and consensus building, providing opportunities for educational and public facilities, and celebrating the cultural heritage of the river.
- Create value by improving the quality of life; increasing employment, housing, and retail space opportunities; creating environmentally-sensitive urban design and land use opportunities and guidelines; and focusing attention on underused areas and disadvantages communities.

The City's LARRMP references the landscaping guidelines and plant palettes in the County's Landscaping Guidelines.

2.0 METHODS

This section summarizes survey methods employed by Psomas Biological Resources Manager Marc Blain and Senior Restoration Ecologist David Hughes during a general site assessment on June 2, 2023. The study area discussed in this report includes the Project area plus a 200-foot buffer to identify biological resources within this potential indirect impact area. This buffer size is expected to be sufficient due to the ambient disturbance level existing in the Project area. Generally, proposed Project disturbances to biological resources are expected to diminish to a level equal to or lesser than existing disturbance levels within 200 feet of the site. The limits of survey areas for each of the focused surveys and the jurisdictional delineation are discussed below.

2.1 LITERATURE REVIEW

Psomas conducted a literature search to identify special status plants, wildlife, and habitats reported from the vicinity of the study area; the searches were updated as needed. The study area region is generally defined as the U.S. Geological Survey's (USGS') Sunland, San Fernando, Oat Mountain, Van Nuys, Burbank, Canoga Park, Topanga, Beverly Hills, and Hollywood 7.5 -minute quadrangles. The following sources of information were consulted:

- The CDFW's California Natural Diversity Database (CNDDB) (CDFW 2023a)
- The California Native Plant Society's (CNPS') Inventory of Rare and Endangered Plants (CNPS 2023)
- The CDFW's *Natural Communities List* (CDFW 2023c), *Special Animals* List (CDFW 2023d), and *Special Vascular Plants, Bryophytes, and Lichens List* (CDFW 2023b)
- California Department of Food and Agriculture noxious weed lists (CDFA 2021)
- Jurisdictional Delineation Report for the Radford Studio Center Project (Psomas 2024)
- Protected Tree Report, Radford Studio Center (Carlberg Associates, 2024)

2.2 VEGETATION MAPPING AND GENERAL SURVEYS

Vegetation on the Project Site was mapped during the June 2, 2023 site assessment. The purpose of the site assessment was to document existing biological resources in the study area and to evaluate its potential to support special status species. Vegetation was mapped in the field on an aerial photograph at a scale of 1 inch equals 200 feet (1" = 200'). Vegetation classification follows that of *A Manual of California Vegetation* (*Second Edition)* (Sawyer et al. 2009) when feasible.

2.3 FOCUSED SURVEYS

2.3.1 Jurisdictional Delineation

Psomas Regulatory Specialist David Hughes performed a delineation of jurisdictional waters as part of the general site assessment on June 2, 2023. Jurisdictional water resources considered for the delineation include WOTUS under the regulatory authority of the USACE; "waters of the State" under the regulatory authority of the Los Angeles RWQCB; and the bed, bank, and channel of all lakes, rivers, and/or streams (and associated riparian vegetation) under the regulatory authority of the CDFW.

Prior to conducting the delineation and during the course of report preparation, Psomas reviewed the following documents to identify areas that may fall under agency jurisdiction: the USGS' Van Nuys 7.5-minute topographic quadrangle map; color aerial photography provided by Google

Earth; soil data provided by the U.S. Department of Agriculture's Natural Resources Conservation Service (USDA NRCS 2023a); the National Hydric Soils List (USDA NRCS 2023b); the National Wetlands Inventory's Wetland Mapper (USFWS 2023).

Non-wetland WOTUS are delineated based on the limits of the ordinary high water mark (OHWM), which can be determined by a number of factors, including the presence of a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; and the presence of litter and debris. For the hardened flood control channels that are present in the Project survey area, the OHWM limits are based on the width of the flat bottom channel. Because the on-site channels have vertical sidewalls, the top of the stream bank equals the width of the stream bottom so that the USACE and CDFW jurisdictional limits are equal from an aerial view.

It should be noted that the RWQCB shares USACE jurisdiction unless isolated conditions are present. Water resources lacking connectivity to a Traditional Navigable Water,[4] are considered isolated. If isolated waters are present, the RWQCB takes jurisdiction using the USACE's definition of the OHWM (33 CFR Section 328).

The Jurisdictional Delineation report for the Project Site is provided in Appendix A.

2.3.2 Tree Inventory Report

Carlberg Associates performed an inventory of tree resources on the Project Site in 2022 and updated in 2024 to document trees that are subject to regulation by the City of Los Angeles' Native Tree and Shrub Protection Ordinance (Ordinance No. 186,873 of the *Los Angeles Municipal Code*) and guidelines established by the Los Angeles Department of City Planning. The tree inventory report is provided in Appendix B

As described in Section 1.3.3, "protected" trees include native western sycamore, indigenous oak species, California bay laurel, and southern California black walnuts that have a cumulative trunk dsh of at least four inches. The City ordinance also covers "protected" shrubs including blue elderberry and toyon that have cumulative trunk dsh of at least four inches. Carlberg Associates prepared a tree inventory report that complies with the requirements of City of Los Angeles tree inventory reports (issued July 2023). In addition to the native trees listed above, the tree inventory survey included all non-protected trees that are at least eight inches dsh (considered "significant" by policy of the Department of City Planning). All protected and significant trees observed in the study area were tagged, measured, evaluated, and photographed.

[4] Traditional Navigable Waters are all waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide (Department of the Army, Corps of Engineers, Department of Defense; and Environmental Protection Agency (EPA) 2023).

3.0 EXISTING BIOLOGICAL RESOURCES

3.1 PHYSICAL ENVIRONMENTAL SETTING

3.1.1 Regional and Local Environment

The Project Site is located in the community of Studio City in the San Fernando Valley. The Project Site is located approximately one mile north of the Hollywood Hills and approximately five miles southwest of the Verdugo Mountains. The Project Site is surrounded by commercial and residential urban development with no natural open space areas in the vicinity (see Exhibits 1, 2, and 3).

As discussed in Section II, Project Description, of the Draft EIR, elevations on the Project Site range from approximately 585 to 617 feet above mean sea level. Prominent features on the Project Site include two Blue Line streams, the Los Angeles River and Tujunga Wash. A Blue Line stream is a stream that has been identified on USGS topographical maps as flowing for most or all of the year. These streams were converted many years ago to concrete-lined storm drain channels (see Exhibit 3).

3.1.2 Climate

Southern California experiences a Mediterranean climate characterized by mild, rainy winters and hot, dry summers. The temperature is moderated by the coastal influence of the Pacific Ocean, which creates mild conditions throughout most of the year. The most distinguishing characteristic of a Mediterranean climate is its seasonal precipitation. In Southern California, precipitation is characterized by brief, intense storms between November and March. It is not unusual for the majority of annual precipitation to fall during a few storms over a short span of time.

Rainfall patterns in the region are subject to extreme variations from year to year and longer-term wet and dry cycles. A rain gauge operated by Los Angeles County Public Works in Northridge has recorded average annual rainfall of approximately 15 inches.

3.1.3 Soils

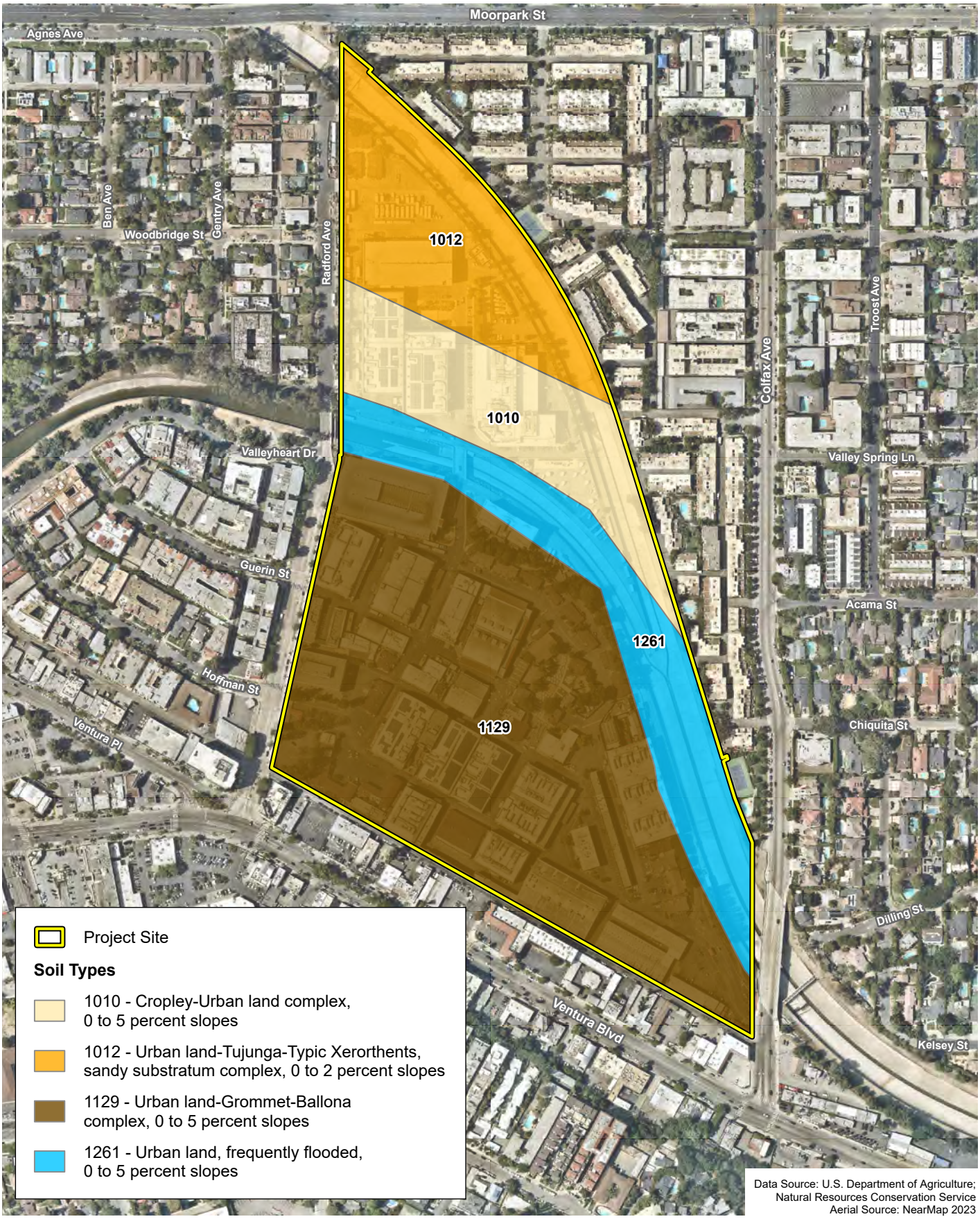
Soils on the Project Site include Cropley-Urban land complex, 0 to 5 percent slopes; Urban land-Tujunga-Typic Xerothents, sandy substratum complex, 0 to 2 percent slopes; Urban land-Grommet-Ballona complex, 0 to 5 percent slopes; and Urban land, frequently flooded, 0 to 5 percent slopes (Exhibit 4). The Urban land component of these soil types indicates that these are manufactured soils that are associated with grading and development. Generally, these soils consist of a variety of soil textures including clay loam, loamy sand, and coarse sand. These are generally deep soils and well drained, though the vast majority of the Project Site consists of paved or developed areas.

3.2 VEGETATION TYPES

Vegetation on the Project Site is the result of ornamental landscaping with no natural habitat areas. Vegetation types on the Project Site include oak groupings, ornamental, concrete-lined channels, and developed areas (Exhibit 5). These vegetation types are described below:

3.2.1 Oak Groupings

This vegetation type consists of groupings of coast live oaks (*Quercus agrifolia*). This vegetation type is not described as an oak woodland to reflect that the dominant trees are the result of



Data Source: U.S. Department of Agriculture; Natural Resources Conservation Service
Aerial Source: NearMap 2023

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Soil Map

Exhibit 4

Biological Technical Report for the Radford Studio Center Project

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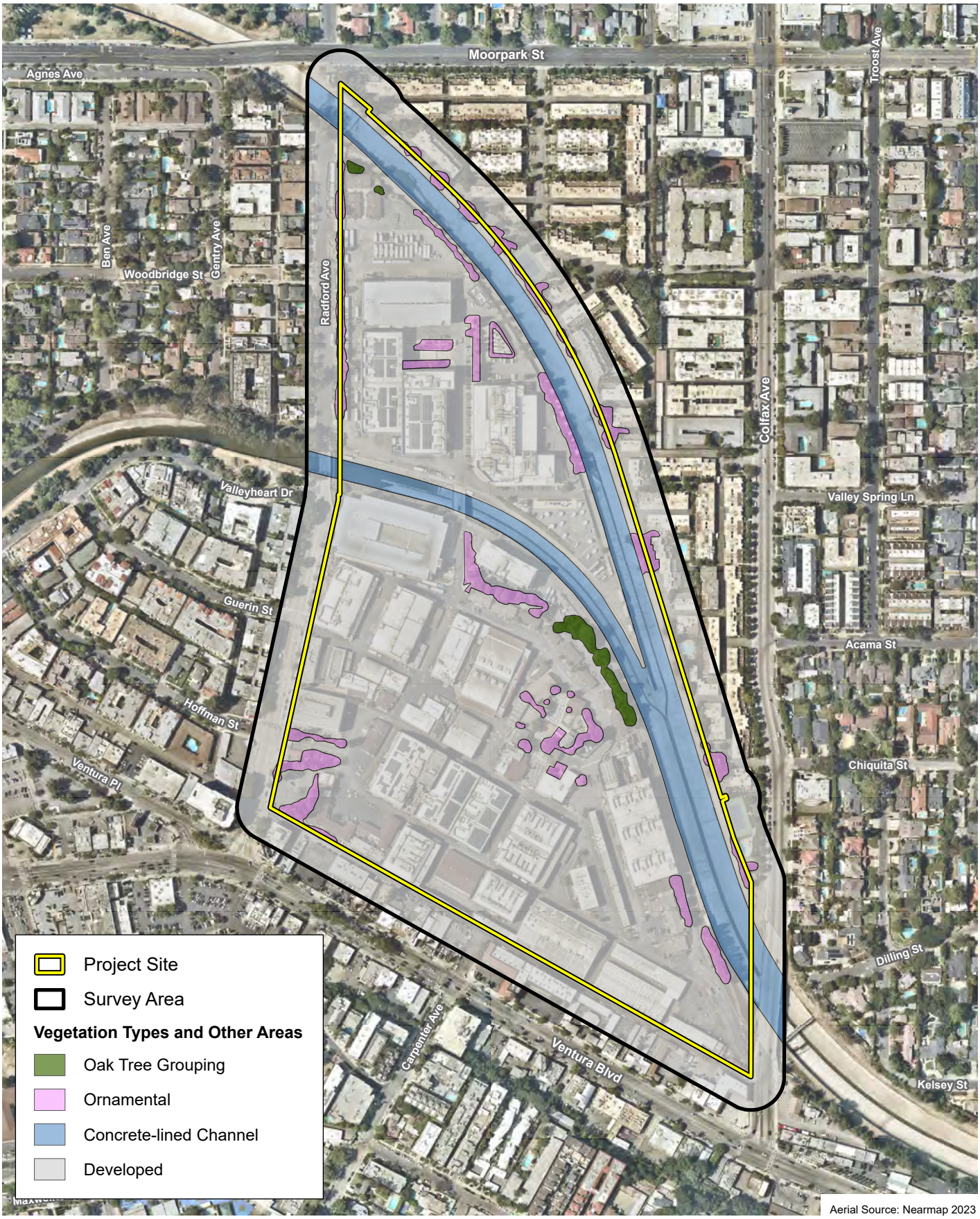

Aerial Source: Nearmap 2023

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Vegetation Map

Exhibit 5

Biological Technical Report for the Radford Studio Center Project

N W E S

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Feet

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landscaping and are not a natural component of the area. Though dominated by mature coast live oaks, these areas also contain several non-native tree species.

3.2.2 Ornamental

Ornamental areas are dominated by a variety of non-native tree species that were planted for Project Site landscaping. These areas contain mature non-native trees such as silk oak (*Grevillea robusta*), sweetshade (*Hymenosporum flavum*), and Peruvian pepper (*Schinus molle*) as well as ornamental shrubs and turf grass. Western sycamores are present in these areas but comprise a minor component of these areas that are dominated by non-native species.

3.2.3 Concrete-lined Channels

These areas are portions of the Los Angeles River and Tujunga Wash that pass through the Project Site. These channels have been converted from natural drainage features to hardened channels for flood-control purposes. These channels do not contain any vegetation and are ecologically and hydrologically separated from the rest of the Project Site by vertical concrete side levees that are approximately 15 feet tall.

3.2.4 Developed

Developed areas consist of portions of the Project Site that consist of paved or built structures and do not contain any native or naturally occurring vegetation. Individual ornamental plantings may occur.

3.3 SPECIAL STATUS VEGETATION TYPES

As described above, the Project Site consists of a combination of developed conditions with small amounts of ornamental vegetation. Coast live oak trees are present on the Project Site, but they appear to have been purposefully planted and occur in a few small areas on the Project Site. Because these oaks were planted by humans and do not appear to be a natural vegetation community, they are not considered a native vegetation type. Because there are no natural vegetation areas on the Project Site, no special status vegetation types are present that would be considered significant under CEQA.

3.4 WILDLIFE POPULATIONS AND MOVEMENT PATTERNS

Vegetation in and adjacent to the study area provides minimal habitat for wildlife species. Only wildlife species that are common to the urban environment are expected to occur on the Project Site. Though two large drainage features pass through the Project Site, the Los Angeles River and Tujunga Wash are highly modified concrete channels that support very limited aquatic habitat and are ecologically disconnected from the rest of the Project Site by the approximately 15-foot-tall concrete side walls. The potential for the Project Site to support common wildlife species is described below.

Special Status wildlife species are discussed in Section 3.5.6, Special Status Wildlife.

3.4.1 Fish

Though the Los Angeles River and Tujunga Wash pass through the Project Site, both are concrete lined drainages. Due to the limited quantity and low quality of aquatic habitat and lack of connectivity to fish habitat, suitable conditions for fish on the Project Site are expected to be limited to non-native mosquito fish.

3.4.2 Amphibians

Amphibians require moisture for at least a portion of their life cycle, and many require standing or flowing water for reproduction. Terrestrial species may or may not require standing water for reproduction; they survive in dry areas by aestivating (i.e., remaining beneath the soil in burrows or under logs and leaf litter and emerging only when temperatures are low and humidity is high). Many of these species' habitats are associated with water, and they emerge to breed once the rainy season begins. Soil moisture conditions can remain high throughout the year in some habitat types, depending on factors such as amount of vegetation cover, elevation, and slope/aspect.

Due to the limited quantity and low quality of aquatic habitat provided by the Los Angeles River and Tujunga Wash and the lack of ponded water elsewhere on the site, amphibian species are expected to be limited on the Project Site.

3.4.3 Reptiles

Reptiles are well-adapted to life in arid habitats. They have several physiological adaptations that allow them to conserve water. There are some vegetated areas on the Project Site that may support common reptile species that can survive in urban environments (e.g., western fence lizard [*Sceloporus occidentalis*]). However, given the limited distribution, lack of connectivity, and low quality of the habitat present, the Project Site is expected to support limited reptile populations.

3.4.4 Birds

The Project Site contains many trees that have the potential to provide both food resources and sites for roosting, perching and nesting for birds. Building and other infrastructure features may also provide suitable roosting and nesting locations for birds. Due to the Project Site's location and level of disturbance in the vicinity, only birds that are common to the urban environment are expected to occur. Common bird species such as house finch (*Haemorhous mexicanus*), black phoebe (*Sayornis nigricans*), and mourning dove (*Zenaida macroura*) were observed during the field assessment.

3.4.5 Mammals

Similar to birds, the Project Site contains numerous trees that could support mammals that are common to the urban environment, such as Eastern fox squirrels (*Sciurus niger*) or raccoons (*Procyon lotor*).

The Project Site does provide potentially suitable habitat for the numerous bat species known to occur in the region. One critical element necessary to support bat populations is the presence of suitable day-roosting sites. Different bat species utilize a wide array of sites for day-roosting, both natural and artificial. Such sites include trees, bridges, buildings, and other man-made structures. Of the 46 species of bats known from North America, over half are known to use buildings as roosts at least for part of the year. Buildings offer bats a wide range of roost microhabitats, including spaces beneath floorboards, inside insulation, etc. Structures located on the exterior of buildings also provide suitable roosting habitat, including crevices between bricks and stones; between vents; behind windows, screens, and shutters; and spaces beneath shingles.

Because roosting bats are protected in California, it is important to identify and appropriately manage occupied, day-roost structures as this is when bats are most vulnerable. Bats enter a state of torpor during the day to minimize their metabolic rate, but this state leaves bats unable to quickly respond to any environmental changes (e.g., roost demolition). Furthermore, bats rear their young during the spring and summer months and the pups are not able to fly or otherwise evacuate the roosts for weeks.

3.4.6 Wildlife Movement

Wildlife corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because they prohibit the infusion of new individuals and genetic information (MacArthur and Wilson 1967; Soule 1987; Harris and Gallagher 1989; Bennett 1990). Corridors mitigate the effects of this fragmentation by (1) allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fire or disease) will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move in their home ranges in search of food, water, mates, and other necessary resources (Noss 1983; Farhig and Merriam 1985; Simberloff and Cox 1987; Harris and Gallagher 1989).

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas or individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (e.g., foraging for food or water; defending territories; or searching for mates, breeding areas, or cover). A number of terms such as "wildlife corridor," "travel route," "habitat linkage," and "wildlife crossing" have been used in various wildlife movement studies to refer to areas in which wildlife move from one area to another. To clarify the meaning of these terms and to facilitate the discussion on wildlife movement in this analysis, these terms are described as follows:

- ***Travel route –*** a landscape feature (such as a ridgeline, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and to provide access to necessary resources (e.g., water, food, cover, den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another. It contains adequate food, water, and/or cover while moving between habitat areas; it provides a relatively direct link between target habitat areas.
- ***Wildlife corridor –*** a piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bound by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and to facilitate their movement while in the corridor. Larger, landscape-level corridors (often referred to as "habitat linkages" or "landscape linkages") can provide both transitory and resident habitat for a variety of species.
- ***Wildlife crossing –*** a small, narrow area, relatively short in length and generally constricted in nature that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are man-made and include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles. These often represent "choke points" along a movement corridor, which may impede wildlife movement and increase the risk of predation.

The Project Site is surrounded by commercial and residential development that does not provide significant opportunities for wildlife movement. The Project Site is located approximately one mile north of the Hollywood Hills, which is the closest area that provides substantial natural open space. Griffith Park, located approximately three miles southeast of the Project Site, provides

more expansive areas of native habitat, though it is separated from the Project Site by the 101 and 134 freeways. Native habitat areas to the north or northeast of the Project Site are more than five miles away.

The only potential wildlife movement corridor that passes through the Project Site would be the Los Angeles River and Tujunga Wash. Though these unvegetated concrete channels do not provide any opportunity for cover or foraging for dispersing wildlife, they do provide unobstructed pathways for travel. These channels may provide some dispersal potential for wildlife; however, there is very little connectivity with other portions of the Project Site due to the vertical side levees of the channels.

3.5 SPECIAL STATUS BIOLOGICAL RESOURCES

The following section addresses special status biological resources that were observed, reported, or have the potential to occur in the study area or in adjacent off-site areas. These resources include plant and wildlife species that have been afforded special status and/or recognition by federal and State resource agencies, as well as private conservation organizations. In general, the principal reason an individual taxon (i.e., species, subspecies, or variety) is given such recognition is the documented or perceived decline or limitations of its population size, geographic range, and/or distribution resulting in most cases from habitat loss. In addition to species, special status biological resources include vegetation types and habitats that are either unique; of relatively limited distribution in the region; or of particularly high wildlife value. These resources have been defined by federal, State, and local government conservation programs. Sources used to determine the special status of biological resources are listed below.

- ***Habitats –*** the CNDDB (CDFW 2023a); *NatureServe Conservation Status Assessments: Methodology for Assigning Ranks* (Faber-Langendoen et al. 2012); and the *California Natural Communities List* (CDFW 2023c).
- ***Plants –*** the CNDDB (CDFW 2023a); the Inventory of Rare and Endangered Plants (CNPS 2022); various USFWS *Federal Register* notices regarding listing status of plant species; and the *List of Special Vascular Plants, Bryophytes, and Lichens* (CDFW 2023b).
- ***Wildlife –*** the CNDDB (CDFW 2023a); various USFWS *Federal Register* notices regarding listing status of wildlife species; and the *List of Special Animals* (CDFW 2023d).

3.5.1 Definitions

Under the *Endangered Species Act*, a **federally Endangered species** is one facing extinction throughout all or a significant portion of its geographic range. A **federally Threatened species** is one likely to become Endangered within the foreseeable future throughout all or a significant portion of its range (ESA, 1983). The presence of any federally listed Threatened or Endangered species in a project impact area generally imposes severe constraints on development, particularly if development would result in "take" of the species or its habitat. The term "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct. "Harm" in this sense can include any disturbance of species' habitats during any portion of its life history.

Proposed species or **Candidate species** are those officially proposed by the USFWS for addition to the federal Threatened and Endangered species list. Because Proposed species may soon be listed as Threatened or Endangered, these species could become listed prior to or during implementation of a proposed project. The presence of a Proposed or Candidate species within a project impact area may impose constraints on development if they are listed prior to issuance of project permits, particularly if a project would result in "take" of the species or its habitat.

The State of California considers an **Endangered species** to be one whose prospects of survival and reproduction are in immediate jeopardy, a **Threatened species** as one present in such small numbers throughout its range that it is likely to become an Endangered species in the near future in the absence of special protection or management, and a **Rare species** as one present in such small numbers throughout its range that it may become Endangered if its present environment worsens. “Rare species” only applies only to California native plants. State-listed Threatened and Endangered species are protected against take unless an Incidental Take Permit is obtained from the resource agencies. The presence of any State-listed Threatened or Endangered species in a project impact area generally imposes severe constraints on development, particularly if a project would result in “take” of the species or its habitat.

California Species of Special Concern is an informal designation used by the CDFW for some declining wildlife species that are not State Candidates for listing. This designation does not provide legal protection but signifies that these species are recognized as special status by the CDFW. A few years ago, the CDFW downlisted several species from Species of Special Concern to the **Watch List**. Although not considered special status, Watch List species are tracked by the CNDDB.

Species that are **California Fully Protected** and **Protected** include those protected by special legislation for various reasons, such as the mountain lion and white-tailed kite (*Elanus leucurus*). Fully Protected species may not be taken or possessed at any time. California Protected species include those species that may not be taken or possessed at any time except under special permit from the CDFW issued pursuant to Sections 650 and 670.7 of the *California Code of Regulations,* or Section 2081 of the *California Fish and Game Code.*

Species of **Local Concern** are those that have no official status with the resource agencies but are being watched because either the region has a unique population or the species is declining in the region.

Special Animal is a general term that refers to species that the CNDDB is interested in tracking, regardless of legal or protective status. This term includes species designated as any of the above terms but also includes species that may be considered biologically rare; restricted in distribution; declining throughout their range; have a critical, vulnerable stage in their life cycle that warrants monitoring; are on the periphery of their range and are threatened with extirpation in California; are associated with special status habitats; or are considered by other State or federal agencies or private organizations to be sensitive or declining.

The **CRPR** is a ranking system administered by the CNPS and the CDFW (CDFW 2023b) that summarizes information on the distribution, rarity, and endangerment of California’s vascular plants. Plants with a CRPR of **1A** are presumed extirpated from the State because they have not been seen in the wild in California for many years and they are either rare or extinct elsewhere. Plants with a CRPR of **1B** are Rare, Threatened, or Endangered throughout their range. Plants with a CRPR of **2A** are presumed extirpated from California but are more common elsewhere. Plants with a CRPR of **2B** are considered Rare, Threatened, or Endangered in California, but are more common elsewhere. Plants with a CRPR of **3** require more information before they can be assigned to another rank or rejected; this is a “review” list. Plants with a CRPR of **4** are of limited distribution or are infrequent throughout a broader area in California; this is a “watch list.” The Threat Rank is an extension that is added to the CRPR to designate the plant’s endangerment level. An extension of **.1** is assigned to plants that are considered “seriously threatened” in California (i.e., over 80 percent of the occurrences are threatened or have a high degree and immediacy of threat). Extension **.2** indicates the plant is “fairly threatened” in California (i.e., between 20 and 80 percent of the occurrences are threatened or have a moderate degree and immediacy of threat). Extension **.3** is assigned to plants that are considered “not very threatened” in California (i.e., less than 20 percent of occurrences are threatened or have a low degree and

immediacy of threat or no current threats are known). The absence of a threat code extension indicates that this information is lacking for the plant(s) in question.

In addition to providing an inventory of special status plant and wildlife species, the CNDDB also provides an inventory of vegetation types that are considered special status by the State and federal resource agencies, academic institutions, and various conservation groups (e.g., the CNPS). Special status natural communities are "of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects"; they may or may not contain special status species (CDFW 2023c). Determination of the level of imperilment (i.e., exposure to injury, loss, or destruction) is based on the NatureServe Heritage Program Status Ranks that rank both species and vegetation types on a global (G) and statewide (S) basis according to their rarity, trend in population size or area, and recognized threats (e.g., proposed developments, habitat degradation, and non-native species invasion) (Faber-Langendoen et al. 2012). Global and state ranks are provided for all native vegetation types on the *California Natural Communities List* (CDFW 2023c). The ranks are scaled from 1 to 5. NatureServe considers **G1** and/or **S1** communities to be critically imperiled and at a very high risk of extinction or elimination due to extreme rarity, very steep declines, or other factors; **G2** and/or **S2** communities to be imperiled and at high risk of extinction or elimination due to very restricted range, very few populations or occurrences, steep declines, or other factors; **G3** and/or **S3** communities to be vulnerable and at moderate risk of extinction or elimination due to a restricted range, relatively few populations or occurrences, recent and widespread declines, or other factors; **G4** and/or **S4** communities to be apparently secure and uncommon but not rare with some cause for long-term concern due to declines or other factors; and **G5** and/or **S5** communities to be secure. A question mark (?) denotes an inexact numeric rank, but existing information points to this rank (Faber-Langendoen et al. 2012). Currently, association ranks are not provided, but associations ranked as S3 or rarer are noted. For vegetation alliances[5] that have State ranks of S1–S3, all associations within the alliance are considered to be highly imperiled.

3.5.2 Special Status Vegetation Types

The majority of the Project Site is covered by developed conditions. The only vegetated areas consist of small areas of landscaping. Though there are some landscaped areas dominated by mature coast live oaks groupings, these are not considered herein to constitute a coast live oak woodland (G5, S4) because these trees were purposefully planted, have no woodland understory, and because there are several non-native tree species interspersed with the oaks. Therefore, no special status vegetation types occur on the Project Site. Trees are discussed independently further below.

3.5.3 Jurisdictional Resources

Two jurisdictional features occur on the Project Site, the Los Angeles River and Tujunga Wash, which are described in detail in the Jurisdictional Delineation Report (Psomas 2024, Appendix A). Exhibit 6 shows the location of these jurisdictional features. These streams were channelized in the 1950s and converted to concrete-lined storm drain channels, which convey storm water and urban runoff in an easterly and southeasterly direction. Due to the vertical side levees associated with these channels, there is no hydrological connection to the rest of the Project Site.

[5] A vegetation alliance is "a classification unit of vegetation, containing one or more associations and defined by one or more diagnostic species, often of high cover, in the uppermost layer or the layer with the highest canopy cover" (Sawyer et al. 2009). This term is generally interchangeable with vegetation type.

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Jurisdictional Resources

Exhibit 6

Jurisdictional Delineation Report for the Radford Studio Center Project

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A summary of on-site jurisdictional resources is provided in Table 1. Photographs of the condition of these channels are provided in Appendix A of the Jurisdictional Delineation Report. A discussion of agency jurisdiction over these features is provided below.

TABLE 1
SUMMARY OF JURISDICTIONAL RESOURCES IN THE SURVEY AREA

Feature	Latitude/Longitude (decimal degrees)		Feature Length (linear feet)	OHWM Width Range (feet)	Area of USACE/RWQCB Jurisdiction* (acres)		CDFW Jurisdiction Width Range (feet)	Area of CDFW Jurisdiction (acres)
	Upstream End	Downstream End			Wetland	Non-wetland		
Los Angeles River	34.147061°, -118.392344°	34.142801°, -118.387737°	2,405	60-120	0.00	4.73	60-120	4.73
Tujunga Wash	34.150559°, -118.393428°	34.144919°, -118.388703°	3,750	65	0.00	5.60	17	5.60
Total					**0.00**	**10.33**		**10.33**

*Because there are no isolated waters on the Project Site, the RWQCB jurisdiction is the same as the USACE's
OHWM: Ordinary High Water Mark; USACE: U.S. Army Corps of Engineers; RWQCB: Regional Water Quality Control Board; CDFW: California Department of Fish and Wildlife

"Waters of the United States" Determination

The Los Angeles River has been determined to be a Traditional Navigable Waterway by the USACE so that it is considered WOTUS by definition. The Tujunga Wash, a tributary to the Los Angeles River, is also considered "WOTUS" due to its connection to the Los Angeles River and because it conveys relatively permanent flows. The OHWM limits were based on the extent of the entire width of the flat channel bottom. Based on the limit of the OHWM the Project Site contains a total of approximately 10.33 acres of non-wetland WOTUS.

Because the channels are hardened, no hydrophytic vegetation or hydric soils are present. Therefore, no wetland conditions are present on the Project Site.

Regional Water Quality Control Board Jurisdiction

The RWQCB's jurisdictional limits of "waters of the State" matches that of USACE WOTUS unless waters lack a connection to a Traditional Navigable Waterway or do not convey water on a relatively permanent basis (continuous flows for at least three months). Because the Los Angeles River and Tujunga Wash are not considered isolated and relatively permanent flows are present, the quantity of USACE and RWQCB jurisdiction is equal. Therefore, the Project Site contains a total of approximately 10.33 acres of non-wetland "waters of the State" (Table 1).

California Department of Fish and Wildlife Jurisdiction

The limits of CDFW jurisdiction on the Project Site were mapped to the top of the bank. Because the streambanks of the Los Angeles River and Tujunga Wash both consist of vertical levees, the CDFW jurisdictional limits match those of the USACE/RWQCB from an aerial view. Therefore, the total quantity of CDFW jurisdiction is approximately 10.33 acres.

3.5.4 Special Status Plants

Table 2 provides a summary of special status plant species reported to occur in the Project region (i.e., the USGS' Sunland, San Fernando, Oat Mountain, Van Nuys, Burbank, Canoga Park, Topanga, Beverly Hills, and Hollywood 7.5-minute quadrangles) and includes information on the status, species background, and potential for occurrence. This list includes species reported by the CNDDB and the CNPS, supplemented with species from the Psomas Project Biologist's experience that either occur nearby or could occur based on the presence of potentially suitable habitat. Note that these species are listed alphabetically according to their scientific name.

Based on the lack of natural habitat conditions on the Project Site, there are no special status plants expected to occur.

TABLE 2
POTENTIAL TO OCCUR FOR SPECIAL STATUS PLANT SPECIES REPORTED FROM THE PROJECT REGION

Scientific Name	Common Name	USFWS	CDFW	CRPR	Species Background	Potential
Arenaria paludicola	marsh sandwort	FE	SE	1B.1	Perennial stoloniferous herb. Marshes and swamps (brackish, freshwater); 10-560 ft. Southern California County Distribution: Los Angeles, Riverside, San Bernardino. Blooming period: May-August	Not expected to occur; outside species' range and lack of suitable habitat.
Astragalus brauntonii	Braunton's milk-vetch	FE		1B.1	Perennial herb. Chaparral, coastal scrub, valley and foothill grassland. 15-2,100 ft. Southern California County Distribution: Los Angeles, Orange, Ventura. Blooming period: January-August	Not expected to occur; outside species' range and lack of suitable habitat.
Astragalus pycnostachyus var. lanosissimus	Ventura Marsh milk-vetch	FE	SE	1B.1	Perennial herb. Coastal dunes, coastal scrub, marshes and swamps (edges, coastal salt, brackish). 5-115 ft. Southern California County Distribution: Los Angeles, Orange, Ventura. Blooming period: August-October	Not expected to occur; outside species' range and lack of suitable habitat.
Astragalus tener var. titi	coastal dunes milk-vetch	FE	SE	1B.1	Annual herb. Coastal bluff scrub (sandy), coastal dunes, coastal prairie (mesic). 5-165 ft. Southern California County Distribution: Los Angeles, San Diego. Blooming period: March-May	Not expected to occur; outside species' range and lack of suitable habitat.
Atriplex coulteri	Coulter's saltbush			1B.2	Perennial herb. Coastal bluff scrub, coastal dunes, costal scrub, valley and foothill grassland. 10-1,510 ft. Southern California County Distribution: Los Angeles, Orange, Santa Barbara, San Bernardino, San Diego, Ventura. Blooming period: March-October	Not expected to occur; outside species' range and lack of suitable habitat.
Atriplex pacifica	south coast saltscale			1B.2	Annual herb. Coastal bluff scrub, coastal dunes, coastal scrub, playas. 0-460 ft. Southern California County Distribution: Los Angeles, Orange, Santa Barbara, San Diego, Ventura. Blooming period: March-October	Not expected to occur; outside species' range and lack of suitable habitat.
Atriplex parishii	Parish's brittlescale			1B.1	Annual herb. Chenopod scrub, playas, vernal pools. 80-6,235 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Bernardino, San Diego. Blooming period: June-October	Not expected to occur; No suitable habitat present.
Atriplex serenana var. davidsonii	Davidson's saltscale			1B.2	Annual herb. Coastal bluff scrub, coastal scrub. 35-655 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, Santa Barbara, Ventura. Blooming period: April-October	Not expected to occur; outside species' range and lack of suitable habitat.
Berberis nevinii	Nevin's barberry	FE	SE	1B.1	Perennial evergreen shrub. Chaparral, cismontane woodland, coastal scrub, riparian scrub. 230-2,705 ft. Southern California County Distribution: Los Angeles, Riverside, San Bernardino, San Diego. Blooming period: March-June	Not expected to occur; No suitable habitat present.
Calandrinia breweri	Brewer's calandrinia			4.2	Annual herb. Chaparral, coastal scrub. 35-4,005 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, Santa Barbara, San Diego, Ventura	Not expected to occur; No suitable habitat present.
Calochortus catalinae	Catalina mariposa lily			4.2	Perennial bulbiferous herb. Chaparral, cismontane woodland, coastal scrub, and grassland; 49–2,296 ft. Southern California County Distribution: Los Angeles, Orange, San Bernardino, San Diego, Ventura. Blooming period: February–June	Not expected to occur; No suitable habitat present.
Calochortus clavatus var. gracilis	slender mariposa lily			1B.2	Perennial bulbiferous herb. Chaparral, coastal scrub, grassland; 1,050–3,280 ft. Southern California County Distribution: Los Angeles, Ventura. Blooming period: March–June	Not expected to occur; No suitable habitat present.
Calochortus plummerae	Plummer's mariposa lily			4.2	Perennial bulbiferous herb. Granitic and rocky areas in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and grassland; 328–5,576 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Bernardino, Ventura. Blooming period: May–July	Not expected to occur; No suitable habitat present.
Calystegia felix	lucky morning-glory			1B.1	Annual rhizomatous herb. Currently known from irrigated landscapes, but historically from meadows and seeps that are sometimes alkaline and alluvial riparian scrub; 98–705 ft. Southern California County Distribution: Los Angeles (Presumed extirpated), Riverside (Presumed extirpated), San Bernardino. Blooming period: March-September	Not expected to occur; No suitable habitat present.
Calystegia peirsonii	Peirson's morning-glory			4.2	Perennial rhizomatous herb. Chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, grassland; 98–4,920 ft. Southern California County Distribution: Los Angeles. Blooming period: April–June	Not expected to occur; No suitable habitat present.
Camissoniopsis lewsii	Lewis' evening-primrose			3	Annual herb. Sandy or clay soils in coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, and grassland; 0–984 ft. Southern California County Distribution: Los Angeles, Orange (Presumed extirpated), San Diego. Blooming period: March–June	Not expected to occur; No suitable habitat present.
Canbya candida	white pygmy-poppy			4.2	Annual herb. Gravelly, sandy, or granitic soils in Joshua tree woodland, Mojavean desert scrub, Pinyon and juniper woodland; 1,968–4,789 ft. Southern California County Distribution: Imperial, Kern, Los Angeles, San Bernardino. Blooming period: March–June	Not expected to occur; No suitable habitat present.
Centromadia parryi ssp. australis	southern tarplant			1B.1	Annual herb. Found within the margin of marshes and swamps, vernally mesic soils in grassland, and vernal pools; 0–1,574 ft. Southern California County Distribution: Los Angeles, Orange, San Diego, Ventura. Blooming period: May–November	Not expected to occur; outside species' range and lack of suitable habitat.
Cercocarpus betuloides var. blancheae	island mountain-mahogany			4.3	Evergreen shrub. Closed-cone coniferous forests and chaparral; 98–1,968 ft. Southern California County Distribution: Los Angeles, Ventura. Blooming period: February–May	Not expected to occur; No suitable habitat present.
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	FE	SE	1B.2	Hemiparasitic annual herb. Coastal dunes and coastal salt marshes and swamps; 0–98 ft. Southern California County Distribution: Los Angeles, Orange, San Bernardino, San Diego, Ventura. Blooming period: May–October	Not expected to occur; outside species' range and lack of suitable habitat.
Chorizanthe parryi var. fernandina	San Fernando Valley spineflower		SE	1B.1	Annual herb. Sandy soil in coastal scrub and grassland; 492–4,002 ft. Southern California County Distribution: Los Angeles, Orange (Presumed extirpated), Ventura. Blooming period: April–July	Not expected to occur; No suitable habitat present.
Convolvulus simulans	small-flowered morning-glory			4.2	Annual herb. Friable clay soils or serpentine seeps in chaparral openings, coastal scrub, and grassland; 98–2,297 ft. Southern California County Distribution: Kern, Los Angeles, Orange, Riverside, San Diego. Blooming period: March–July	Not expected to occur; No suitable habitat present.
Deinandra minthornii	Santa Susana tarplant		SR	1B.2	Deciduous shrub. Rocky soils in chaparral and coastal scrub; 918–2,493 ft. Southern California County Distribution: Los Angeles, Ventura. Blooming period: July–November.	Not expected to occur; No suitable habitat present.
Dichondra occidentalis	western dichondra			4.2	Perennial rhizomatous herb. Chaparral, cismontane woodland, coastal scrub, grassland; 164–1,640 ft. Southern California County Distribution: Los Angeles (Uncertain about distribution or identity), Orange, San Diego, Ventura. Blooming period: January–July	Not expected to occur; No suitable habitat present.

TABLE 2
POTENTIAL TO OCCUR FOR SPECIAL STATUS PLANT SPECIES REPORTED FROM THE PROJECT REGION

Scientific Name	Common Name	USFWS	CDFW	CRPR	Species Background	Potential
Diplacus johnstonii	Johnston's monkeyflower			4.3	Annual herb. Lower montane coniferous forest (disturbed areas, gravelly, roadsides, rocky, scree). 3,200-9,580 ft. Southern California County Distribution: Los Angeles, Riverside, Santa Barbara, San Bernardino, Ventura. Blooming period: May-August	Not expected to occur; No suitable habitat present.
Dithyrea maritima	beach spectaclepod		ST	1B.1	Perennial rhizomatous herb. Coastal dunes and sandy coastal scrub; 10–164 ft. Southern California County Distribution: Los Angeles (Presumed extirpated), Ventura. Blooming period: March–May	Not expected to occur; outside species' range and lack of suitable habitat.
Dodecahema leptoceras	slender-horned spineflower	FE	SE	1B.1	Annual herb. Sandy soils in chaparral, cismontane woodland, and alluvial fan coastal scrub; 656–2,493 ft. Southern California County Distribution: Los Angeles, Riverside, San Bernardino. Blooming period: April–June	Not expected to occur; No suitable habitat present.
Dudleya blochmaniae ssp. blochmaniae	Blochman's dudleya			1B.1	Perennial herb. Rocky, often clay or serpentine soils in coastal bluff scrub, chaparral, coastal scrub, and grassland; 16–1,476 ft. Southern California County Distribution: Los Angeles, Orange, San Diego, Ventura. Blooming period: April–June	Not expected to occur; No suitable habitat present.
Dudleya cymosa ssp. ovatifolia	Santa Monica dudleya	FT		1B.1	Perennial herb. Volcanic or sedimentary rocky soils in chaparral and coastal scrub; 492–5,494 ft. Southern California County Distribution: Los Angeles, Orange. Blooming period: March–June	Not expected to occur; No suitable habitat present.
Dudleya densiflora	San Gabriel Mountains dudleya			1B.1	Perennial herb. Granitic cliffs and canyon walls in chaparral, coastal scrub, lower montane coniferous forest, riparian and cismontane woodland; 800–2,001 ft. Southern California County Distribution: Los Angeles, Orange. Blooming period: March–June	Not expected to occur; No suitable habitat present.
Dudleya multicaulis	many-stemmed dudleya			1B.2	Perennial herb. Often in clay soils in chaparral, coastal scrub, and grassland; 49–2,591 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Bernardino, San Diego. Blooming period: April–July	Not expected to occur; No suitable habitat present.
Galium cliftonsmithii	Santa Barbara bedstraw			4.3	Perennial herb. Cismontane woodland; 656–4,002 ft. Southern California County Distribution: Los Angeles, Ventura. Blooming period: May–July	Not expected to occur; No suitable habitat present.
Harpagonella palmeri	Palmer's grapplinghook			4.2	Annual herb. Clay soils in chaparral, grasslands, coastal sage scrub; 65–3,132 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Diego. Blooming period: March–May	Not expected to occur; No suitable habitat present.
Helianthus nuttallii ssp. parishii	Los Angeles sunflower			1A	Perennial rhizomatous herb. Coastal salt and freshwater marshes and swamps; 33–5,494 ft. Southern California County Distribution: Los Angeles (Presumed extirpated), Orange (Presumed extirpated), San Bernardino (Presumed extirpated). Blooming period: August–October	Not expected to occur; outside species' range and lack of suitable habitat.
Heuchera caespitosa	urn-flowered alumroot			4.3	Perennial rhizomatous herb. Rocky soil in montane riparian forest, cismontane woodland, lower and upper montane coniferous forest; 3,788–8,692 ft. Southern California County Distribution: Kern, Los Angeles, San Bernardino, Ventura. Blooming period: May–August	Not expected to occur; outside species' range and lack of suitable habitat.
Horkelia cuneata var. puberula	mesa horkelia			1B.1	Perennial herb. Sandy and gravelly soils in maritime chaparral, cismontane woodland, and coastal scrub; 229–2,657 ft. Southern California County Distribution: Los Angeles, Orange, Riverside (Presumed extirpated), San Bernardino, San Diego (Presumed extirpated), Ventura. Blooming period: February–July(September)	Not expected to occur; No suitable habitat present.
Hulsea vestita ssp. gabrielensis	San Gabriel Mountains sunflower			4.3	Perennial herb. Rocky soil in lower and upper montane coniferous forest; 4,920–8,200 ft. Southern California County Distribution: Los Angeles, San Bernardino, Ventura. Blooming period: May–July	Not expected to occur; outside species' range and lack of suitable habitat.
Imperata brevifolia	California satintail			2B.1	Perennial rhizomatous herb. Mesic soils in chaparral, coastal scrub, Mojavean desert scrub, riparian scrub, meadows and seeps (often alkali); 0–3,985 ft. Southern California County Distribution: Imperial, Kern, Los Angeles, Orange, Riverside, San Bernardino, Ventura. Blooming period: September–May	Not expected to occur; No suitable habitat present.
Juglans californica	Southern California black walnut			4.2	Deciduous tree. Alluvial areas in chaparral, cismontane woodland, and coastal scrub; 164–2,952 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Bernardino, San Diego, Ventura. Blooming period: March–August	Not expected to occur; No suitable habitat present.
Juncus acutus ssp. leopoldii	southwestern spiny rush			4.2	Perennial rhizomatous herb. Mesic soils in coastal dunes, alkaline seeps in meadows and seeps, and coastal salt marshes and swamps; 9–2,953 ft. Southern California County Distribution: Imperial, Los Angeles, Orange, San Diego, Ventura. Blooming period: (March) May–June	Not expected to occur; No suitable habitat present.
Lasthenia glabrata ssp. coulteri	Coulter's goldfields			1B.1	Annual herb. Coastal salt marsh, coastal salt swamps, playas, vernal pools; 3–4,001 ft. Southern California County Distribution: Kern (Presumed extirpated), Los Angeles (Presumed extirpated), Orange, Riverside, San Bernardino (Presumed extirpated), San Diego, Ventura. Blooming period: February–June	Not expected to occur; outside species' range and lack of suitable habitat.
Lepechinia fragrans	fragrant pitcher sage			4.2	Perennial herb. Chaparral; 66–4,297 ft. Southern California County Distribution: Los Angeles, San Bernardino, Ventura (Uncertain about distribution or identity). Blooming period: March–October	Not expected to occur; No suitable habitat present.
Lepidium virginicum var. robinsonii	Robinson's pepper-grass			4.3	Annual herb. Openings in chaparral and sage scrub; below 2,900 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Bernardino, San Diego, Ventura. Blooming Period: January–July	Not expected to occur; No suitable habitat present.
Lilium humboldtii ssp. ocellatum	ocellated Humboldt lily			4.2	Perennial bulbiferous herb. Openings in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland; 98–5,904 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Bernardino, San Diego, Ventura. Blooming period: March–July(August)	Not expected to occur; No suitable habitat present.
Lupinus paynei	Payne's bush lupine			1B.1	Perennial shrub. Coastal scrub, riparian scrub, valley and foothill grassland; 720-1,380 ft. Southern California County Distribution: Los Angeles, Ventura. Blooming Period: March-April (May-July)	Not expected to occur; No suitable habitat present.
Malacothamnus davidsonii	Davidson's bush-mallow			1B.2	Deciduous shrub. Chaparral, coastal scrub, cismontane and riparian woodland; 607–2,804 ft. Southern California County Distribution: Kern, Los Angeles, Ventura. Blooming period: June–January	Not expected to occur; No suitable habitat present.

TABLE 2
POTENTIAL TO OCCUR FOR SPECIAL STATUS PLANT SPECIES REPORTED FROM THE PROJECT REGION

Scientific Name	Common Name	USFWS	CDFW	CRPR	Species Background	Potential
Monardella hypoleuca ssp. hypoleuca	white-veined monardella			1B.3	Perennial herb. Chaparral and cismontane woodland; 164–5,002 ft. Southern California County Distribution: Los Angeles, Ventura. Blooming period: April–December	Not expected to occur; No suitable habitat present.
Mucronea californica	California spineflower			4.2	Annual herb. Sandy soils in chaparral, cismontane woodland, coastal dunes, coastal scrub, and grassland; 0–4,592 ft. Southern California County Distribution: Kern, Los Angeles, Riverside, San Bernardino, San Diego, Ventura. Blooming period: March–August	Not expected to occur; No suitable habitat present.
Nama stenocarpa	mud nama			2B.2	Annual/perennial herb. Marshes and swamps, also riverbanks and lake margins; 16–1,640 ft. Southern California County Distribution: Imperial (Presumed extirpated), Los Angeles (Presumed extirpated), Orange, Riverside, San Diego. Blooming period: January–July	Not expected to occur; outside species' range and lack of suitable habitat.
Nasturtium gambelii	Gambel's water cress	FE	ST	1B.1	Perennial rhizomatous herb. Freshwater or brackish marshes and swamps; 16-1,000 ft. Southern California County Distribution: Los Angeles, Orange, San Bernardino (Presumed extirpated), San Diego. Blooming period: April–October	Not expected to occur; No suitable habitat present.
Navarretia prostrata	prostrate vernal pool navarretia			1B.2	Annual herb. Mesic coastal scrub, meadows and seeps, alkaline grassland, and vernal pools; 49–3,968 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Bernardino (Presumed extirpated; Occurrence confirmed, but possibly extirpated), San Diego. Blooming period: April–July	Not expected to occur; No suitable habitat present.
Orcuttia californica	California Orcutt grass	FE	SE	1B.1	Annual herb. Vernal pools; 49–2,165 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Diego, Ventura. Blooming period: April–August	Not expected to occur; No suitable habitat present.
Pelazoneuron puberulum var. sonorense	Sonoran maiden fern			2B.2	Perennial rhizomatous herb. Meadows and seeps (seeps, streams); 165-2,000 ft. Southern California County Distribution: Los Angeles, Riverside, Santa Barbara, San Bernardino. Blooming period: January-September	Not expected to occur; No suitable habitat present.
Phacelia hubbyi	Hubby's phacelia			4.2	Annual herb. Gravelly to rocky soil or talus in chaparral, coastal scrub, grassland; 0–3,280 ft. Southern California County Distribution: Kern, Los Angeles, Ventura. Blooming period: April–July	Not expected to occur; No suitable habitat present.
Pseudognaphalium leucocephalum	white rabbit-tobacco			2B.2	Perennial herb. Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian woodland; 0–6,888 ft. Southern California County Distribution: Los Angeles, Orange, Riverside, San Diego. Blooming period: July–December	Not expected to occur; No suitable habitat present.
Quercus dumosa	Nuttall's scrub oak			1B.1	Perennial evergreen shrub. Sandy or clay loam in closed-cone coniferous forest, chaparral, and coastal scrub; 49–1,312 ft. Southern California County Distribution: Los Angeles, Orange, San Diego, Ventura. Blooming period: February–August	Not expected to occur; No suitable habitat present.
Quercus durata var. gabrielensis	San Gabriel oak			4.2	Evergreen shrub. Chaparral and cismontane woodland; 1,476–3,280 ft. Southern California County Distribution: Los Angeles. Blooming period: April–May	Not expected to occur; No suitable habitat present.
Sagittaria sanfordii	Sanford's arrowhead			1B.2	Perennial rhizomatous herb. Marshes and swamps that are typically shallow and freshwater; 0–2,132 ft. Southern California County Distribution: Orange (Presumed extirpated), San Bernardino, Ventura (Presumed extirpated). Blooming period: May–October	Not expected to occur; outside species' range and lack of suitable habitat.
Sidalcea neomexicana	salt spring checkerbloom			2B.2	Perennial herb. Alkaline and mesic soils in chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, and playas; 49–5,020 ft. Southern California County Distribution: Kern, Los Angeles (Presumed extirpated), Orange, Riverside, San Bernardino, San Diego, Ventura. Blooming period: March–June	Not expected to occur; No suitable habitat present.
Spermolepis lateriflora	western bristly scaleseed			2A	Annual herb. Sandy or rocky Sonoran Desert scrub; 1,198–2,198 ft. Southern California County Distribution: Los Angeles (Occurrence confirmed, but possibly extirpated), San Diego. Blooming period: March–April	Not expected to occur; No suitable habitat present.
Symphyotrichum defoliatum	San Bernardino aster			1B.2	Perennial rhizomatous herb. Near ditches, streams, and springs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, and vernally mesic grassland; 7–6,693 ft. Southern California County Distribution: Kern, Los Angeles, Orange, Riverside, San Bernardino, San Diego. Blooming period: July–November	Not expected to occur; No suitable habitat present.
Symphyotrichum greatae	Greata's aster			1B.3	Perennial rhizomatous herb. Mesic soils in chaparral, cismontane and riparian woodland, broadleaved upland and lower montane coniferious forest; 984–6,593 ft. Southern California County Distribution: Los Angeles, San Bernardino, Ventura. Blooming period: June–October	Not expected to occur; No suitable habitat present.

USFWS: U.S. Fish and Wildlife Service: CDFW: California Department of Fish and Wildlife; CRPR: California Rare Plant Rank. Species observed are represented in **bold** text.

Species Status:

Federal (USFWS)

FE	Endangered
FT	Threatened

State (CDFW)

SE	Endangered
ST	Threatened
SR	Rare

CRPR

1B	Plants Rare, Threatened, or Endangered in California and elsewhere
2B	Plants Rare, Threatened, or Endangered in California, but more common elsewhere
4	Plants of limited distribution - watch list
.1	Seriously threatened in California (over 80% of occurrences threatened; high degree and immediacy of threat)
.2	Moderately threatened in California (20–80% of occurrences threatened; moderate degree and immediacy of threat)
.3	Not very threatened in California (<20% of occurrences threatened; low degree and immediacy of threat or no current threats known)

3.5.5 Protected Trees

Results of the Project Site survey of protected trees is detailed in the Tree Inventory Report provided in Appendix B. In summary, 625 trees were documented during the tree inventory, including 609 on-site trees and 16 street trees located in the adjacent public right-of-way. There are no trees on neighboring private properties whose protection zones (12 times the trunk dbh) overlap the Project Site. The on-site trees include 45 protected tree or shrub species, including 35 coast live oaks, 9 western sycamores, and 1 toyon that are considered protected by the City of Los Angeles' Tree Preservation Ordinance No. 186,873. The protected oak and sycamore trees are located on the northern and western perimeters of the property.

3.5.6 Special Status Wildlife

Table 3 provides a summary of special status wildlife species reported to occur in the Project region (i.e., the Sunland, San Fernando, Oat Mountain, Van Nuys, Burbank, Canoga Park, Topanga, Beverly Hills, and Hollywood 7.5-minute quadrangles) and includes information on the status, species background, nearest reported location, and potential for occurrence on the Project Site. This list includes species reported by the CNDDB, supplemented with species from the Project Biologist's experience that either occur nearby or could occur based on the presence of suitable habitat. Note that these species are listed taxonomically.

Los Angeles County Sensitive Bird Species

One additional species has been recognized by the Los Angeles Audubon Society as "at-risk" in the region (Allen et al. 2016). In addition to the species listed in Table 3, the Audubon "at-risk" species that have potential to occur on the Project Site include California towhee (*Melozone crissalis*). Although not recognized by State or federal agencies, the Los Angeles County Department of Regional Planning considers these species worthy of consideration as sensitive.

TABLE 3
SPECIAL STATUS WILDLIFE SPECIES
REPORTED FROM THE PROJECT REGION

Species	Status		Species Background	Potential to Occur/Results of Focused Surveys (Project Site)
	USFWS	CDFW		
Invertebrates				
Bombus crotchii Crotch bumble bee	—	SC	Prefers relatively warm and dry sites with preferred food plants including *Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.*	Not expected to occur; due to lack of suitable habitat.
Danaus plexippus plexippus pop. 1 monarch – California overwintering population	—	SC	Winter roosts extend along coast from northern Mendocino to Baja California. Roosts located in wind-protected trees with nectar and water sources nearby.	Not expected to occur; due to lack of suitable habitat.
Fish				
Catostomus santaanae Santa Ana sucker	FT	—	Occurs in Los Angeles Basin south coastal streams. Habitat generalists but prefer sand, rubble, and boulder bottoms with cool, clear water and algae.	Not expected to occur; due to lack of suitable habitat.
Gila orcuttii arroyo chub	—	SSC	Occurs in slow water stream sections with mud or sand bottoms. Requires aquatic vegetation and associated invertebrates for foraging.	Not expected to occur; due to lack of suitable habitat.
Oncorhynchus mykiss irideus pop. 10 steelhead – southern California DPS	FE	SC	Refers to populations from Santa Maria River south to southern extent of range is San Diego County (San Mateo Creek). Occurs in the ocean, rivers, creeks, and large inland lakes with perennial waters. Adults prefer water with summer temperatures of 10-15 C.	Not expected to occur; due to lack of suitable habitat.
Rhinichthys osculus ssp. 8 Santa Ana speckled dace	—	SSC	Occurs in perennial flowing streams with summer waters temperatures of 17-20 C. Prefers shallow cobble and gravel riffle substrate.	Not expected to occur; due to lack of suitable habitat.
Amphibians				
Anaxyrus californicus arroyo toad	FE	SSC	Occurs in semi-arid regions near washes or intermittent streams. Streams must be of low velocity with sand or gravel substrate.	Not expected to occur; due to lack of suitable habitat.

TABLE 3
SPECIAL STATUS WILDLIFE SPECIES
REPORTED FROM THE PROJECT REGION

Species	Status		Species Background	Potential to Occur/Results of Focused Surveys (Project Site)
	USFWS	CDFW		
Rana muscosa Southern mountain yellow-legged frog	FE	SE	Occurs in small, isolated populations in the San Gabriel, San Bernardino, and San Jacinto Mountains in narrow, rock-walled rivers, perennial creeks, and permanent plunge pools with intermittent creeks and pools in montane riparian and/or chaparral between 1,200 and 7,500 feet above msl.	Not expected to occur due to lack of suitable habitat.
Spea hammondii western spadefoot	—	SSC	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential to breeding and egg-laying.	Not expected to occur due to lack of suitable habitat.
Taricha torosa coast range newt	—	SSC	Occurs in coastal drainages from Mendocino County to San Diego County. May also be found in terrestrial habitats migrating to breed in ponds, reservoirs, and slow-moving streams.	Not expected to occur due to lack of suitable habitat.
Reptiles				
Anniella spp. California legless lizard	—	SSC	Occurs in a variety of habitats, generally in loose soil with a high moisture content. Represents records of Anniella not yet assigned to new species within the Anniella pulchra complex.	Not expected to occur due to lack of suitable habitat.
Anniella stebbinsi Southern California legless lizard	—	SSC	Occurs in sandy or loose loamy soils under sparse vegetation, generally in moist, loose soil. Found in a variety of habitats south of the Transverse Range extending to northwestern Baja California.	Not expected to occur due to lack of suitable habitat.
Arizona elegans occidentalis California glossy snake	—	SSC	Occurs in chaparral, sagebrush, valley-foothill hardwood, pine-juniper, and annual grass, elevation from below sea level to 7,000 feet. Prefer open sandy areas with scattered brush, but also found in rocky areas.	Not expected to occur; outside species' range and lack of suitable habitat.

TABLE 3
SPECIAL STATUS WILDLIFE SPECIES
REPORTED FROM THE PROJECT REGION

Species	Status		Species Background	Potential to Occur/Results of Focused Surveys (Project Site)
	USFWS	CDFW		
Aspidoscelis tigris stejnegeri Coastal whiptail	—	SSC	Occurs in hot, dry, flat open spaces in deserts or semi-arid areas with sparse vegetation and firm, sandy, or rocky soils.	Not expected to occur; outside species' range and lack of suitable habitat
Emys marmorata western pond turtle	—	SSC/SC	Highly aquatic turtle requiring ponds, marshes, rivers, streams, or irrigation ditches, typically with aquatic vegetation. Found below 6,000 ft. Requires upland habitat of sandy banks or grassy open fields for egg-laying	Not expected to occur due to lack of suitable habitat.
Phrynosoma blainvillii Blainville's horned lizard	—	SSC	Valley-foothill hardwood, conifer, and riparian habitats, pine-cypress, juniper and annual grassland habitats from sea level to 6,000 feet above msl and open country, especially sandy areas, washes, floodplains, and windblown deposits.	Not expected to occur; outside species' range and lack of suitable habitat.
Thamnophis hammondii two-striped garter snake	—	SSC	Occurs in wetlands, freshwater marsh, and riparian habitats with perennial water.	Not expected to occur due to lack of suitable habitat.
Birds				
Agelaius tricolor tricolored blackbird	—	ST	Occurs near open water with protected nesting substrate. This species is highly colonial and requires foraging areas within a few kilometers of the colony. Most numerous in Central Valley and vicinity.	Not expected to occur due to lack of suitable habitat.

TABLE 3
SPECIAL STATUS WILDLIFE SPECIES
REPORTED FROM THE PROJECT REGION

Species	Status		Species Background	Potential to Occur/Results of Focused Surveys (Project Site)
	USFWS	CDFW		
Aimophila ruficeps canescens southern California rufous-crowned sparrow	—	WL	Occurs in Southern California coastal sage scrub and sparse mixed chaparral. Prefers relatively steep, often rocky hillsides with grass and forb patches.	Not expected to occur for nesting or foraging; no suitable nesting or foraging habitat. May occur as a flyover.
Athene cunicularia burrowing owl	—	SSC/SC	Occurs in arid and semi-arid environments (e.g., grassland, steppes, deserts, prairies, and agricultural land) with well-drained, level to gently sloping areas with sparse vegetation (Haug et al. 1993; Dechant et al. 2003). Nests in mammal burrows and man-made cavities such as dry culverts.	Not expected to occur due to lack of suitable habitat.
Buteo swainsoni Swainson's hawk (nesting)	—	ST	Forages in open stands of grass-dominated vegetation; sparse shrublands; and small, open woodlands and has adapted well to foraging in agricultural areas (e.g., wheat and alfalfa) (Woodbridge 1991). Nests in scattered trees within these grassland, shrubland, or agricultural landscapes (e.g., along stream courses or in open woodlands) (Bechard et al. 2010).	Not expected to occur for nesting or foraging on the Project Site; no suitable nesting or foraging habitat (developed environment).
Coccyzus americanus occidentalis western yellow-billed cuckoo	FT	SE	Occurs in riparian forest areas along the broad, lower flood-bottoms of larger river systems. Nesting requires dense riparian vegetation of willow, often mixed with cottonwoods and an understory of blackberry, nettle, or wild grape.	Not expected to occur due to lack of suitable habitat.

TABLE 3
SPECIAL STATUS WILDLIFE SPECIES
REPORTED FROM THE PROJECT REGION

Species	Status		Species Background	Potential to Occur/Results of Focused Surveys (Project Site)
	USFWS	CDFW		
Coturnicops noveboracensis yellow rail	—	SSC	Occurs in freshwater marshlands, meadows, or seeps. In summer, typically in areas with water no more than a foot deep. In winter, mostly in coastal salt marshes, dense stands of spartina, or damp meadows near the coast.	Not expected to occur due to lack of suitable habitat.
Empidonax traillii extimus southwestern willow flycatcher	FE	SE	Occurs in Southern California riparian woodlands along streams and rivers with mature, dense thickets of trees and shrubs.	Not expected to occur due to lack of suitable habitat.
Polioptila californica californica coastal California gnatcatcher	FT	SSC	Occurs in low coastal sage scrub in arid washes, on mesas, and slopes below 2,500 ft in Southern California	Not expected to occur due to lack of suitable habitat.
Riparia riparia bank swallow (nesting)	—	ST	Occurs near fields, marshes, streams, and lakes. Typically feeds in flight over or near water during all seasons. Requires vertical banks or cliffs with fine-textured/sandy soils	Not expected to occur for nesting or foraging due to lack of suitable habitat.
Vireo bellii pusillus least Bell's vireo	FE	SE	Occurs in riparian forest, scrub, and woodland areas in the vicinity of water or dry river bottoms below 2,000 ft. breeds in low, dense growth especially in streamside thickets but also in chaparral, woodland, edges, or scrub oaks.	Not expected to occur due to lack of suitable habitat.

TABLE 3
SPECIAL STATUS WILDLIFE SPECIES
REPORTED FROM THE PROJECT REGION

Species	Status		Species Background	Potential to Occur/Results of Focused Surveys (Project Site)
	USFWS	CDFW		
Mammals				
Antrozous pallidus pallid bat	—	SSC	Occurs in a variety of habitats such as grasslands, shrublands, and woodlands, but most commonly in open habitats with rocky areas for roosting (Zeiner et al. 1990). Roosts in caves, crevices, mines, and occasionally hollow trees and buildings (Whitaker 1980; Zeiner et al. 1990).	Not expected to occur due to lack of suitable habitat.
Corynorhinus townsendii Townsend's big-eared bat	—	SSC	Occurs in a variety of habitats such as oak woodlands, arid deserts, grasslands, and high-elevation forests and meadows (Hall 1981). Roosts in mine tunnels, limestone caves, lava tubes, buildings, and other man-made structures (Williams 1986).	Not expected to occur due to lack of suitable habitat.
Eumops perotis californicus western mastiff bat	—	SSC	Forages in dry desert washes, floodplains, chaparral, oak woodland, open ponderosa pine forest, grassland, and agricultural areas. Roosts primarily in cliffs high above the ground (WBWG 2005).	May occur for foraging; potentially suitable foraging habitat. Low potential for roosting and is known to roost in buildings in urban areas including the Los Angeles Basin.
Lasiurus xanthinus western yellow bat	—	SSC	Occurs in desert regions of the southwest associated with palms or desert riparian habitats. Roosts primarily in palm trees and forages over water and among trees.	Not expected to occur due to lack of suitable habitat.
Macrotus californicus California leaf-nosed bat	—	SSC	Occurs in desert areas including washes, scrub, oasis, and riparian habitats. Requires rocky, rugged terrain with mines or caves for roosting.	Not expected to occur; outside species' range and lack of suitable habitat.
Microtus californicus stephensi south coast marsh vole	—	SSC	Occurs along the Pacific coast from central Oregon to Baja California in chaparral, woodland, and grassland areas. Prefers marshy ground, wet meadows, coastal wetlands and dry, grassy hillsides.	Not expected to occur; outside species' range and lack of suitable habitat.

TABLE 3
SPECIAL STATUS WILDLIFE SPECIES
REPORTED FROM THE PROJECT REGION

Species	Status		Species Background	Potential to Occur/Results of Focused Surveys (Project Site)
	USFWS	CDFW		
Neotoma lepida intermedia San Diego desert woodrat	—	SSC	Occurs in coastal scrub of Southern California from San Diego County to San Luis Obispo County. Prefers moderate to dense canopies of scrub with rock outcrops, rocky cliffs, and slopes.	Not expected to occur due to lack of suitable habitat.
Nyctinomops macrotis big free-tailed bat	—	SSC	A migratory bat species between sea level to 8,500 ft. Found in a variety of plant associations including desert shrub, woodland, and evergreen forest. Prefers roosting in rock crevices although may use buildings, caves, or tree cavities.	May occur for foraging. Low potential for roosting and is known to roost in buildings in urban areas including the Los Angeles Basin.
Onychomys torridus ramona southern grasshopper mouse	—	SSC	Occurs in desert scrub habitats with friable soils for digging. Prefers low to moderate shrub cover. Feeds exclusively on arthropods.	Not expected to occur due to lack of suitable habitat.
Perognathus longimembris brevinasus Los Angeles pocket mouse	—	SSC	Occurs in lower elevation grasslands and coastal sage communities in and around the Los Angeles Basin. Requires open ground with fine, sandy soils.	Not expected to occur due to lack of suitable habitat.
Taxidea taxus American badger	—	SSC	Occurs in a wide range of habitats, but is most abundant in drier, open stages of most shrub, forest, and herbaceous habitats with friable soil.	Not expected to occur due to lack of suitable habitat.

USFWS: U.S. Fish and Wildlife Service; CDFW: California Department of Fish and Wildlife. Species observed on the Project Site are represented in **bold** text.

LEGEND:

Federal (USFWS)		**State (CDFW)**	
FE	Endangered	SE	Endangered
FT	Threatened	ST	Threatened
		SC	Candidate
		FP	Fully Protected
		SSC	Species of Special Concern
		WL	Watch List
		FBM	Fur-bearing Mammal (protected by *Fur-bearing Mammal Act*)

4.0 PROJECT DESIGN FEATURES

PDF 1 **Landscaping.** A qualified Biologist shall be retained to review the landscaping plan prior to submittal of the plan to the City to ensure that any landscaping component of the Project does not include the planting of exotic, invasive species that would potentially degrade the quality of the regional natural open space. A list of potential landscaping plant species shall be submitted to the Biologist for review prior to submittal of the plan to the City. Through this review process, the Biologist shall ensure that exotic plant species known to be invasive (e.g., those on the California Invasive Plant Council's [Cal-IPC's] invasive plant inventory) are not included on the list. The Biologist shall make recommendations for more suitable plant species if necessary. Once a final plant palette is prepared, landscaping installed in the development area shall include only species on the approved palette.

PDF 2 **Migratory Bird Protection.** If any active bird nest is found during a pre-construction nesting bird survey or is discovered inadvertently during earthwork or construction-related activities, a Qualified Biologist shall be retained by the Applicant or Owner to determine an appropriate avoidance buffer which shall be no less than is necessary to protect the nest, eggs and/or fledglings, from damage or disturbance in consideration of the following factors: the bird species, the availability of suitable habitat within the immediate area, the proposed work activity, and existing disturbances associated with surrounding land uses. The buffer shall be demarcated using bright orange construction fencing, flagging, construction lathe, or other means to mark the boundary of the buffer. All construction personnel shall be notified of the buffer zone and shall avoid entering the protected area. No Ground Disturbing Activities or vegetation removal shall occur within this buffer area until the Qualified Biologist has confirmed that breeding/nesting is complete and the young have fledged the nest and/or that the nest is no longer an Active Nest. The Qualified Biologist shall prepare a report prior to the issuance of any building permit detailing the results of the nesting bird survey and subsequent monitoring, which shall be maintained by the Applicant for at least five years after certificate of occupancy is issued.

5.0 PROJECT IMPACTS

5.1 INTRODUCTION

This section presents an impact analysis of the Project. All construction activities, including staging and equipment areas, will be contained within the Project Site and immediately adjacent off-site areas further described below. Construction of the Project would lead to the permanent removal of existing vegetation within portions of the Project Site.

Both "direct" and "indirect" impacts on biological resources have been evaluated. Direct impacts are those that involve the initial loss of habitat or individuals due to vegetation clearing and construction-related activities. Indirect impacts would be those related to impacts on the adjacent remaining habitat due to construction activities (e.g., noise, dust) or operation of a project (e.g., human activity).

Biological impacts associated with the Project were evaluated with respect to the following special status (synonymous with "sensitive") biological issues:

- Species listed under federal or State Endangered Species Acts;
- Species proposed for listing under federal or State Endangered Species Acts;
- Non-listed species that meet the criteria in the definition of "Rare" or "Endangered" in the CEQA Guidelines (i.e., 14 *California Code of Regulations,* Section 15380)[6];
- Species designated as California Species of Special Concern;
- Vegetation types (synonymous with "habitat" and "community") suitable to support a federally or State-listed Endangered or Threatened plant or wildlife species;
- Streambeds, waterbodies, wetlands, and their associated vegetation;
- Vegetation types, other than wetlands, considered special status by regulatory agencies (e.g., the USFWS, the CDFW) or resource conservation organizations; and
- Other species or issues of concern to regulatory agencies or conservation organizations.

The actual and potential occurrence of these resources in the study area were correlated with the significance criteria listed in the next section in order to determine whether Project impacts on these resources would be considered significant.

[6] Section 15380 of the CEQA Guidelines indicates that a lead agency can consider a non-listed species (e.g., plant with a CRPR of 1B.1) to be Endangered, Rare, or Threatened if the species can be shown to meet the criteria in the definition of Rare or Endangered. For the purposes of this discussion, the current scientific knowledge on the population size and distribution for each special status species was considered in determining if a non-listed species meets the definitions for Rare and Endangered according to Section 15380 of the CEQA Guidelines.

5.2 SIGNIFICANCE CRITERIA

The environmental impacts relative to biological resources are assessed using impact significance criteria that mirror the policy contained in CEQA (*California Public Resources Code* Section 21001[c]). Accordingly, the State Legislature has established it to be the policy of the State to:

> Prevent the elimination of fish or wildlife species due to man's activities, insure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities.

Determining whether a project would have a significant effect plays a critical role in the CEQA process. According to Section 15064.7 of the CEQA Guidelines (Thresholds of Significance), each public agency is encouraged to develop and adopt—by ordinance, resolution, rule, or regulation—their own significance thresholds that the agency would use in determining the level of significance of environmental effects. A significance threshold defines the quantitative, qualitative, or performance limits of an environmental effect. If these thresholds are exceeded, the agency would consider the effect to be significant.

In the development of significance thresholds for impacts to biological resources, CEQA provides guidance primarily in Section 15065, Mandatory Findings of Significance, and Appendix G, the Environmental Checklist Form, of the CEQA Guidelines. Section 15065(a)(1) states that a project may have a significant effect where:

> The project has the potential to substantially degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; substantially reduce the number or restrict the range of an endangered, rare, or threatened species.

Appendix G of the CEQA Guidelines is more specific in addressing biological resources and encompasses a broader range of resources to be considered, including candidate, sensitive, or special status species; riparian habitat or other special status natural communities; federally protected wetlands; fish and wildlife movement corridors; local policies or ordinances protecting biological resources; and adopted Habitat Conservation Plans. These factors are considered through the checklist of questions answered during the Initial Study process used to determine a project's appropriate environmental documentation (i.e., Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report). Because these questions are derived from standards employed in other laws, regulations, and commonly used thresholds, it is reasonable to use these standards as a basis for defining significance thresholds in a CEQA document. For each of the thresholds identified below, the section of the CEQA Guidelines upon which the threshold is based has been provided. For the purpose of this analysis, impacts to biological resources are considered potentially significant (before calculating the offsetting impacts of mitigation measures [MMs]) if one or more of the following conditions would result from implementation of the Project:

1. The project has the potential to substantially degrade the quality of the environment (Section 15065[a]);
2. The project has the potential to substantially reduce the habitat of a fish or wildlife species (Section 15065[a]);
3. The project has the potential to cause a fish or wildlife population to drop below self-sustaining levels (Section15065[a]);

4. The project has the potential to threaten to eliminate a plant or animal community (Section 15065[a]);
5. The project has the potential to substantially reduce the number or restrict the range of an endangered, rare, or threatened species (Section 15065[a]);[7]
6. The project would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service (Appendix G, IV[a]);
7. The project would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service (Appendix G, IV[b]);
8. The project would have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means (Appendix G, IV[c]);
9. The project would interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites (Appendix G, IV[d]);
10. The project would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (Appendix G, IV[e]); or
11. The project would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (Appendix G, IV[f]).

In order to evaluate whether an impact on biological resources would result in a "substantial adverse effect," both the resource itself and how that resource fits into a regional context must be considered. The Project's regional setting includes the portion of the Mojave Desert encompassed by the USGS' Sunland, San Fernando, Oat Mountain, Van Nuys, Burbank, Canoga Park, Topanga, Beverly Hills, and Hollywood 7.5-minute quadrangles.

For impact analysis purposes, a "substantial adverse effect" can be considered as the loss or harm of a magnitude which, based on current scientific data and knowledge, would (1) substantially diminish population numbers of a species or distribution of a habitat type within the region or (2) eliminate the functions and values of a biological resource in the region (CEQA Guidelines, Section 15065(a)[1].).

5.3 DIRECT IMPACTS

The actual and potential occurrence of biological resources in the study area vicinity was correlated with the significance criteria described above to determine whether impacts from the Project on these resources would be significant. Potential direct impacts are described below.

[7] "Endangered" and "Threatened" species, as used in this threshold, are those listed by the USFWS and/or CDFW as Threatened or Endangered. Section 15380 of the CEQA Guidelines indicates that a lead agency can consider a non-listed species (e.g., plants with a CRPR of 1B.1) to be Endangered, Rare, or Threatened for the purposes of CEQA if the species can be shown to meet the criteria in the definition of "Rare" or "Endangered." For the purposes of this discussion, the current scientific knowledge on the population size and distribution for each special status species was considered in determining if a non-listed species met the definitions for "Rare" and "Endangered" according to Section 15380 of the CEQA Guidelines.

5.3.1 Vegetation Types and Other Areas

Vegetation types and other areas that would be impacted by the Project are shown on Exhibit 7 and listed in Table 4 below. These impacts are discussed in greater detail further below.

TABLE 4
VEGETATION TYPES AND OTHER AREAS
IMPACTED BY THE PROJECT

Vegetation Types and Land Cover Types	Existing (acres)		Project Impacts (acres)		
	On-site	Off-site	On-site	Off-site	Total
Oak groupings	0.42	0.00	0.42	0.00	0.42
Ornamental	2.79	0.62	2.79	0.18	2.97
Concrete-lined channels	7.31	0.86	0.00	0.00	0.00
Developed	41.73	15.78	41.73	7.21	48.94
Total	**52.25**	**17.26**	**44.94**	**7.39**	**52.33**

The Project would impact approximately 52.33[8] acres of various vegetation types and other areas, the majority (approximately 48.94 acres) of which is Developed area, due to temporary disturbance or permanent removal. Approximately 7.31 acres of the Project Site comprised of concrete-lined channels would remain unimpacted. The impacted vegetation types and land covers are common throughout the region and provide limited suitability for native plant and wildlife species. None of the vegetation types are considered special status by resource agencies. While there are a few scattered oak tree groupings within landscaped areas of the developed site, they do not represent an oak woodland due to the lack of native understory and other components of a vegetation community. Impacts to vegetation types and other areas are considered less than significant, and no mitigation would be required.

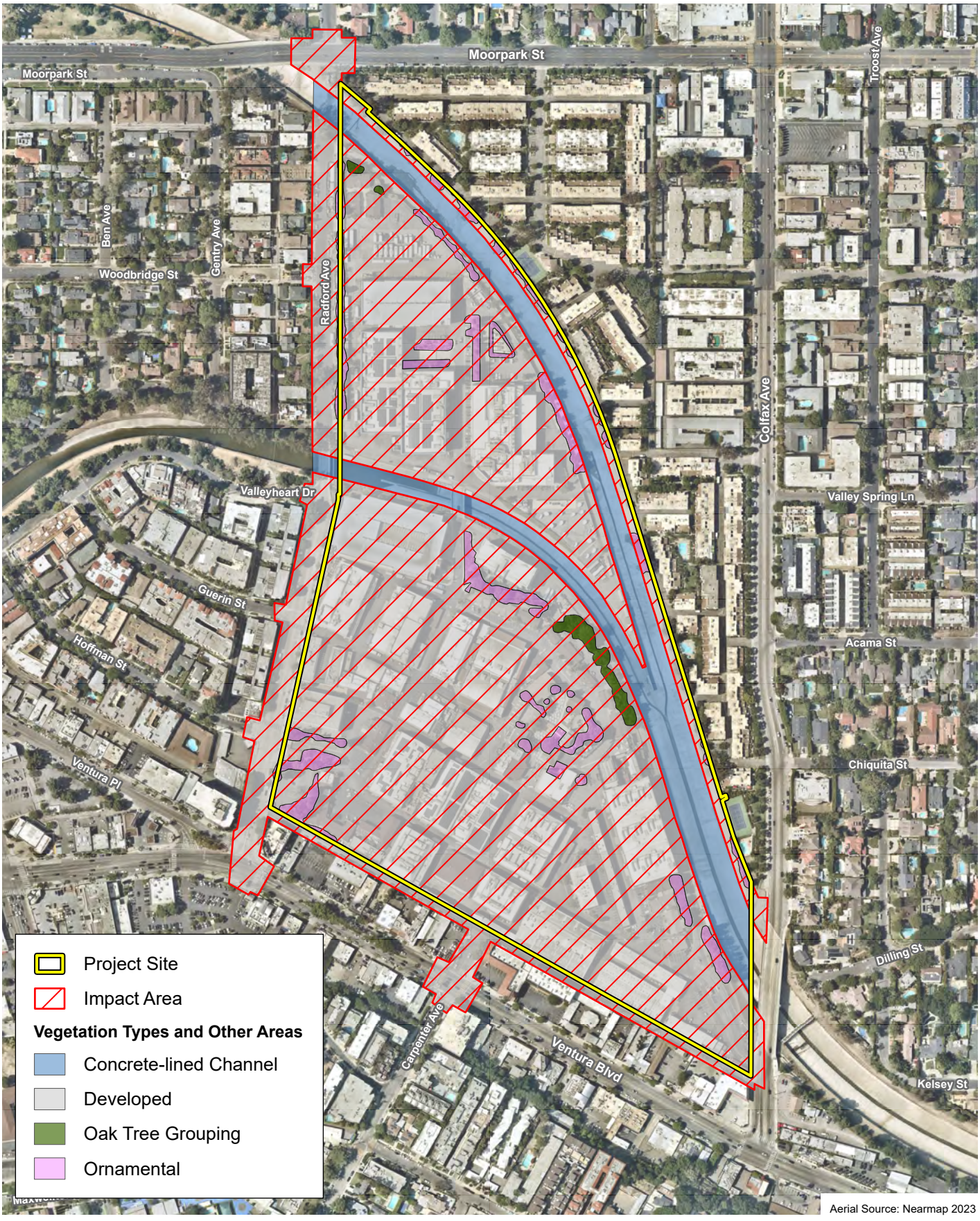
5.3.2 Wildlife

To assess impacts on wildlife, the total impact on particular vegetation types that provide habitat for wildlife was assessed. The following discussion of wildlife impacts focuses on the common wildlife species occurring in the study area.

General Habitat and Wildlife Loss

Native and non-native vegetation provide valuable nesting, foraging, roosting, and denning opportunities for a variety of wildlife species. The Project would result in some permanent impacts, some temporary impacts, and some conversion from one vegetation type or other land cover to another. The majority of the site, currently classified as developed, would be impacted during construction but would be again classified as developed following construction. Other areas classified as developed may be converted to ornamental plantings and vice versa. In general, the site approximate acreage of various land covers is expected to be nearly the same following Project construction. There are no net losses to vegetation types or other land covers that would result in measurable impacts on local populations of species utilizing such areas. Small numbers of individuals may be temporarily disturbed during construction due to direct impact of heavy

[8] Acreages are approximate based on best available data and level of accuracy with field equipment and may vary slightly.



Aerial Source: Nearmap 2023

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Vegetation Impacts

Exhibit 7

Biological Technical Report for the Radford Studio Center Project

N W E S

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Feet

PSOMAS

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machinery or increased vibration or noise immediately adjacent to machinery but most are expected to be more mobile wildlife species such as birds and insects that would relocate to unimpacted areas during construction. Such relocation may result in the loss of individuals that cannot successfully compete with the wildlife occupying the alternate locations. Additionally, the loss of vegetation and other areas that provide habitat for wildlife, albeit limited on the Project Site, is considered an adverse impact due to the reduction in the number of individuals that can persist within the reduced area either temporarily or permanently. However, the loss of habitat on the Project Site would not be expected to reduce regional populations of common wildlife species below self-sustaining levels in the Project region. This is a standard threshold for determining the effects of impacts on a species. Loss of a small percentage of the total regional population, and at a location that does not represent a critical pathway for regional populations, is not expected to have a measurable effect on the regional population. Therefore, this impact would be considered less than significant, and no mitigation would be required.

Increased pedestrian usage and human presence along the proposed bike/pedestrian paths adjacent to the river is expected following Project implementation. This would represent an impact on similar common species expected to be present in the area. However, due to the highly disturbed nature of the area and the urban adaption of most species occupying the area, impacts would be considered less than significant.

Many common bird species, such as rock dove (*Columba livia*), house finch (*Haemorhous mexicanus*), house sparrow (*Passer domesticus*), mourning dove (*Zenaida macroura*), lesser goldfinch (*Spinus psaltria*), and American crow (*Corvus brachyrhynchos*), have the potential to nest in the vegetation, on buildings and other infrastructure, or on the ground throughout the Project Site. The loss of an active migratory bird nest, including nests of common species, would be considered a violation of the MBTA and Sections 3503, 3503.5, and 3513 of *California Fish and Game Code*. The MBTA and *California Fish and Game Code* prohibits the taking of migratory birds, nests, and eggs. The potential loss of an active nest due to Project activities would be considered less than significant impact with implementation of **PDF-2,** which requires pre-construction surveys to avoid active nests, would prevent violation of the provisions of the MBTA and *California Fish and Game Code* and would ensure potential impacts are less than significant. Therefore, no mitigation would be required.

Wildlife Movement

The Project Site is located within a largely developed area with substantial barriers to movement including a sheer wall banked concrete lined channels that bisects the site. The Project Site does not occur within or adjacent to a recognized regional wildlife corridor. Although Project implementation would result in the temporary loss of low-value wildlife habitat during construction, as described above, it would not create any additional barrier to movement. Therefore, the impact on wildlife movement would be considered less than significant, and no mitigation would be required.

Roosting Bats

Several bat species may forage throughout the Project Site and roost in mature trees or under bridges. However, large roosting colonies are not expected to occur due to the high level of disturbance throughout the Project Site and vicinity in general under existing conditions. Impacts on individual roosting bats or small colonies (i.e., less than ten individuals) are a potential adverse impact. Indirect impacts on individual roosting bats or small colonies may occur with Project implementation and may result in bats avoiding the Project Site temporarily. Therefore, the Project would implement **MM BIO-1**, which requires a two-step tree removal process to prevent bat mortality. With the implementation of **MM BIO-1**, potential impacts to roosting bats would be

reduced to a less than significant level. Special status bat species are discussed specifically further below.

5.3.3 Special Status Biological Resources

Special Status Vegetation Types

The Project Site does not support any areas classified as a special status vegetation type. Therefore, there are no impacts on special status vegetation types and no mitigation would be required.

Jurisdictional Resources

There are two jurisdictional features that pass through the middle of the Project Site: the Los Angeles River and Tujunga Wash. These streams pass through the Project Site but are not part of the Radford Studios property. The Project does not propose any permanent discharge of fill pursuant to Section 404 of the *Clean Water Act*. These drainage features were converted to concrete-lined storm drains many years ago so that they are hydrologically separated from the rest of the Project Site. As a result, no indirect impacts to these drainage features are anticipated from any ground disturbances associated with the Project.

Proposed Project activities that may impact these drainage features include:

1. Construction of a new bridge that will cross Tujunga Wash in the northwestern corner of the Project Site to connect Radford Avenue to Moorpark Street for a new studio entrance.
2. Expansion of an existing bridge in the center of the Project Site (Gilligan's Island Road) from its current width of approximately 36 feet to approximately 56 feet.

These activities may require an alteration to the channel sidewall of the two drainage features and/or construction activities within the maintenance right-of-way for the Tujunga Wash and Los Angeles River. Consultation with the USACE Civil Works Branch is required to determine if proposed construction activities will require a permit from the USACE pursuant to 33 USC 408.

Additional regulatory permitting is dependent on the proposed methods of bridge construction. If construction equipment needs to operate from within the jurisdictional limits of the two drainage features, a water diversion plan will likely be necessary. Implementation of a water diversion plan would likely require placement of material (e.g., sandbags, diversion pipe) that would constitute a temporary fill in jurisdictional waters. Consultation with the regulatory agencies (USACE, RWQCB) would be necessary to determine if placement of temporary fill would require issuance of permits pursuant to Sections 401 and 404 of the *Clean Water Act*. If diversion is needed, the Project design would only divert water around a specific work area temporarily. All flows would remain in the channel and would continue downstream in the same manner as without the diversion. No downstream riverine habitat areas would be expected to experience any change in flows resulting from Project implementation.

Pursuant to *California Fish and Game Code* Section 1602, the CDFW issues Lake or Streambed Alteration Agreements for activities that would "substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material…" (California, State of. 2004). Proposed bridge construction activities would not be expected to "substantially change" the drainage features, though implementation of a temporary fill for a water diversion would require Project review from the CDFW, which would occur through submittal of a Notification of Lake or Streambed Alteration. The CDFW may also consider additional shading on stream bottom to be an indirect Project impact, though the lack of aquatic

habitat in the channel would likely not constitute an impact. Indirect shading impacts would include approximately 5,410 square feet (0.12 acre) associated with the LA River Connector and approximately 1,350 square feet (0.03 acre) associated with the Gilligan's Island Road bridge expansion (Exhibit 8).

Additionally, the USACE would require a Section 408 permit if the bridge construction activities at either site would require modification of the sidewall of the concrete channels or if construction activities are required within the maintenance rights-of-way of the Los Angeles River or Tujunga Wash. Currently, the Gilligan's Island Road bridge spans the Los Angeles River without touching the sidewalls and it is likely that the expanded bridge would similarly span the river. Similarly, the Radford Avenue Bridge over Tujunga Wash will not require any modification to the concrete lined channel, but the construction footprint will occur within the maintenance right-of-way. Consultation with the USACE will be needed to determine if the encroachment within the channel rights-of-way will require a Section 408 permit.

Project impacts on jurisdictional features would be considered less than significant with regulatory compliance which requires consultation with appropriate agencies, and subsequent permitting and permit compliance if required. Therefore, no mitigation would be required.

It should be noted that the Project has been designed to be consistent with the City of Los Angeles River Improvement Overlay District requirements as well as the City of Los Angeles' River Revitalization Master Plan and the County of Los Angeles' Los Angeles River Master Plan.

Special Status Plant Species

A total of 62 special status plant species are known to occur in the general Project region as listed and described in Table 2 above. Due to lack of suitable habitat, none of these species are expected to occur on the Project Site or within the Project's off-site impact area. Therefore, no impacts on special status plant species are expected to occur as a result of Project implementation.

Tree Ordinance

The City of Los Angeles regulates trees that are designated as "protected trees" as defined by Chapter IV, Article 6, Section 17.02 of the *Los Angeles Municipal Code*. Project impacts on protected trees, including oak trees and western sycamores, that have a minimum trunk dsh of 4 inches would require permitting with the City. Additionally, all non-protected trees with a minimum dbh of 8 inches require documentation. A total of 625 trees and palms were inventoried on the Project Site. Of those, 609 are on-site private property trees and 16 are public right-of-way street trees. A total of 45 Ordinance-Protected (Protected) tree and shrub species are included in the inventory. The Protected tree species include 35 coast live oaks (*Quercus agrifolia*), 9 western sycamores (*Platanus racemosa*), and 1 toyon (*Heteromeles arbutifolia*) (Carlberg Associates 2024).

Removal of Protected private trees or street trees requires a Tree Removal Permit through the Department of Public Works, Urban Forestry Division, and replacement trees are required at a ratio that is consistent with the Tree Protection Ordinance. The current replacement ratio for permitted Protected tree removals is 4:1 and the replacement ratio for street tree removals is 2:1. The Tree Protection Ordinance does not regulate the removal of non-protected trees (Carlberg Associates 2024), though the Los Angeles Environmental Assessment Form requires documentation of all non-protected trees with possible tree replacement requirements to be determined by the Los Angeles Planning Department.

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Impacts to Jurisdictional Resources

Exhibit 8

Biological Technical Report for the Radford Studio Center Project

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The removal of thirty-nine (39) Protected trees may require installation, bonding for, and post-planting monitoring of 156 replacement trees of the same species as those removed. The Project is also expected to result in the removal of 338 non-protected tree and palm species that are expected to require replacement at a 1:1 ratio. For all trees to be protected in place during Project implementation, required and recommended Best Management Practices for tree protection, including exclusionary fencing and monitoring during demolition, construction, and landscape installation recommendations are included in the tree report (Carlberg Associates 2024).

Project impacts on City Protected trees would be considered significant due to conflict with local ordinance and mitigation would be required. Implementation of **MM BIO-2,** which requires consultation and permitting with the City in accordance with the tree ordinance, would reduce impacts to a level of less than significant.

Special Status Wildlife Species

A total of 38 special status wildlife species as well as one species of local concern (the California towhee) are known to occur in the general Project region as listed and described in Table 3 above. Most of these species are not expected to occur on the Project Site due to lack of suitable habitat. Two special status wildlife species, big free-tailed bat and western mastiff bat, have the potential to occur within the Project Site due to the presence of potentially suitable habitat, including man-made structures such as buildings and bridges. The western mastiff bat is found in many open semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, palm oases, chaparral, desert scrub, but is also commonly found in urban areas. This species typically forages in open areas with high cliffs and roosts in small colonies in crevices on cliff faces but may use crevices in structures. The big free-tailed bat feeds primarily on moths caught while flying over water sources in suitable habitat in the southwestern U.S. This species prefers rugged, rocky terrain and roosts in crevices in high cliffs or rocky outcrops but may use crevices in structures in urban areas. Although habitat conditions on the Project Site are not ideal due to the level of disturbance in general and minimal availability of open space, there is a moderate likelihood for both species to forage and/or roost throughout the Project Site. The California towhee has a low likelihood to occur for foraging or nesting due to the presence of small patches of vegetation in a few locations on site. Although temporary loss of habitat is not likely to affect regional populations of these species, construction activities such as building demolition, tree removal, and demolition of other structures on the Project Site may result in direct mortality of individuals or untimely abandonment of a roost. Implementation of **MM BIO-1,** Bat Roost Avoidance and Impact Minimization, would reduce impacts to a level of less than significant.

5.4 INDIRECT IMPACTS

Indirect impacts, often called “edge effects,” are those that affect the quality of nearby wildlife habitat resulting from disturbance by construction (such as noise, night lighting, and human activity) and/or the long-term use of the Project Site and utility alignment. It is anticipated that some indirect impacts may result from the Project construction and operation; these are described below.

5.4.1 Water Quality

Drainages traversing the Project Site, the Los Angeles River and Tujunga Wash, could be impacted as a result of changes in water quality. During construction, runoff carrying increased silt or petroleum residues from construction equipment could potentially impact water quality if working in or above flowing water and petroleum-based products leaked from the equipment or mud is dislodged from tires and, in turn, affect plant and wildlife species using habitat downstream of the Project. With compliance with applicable regulations (such as the required Stormwater Pollution Prevention Plan during construction) and the implementation of water quality Best

Management Practices to reduce construction-related pollutants, these impacts would be considered less than significant and no mitigation would be required.

5.4.2 Noise and Vibration

During active construction, temporary noise and vibration impacts have the potential to disrupt foraging, nesting, roosting, and/or denning activities for a variety of wildlife species such as lizards, birds, and bats. Construction noise and vibration could deter wildlife from using habitat adjacent to construction. This impact would be considered adverse but less than significant because a substantial amount of similar habitat is present in the vicinity where the animals may disperse. Therefore, no mitigation would be required.

Following construction of the Project, the ambient noise and vibration levels adjacent to the Project Site are expected to incrementally increase. Wildlife species stressed by noise and vibration may disperse from the habitat immediately adjacent to the Project Site. Increases in noise and vibration if substantial enough can cause a variety of reactions in wildlife species, such as retreating into concealed spaces or fleeing the areas, which may result in harm to the individual. This impact would be considered adverse but less than significant because its effect on biological resources would be limited to very low numbers and highly urban adapted species. The persistence of such species in the region is not expected to be negatively affected to any measurable degree. Therefore, no mitigation would be required.

Common bird species are expected to nest in habitat such as trees, buildings, and infrastructure of all kinds, within and adjacent to the Project Site. Increased noise and vibration can cause behavioral changes in nesting birds potentially resulting nest failure. The loss of an active bird nest would be considered a violation of the MBTA and *California Fish and Game Code* (Sections 3503, 3503.5, and 3513) and a potentially significant impact. Implementation of **PDF-2** would ensure that construction impacts would not violate the provisions of the MBTA or *California Fish and Game Code* Sections 3503, 3503.5, and 3513 through project planning (i.e., construction schedule) and use of pre-construction surveys and measures to protect active nests. With implementation of **PDF-2,** impacts would be less than significant and no mitigation would be required.

5.4.3 Dust

Dust levels on the Project Site and adjacent areas are expected to temporarily increase during construction due to soil disturbance from heavy machinery. Dust can settle on plants in the area and result in reduced health until it is removed. Due to the developed condition of the area with a largely paved site and minimal native vegetation in on or near the Project Site, impacts of temporary increased dust during construction are considered less than significant.

5.4.4 Night Lighting

Night lighting may impact the behavioral patterns of nocturnal and crepuscular (i.e., active at dawn and dusk) wildlife adjacent to night lighting. Of greatest concern is the effect on small, ground-dwelling animals that use the darkness to hide from predators and/or owls, which are specialized night foragers. Due to the urban setting of the Project Site and the presence of night lighting throughout most of the site and adjacent areas, potential increase in night lighting from the Project, if any, would be negligible and is not expected to affect biological resources of the area. Therefore, impacts of night lighting are considered less than significant.

5.4.5 Invasive Exotic Plant Species

Landscaping that includes the installation of non-native, invasive plant species (e.g., species listed in the California Invasive Plant Council's invasive plant inventory) can be detrimental to regional native habitat. Invasive species have the potential to spread into the surrounding natural open space and displace native species, hybridize with native species (thereby impacting the genetic integrity of the native species), alter biological communities, or alter ecosystem processes (e.g., tamarisk [*Tamarix* sp.] affects hydrology). This could degrade the quality of the regional vegetation, including vegetation communities that provide suitable habitat for special status species. With implementation of the Project Design Feature, this impact would be considered less than significant. Implementation of **PDF 1** would prohibit the use of non-native, invasive plant species in landscaping associated with the Project. This PDF would ensure this potential impact is less than significant.

Construction activities create disturbance, which in turn provides a place for non-native weedy species to spread. Additionally, construction equipment can introduce non-native weed seeds to the area if the equipment is not properly cleaned. Weeds from the construction may then spread to adjacent habitat areas, which would degrade habitat quality for native species. In addition to the negative effects on habitat quality, non-native weeds can also increase the potential for large fires to spread. Due to the lack of on-site native vegetation communities and the lack of undeveloped lands that may be affected by weeds, this impact would be considered less than significant and no mitigation would be required.

5.5 CUMULATIVE IMPACTS

Under CEQA, the cumulative impact from several projects is the change in the environment which results from the incremental impact of the Project when added to other closely related past, present, and reasonably foreseeable probable future projects. The Project Site, adjacent areas, and region in general is highly developed. Other projects that have occurred and are expected to occur in the Project area would be expected to be modifications of existing developed areas with minimal open space and minimal biological resources and therefore minimal biological resource impacts. In addition, other projects in the region would comply with applicable regulations and incorporate mitigation measures as needed and impacts would be reduced to less than significant. Therefore, the cumulative impacts on biological resources are expected to be less than significant.

6.0 MITIGATION MEASURES

Implementation of the following mitigation measures are required for the Project and would avoid, minimize, or mitigate impacts on biological resources discussed above.

BIO 1 **Bat Roost Avoidance and Impact Minimization.** To avoid the direct loss of bats that could result from removal of trees and/or structures that may provide day or night roost habitat (e.g., in cavities or under loose bark), the following methods shall be implemented:

a. To the extent feasible, schedule tree/structure removal between October 1 and February 28, outside of the maternity roosting season for bats.

b. If trees and/or structures are removed outside the maternity season (March 1 to September 30), a qualified bat specialist will conduct a follow up focused bat survey no less than 7 days before scheduled tree/structure removals. Each tree and/or structure identified as potentially supporting an active maternity roost or day roost should be closely inspected by the bat specialist to more precisely determine the presence or absence of roosting bats.

c. Maternity season lasts from March 1 to September 30. Trees and/or structures determined to be maternity roosts should be left in place until the end of the maternity season.

d. To minimize disturbance to night roosts, do not conduct tree removal activities within 100 feet of bridges between 10:00 PM and sunrise at any time of year work is conducted.

    i. Bird exclusion netting will not be used on underside of bridges.

    ii. Lights will not be used under bridges.

    iii. Combustion equipment, such as generators, pumps, and vehicles, will not be parked or operated under bridges.

    iv. Personnel will not be present under bridges from 1/2 hour before sunset to 1/2 hour after sunrise.

e. No less than 15 days before scheduled tree/structure removal, a qualified bat specialist will conduct a pre-construction reconnaissance survey to identify those trees and/or structures proposed for disturbance that could provide hibernacula, roosting, or nursery colony habitat for bats.

f. If bats are not detected, but the bat specialist determines that roosting bats may be present at any time of year, it is preferable to slowly push any tree/structure down under operator's control using heavy machinery rather than felling it with a chainsaw. To ensure the optimum warning for any roosting bats that may still be present, the tree should be pushed lightly two to three times, with a pause of approximately 30 seconds between each nudge to allow bats to become active. The tree should then be pushed to the ground slowly and should remain in place until it has been inspected by a bat specialist. Trees that are observed to have bats during this process

should not be sawn up or mulched immediately. A period of at least 24 hours will elapse prior to such operations to allow bats to escape. Bats should be allowed to escape prior to demolition of structures. This may be accomplished by placing one-way exclusionary devices into areas where bats are entering a building that allow bats to exit but not enter the structure.

g. The qualified bat biologist will document all demolition monitoring activities and prepare a summary report upon completion of tree disturbance and/or building demolition activities.

BIO 2 **Tree Protection.** Trees to be preserved on-site during the construction process shall have the following measures implemented:

Prior to the initiation of construction activities, protective fencing shall be placed around the tree protection zone (at least 12 times the tree's trunk dsh) of all trees that are in the vicinity of Project construction and are intended to remain in place. No ground disturbance or storage of construction materials should occur within the tree protection zone during construction.

A Certified Arborist shall be retained to monitor construction activities of any ground disturbance planned within the tree protection zone for any tree to be preserved during construction.

7.0 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the recommended measures will mitigate biological impacts to a level that is considered less than significant.

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APPENDIX A

JURISIDICTIONAL DELINEATION REPORT

Jurisdictional Delineation Report

Radford Studio Center Project
Studio City, California

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March 18, 2024

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EXECUTIVE SUMMARY

The purpose of this Jurisdictional Delineation Report is to provide baseline data concerning the type and extent of jurisdictional resources that occur on the Radford Studio Center Project Site in Studio City, California and the potential impacts to these resources that would occur as a result of Project implementation. Jurisdictional resources considered for this report include wetlands and non-wetland "waters of the United States" (WOTUS) regulated by the U.S. Army Corps of Engineers (USACE); "waters of the State" regulated by the Regional Water Quality Control Board (RWQCB); and the bed, bank, and channel of all lakes, rivers, and/or streams (and associated riparian vegetation), as regulated by the California Department of Fish and Wildlife (CDFW).

The jurisdictional delineation work was performed by Psomas Regulatory Specialist David Hughes on June 2, 2023. Based on the results of the jurisdictional delineation field work, it was determined that the total amount of jurisdictional resources on the Project Site are as follows:

- **USACE Jurisdictional "waters of the U.S.":**

  Wetlands: 0.00 acre

  Non-wetland waters: approximately 10.33 acres

- **RWQCB Jurisdictional "waters of the State":**

  Wetlands: 0.00 acre

  Non-wetland waters: approximately 10.33 acres

- **CDFW Jurisdictional Streambeds:**

  Streambeds/Riparian Habitat: approximately 10.33 acres

1.0 INTRODUCTION

This Jurisdictional Delineation Report has been prepared to provide baseline data concerning the type and extent of resources under the jurisdiction of the U.S. Army Corps of Engineers (USACE), Los Angeles Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) for the Radford Studio Center Project Site located in Studio City, California (hereinafter referred to as the "Project Site").

1.1 PROJECT LOCATION

The Project Site is located at 4024-4064 and 4200 North Radford Avenue in the Studio City area of Los Angeles, California (Exhibit 1). The Project Site is generally bounded by the Los Angeles River and Tujunga Wash to the north and east, Colfax Avenue to the east, an alley of varying width (from approximately 28 feet to 30 feet) to the south with various commercial uses across the alley fronting Ventura Boulevard, and Radford Avenue to the west. The North Lot and the South Lot are separated by the Los Angeles River. The current Project Site area (prior to dedications/mergers that would occur as part of the Project) measures 2,377,372 square feet (approximately 55 acres). The Project Site area after dedications/mergers would measure 2,276,215 square feet (approximately 52.25 acres). The Project Site is shown on the U.S. Geological Survey's (USGS') Van Nuys 7.5-minute topographic quadrangle of the San Bernardino Meridian in Township 1 North, Range 14 West, Sections 19 and 30 (Exhibit 2).

1.2 EXISTING CONDITIONS

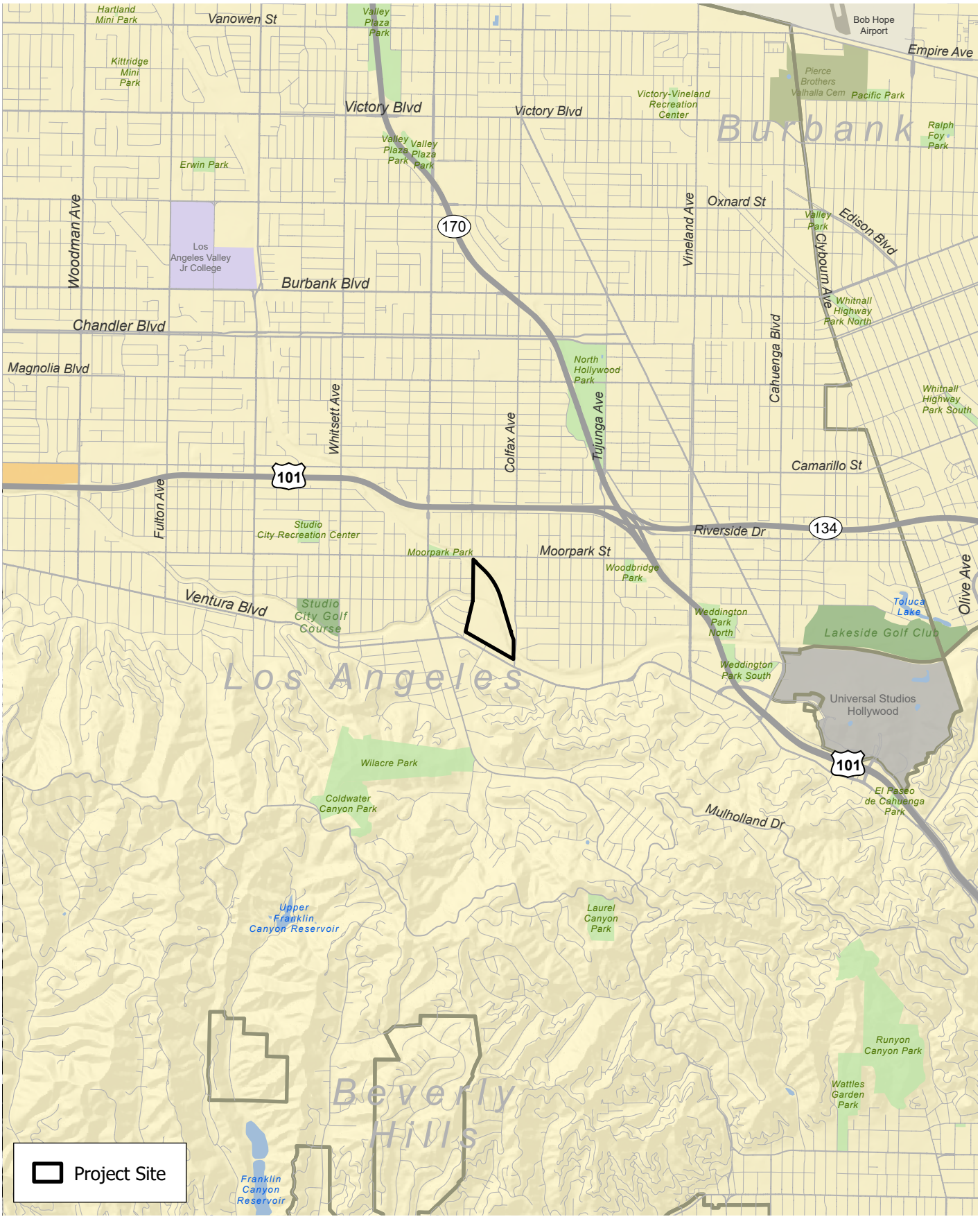
The Project Site consists of various television production studios, offices, and other appurtenant buildings. There are no natural habitat areas on the Project Site. The Los Angeles River and Tujunga Wash, both concrete-lined channels with vertical side walls, flow through the Project Site (Exhibit 3). Areas north of the Los Angeles River are considered the North Lot, while areas south of the Los Angeles River are considered the South Lot. The survey area for this report consists of the Project Site with a 100-foot buffer area surrounding the Project Site. The Project site is generally flat with elevations ranging from approximately 585 to 617 feet above mean sea level.

The Project Site is currently improved with approximately 1,179,110 square feet of studio-related uses, including 21 sound staging totaling approximately 359,730 square feet, along with 255,510 square feet of production support, 450,060 square feet of production office, and 113,810 square feet of creative office. The Project Site also contains numerous one- and two-story ancillary buildings and structures, primarily located at the northernmost point of the North Lot and throughout the entirety of the South Lot.

The interior of the Project Site contains a bridge that crosses the Los Angeles River to provide vehicular and pedestrian access between the North Lot and South Lot without having to exit the Project Site. Existing automobile parking is provided in multiple above-grade automobile parking structures, which are accessible from both Radford Avenue and Colfax Avenue, as well as various surface parking areas throughout the Project Site. A total of 3,095 vehicle spaces are currently provided on the Project Site within the parking structures and surface parking areas.

Outdoor studio production activities occur throughout the Project Site. These activities include, but are not limited to, set up and take down of sets and various outdoor filming activities, including back lot production activities. These areas also provide flexible space for access, staging, connectivity between active production and supporting uses, housing of production vehicles, equipment storage, basecamps, and emergency vehicle access.

The Project Site perimeter is enclosed with chain link, wrought iron, or combination block wall/chain link fencing, much of which is lined with trees, shrubs, and climbing vines, and



Local Vicinity

Exhibit 1

Jurisdictional Delineation Report for the Radford Studio Center Project

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Feet

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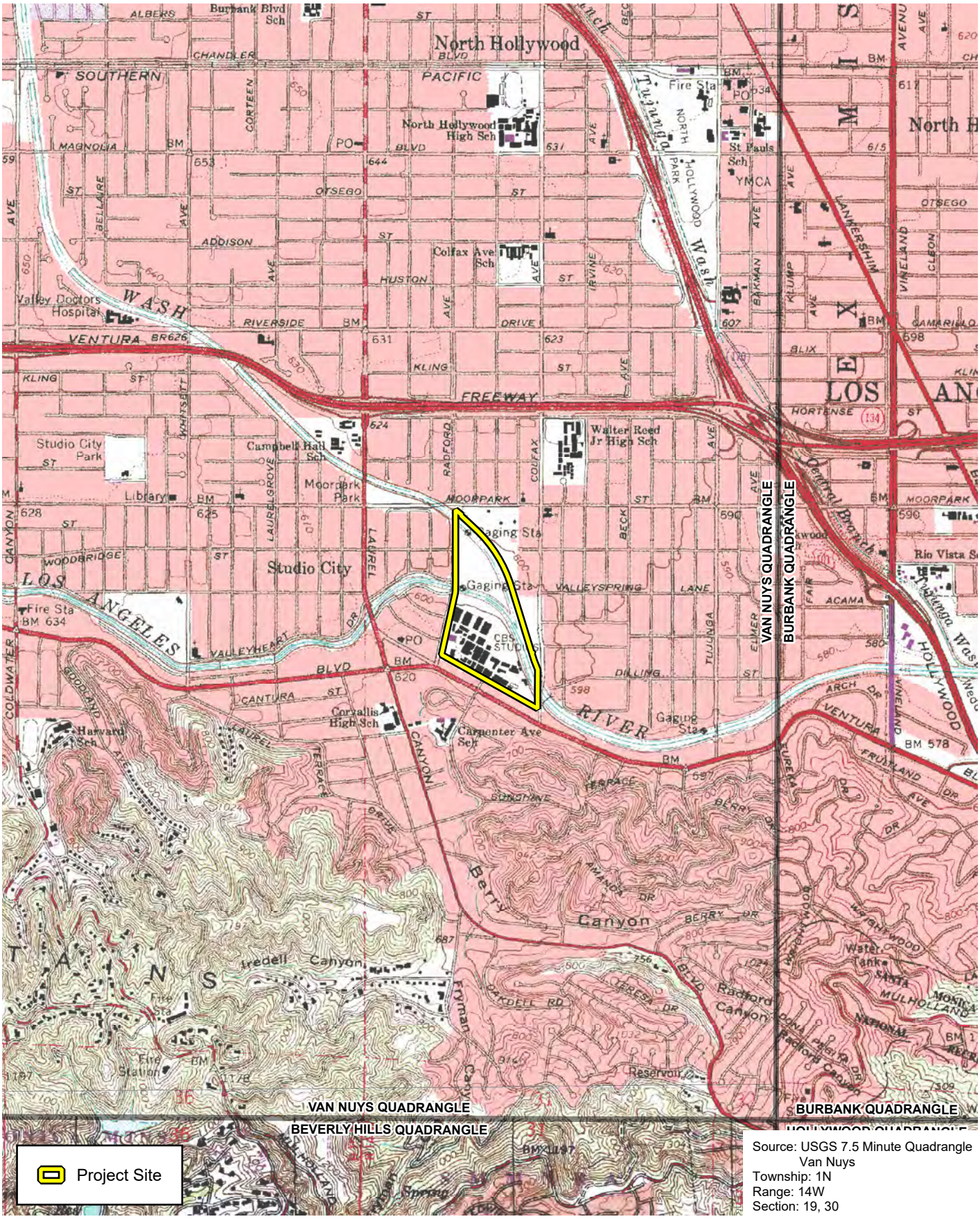

Source: USGS 7.5 Minute Quadrangle
Van Nuys
Township: 1N
Range: 14W
Section: 19, 30

USGS 7.5-Minute Digital Quadrangle

Exhibit 2

Jurisdictional Delineation Report for the Radford Studio Center Project

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Feet

PSOMAS

segments of which include green screening. Additional landscaping within the Project Site interior includes trees and shrubs, and some of the parking areas include landscaped infiltration basins. Street trees are also located along Radford Avenue.

The Project Site is located in a highly urbanized area and is surrounded by a diverse mix of land uses. Surrounding land uses consist of both residential and commercial development. No natural habitat areas are located adjacent to the Project Site.

1.3 PROJECT DESCRIPTION

The Project includes the modernization and expansion of the existing Radford Studio Center through the proposed Radford Studio Center Specific Plan (Specific Plan). The Project includes the development of up to approximately 1,667,010 square feet of new sound stage, production support, production office, creative office, and retail uses within the Project Site as well as associated circulation, parking, landscaping, and open space improvements. The proposed Specific Plan would allow up to approximately 2,200,000 square feet of total floor area within the Project Site upon buildout of the Project (inclusive of approximately 532,990 square feet of existing uses to remain).

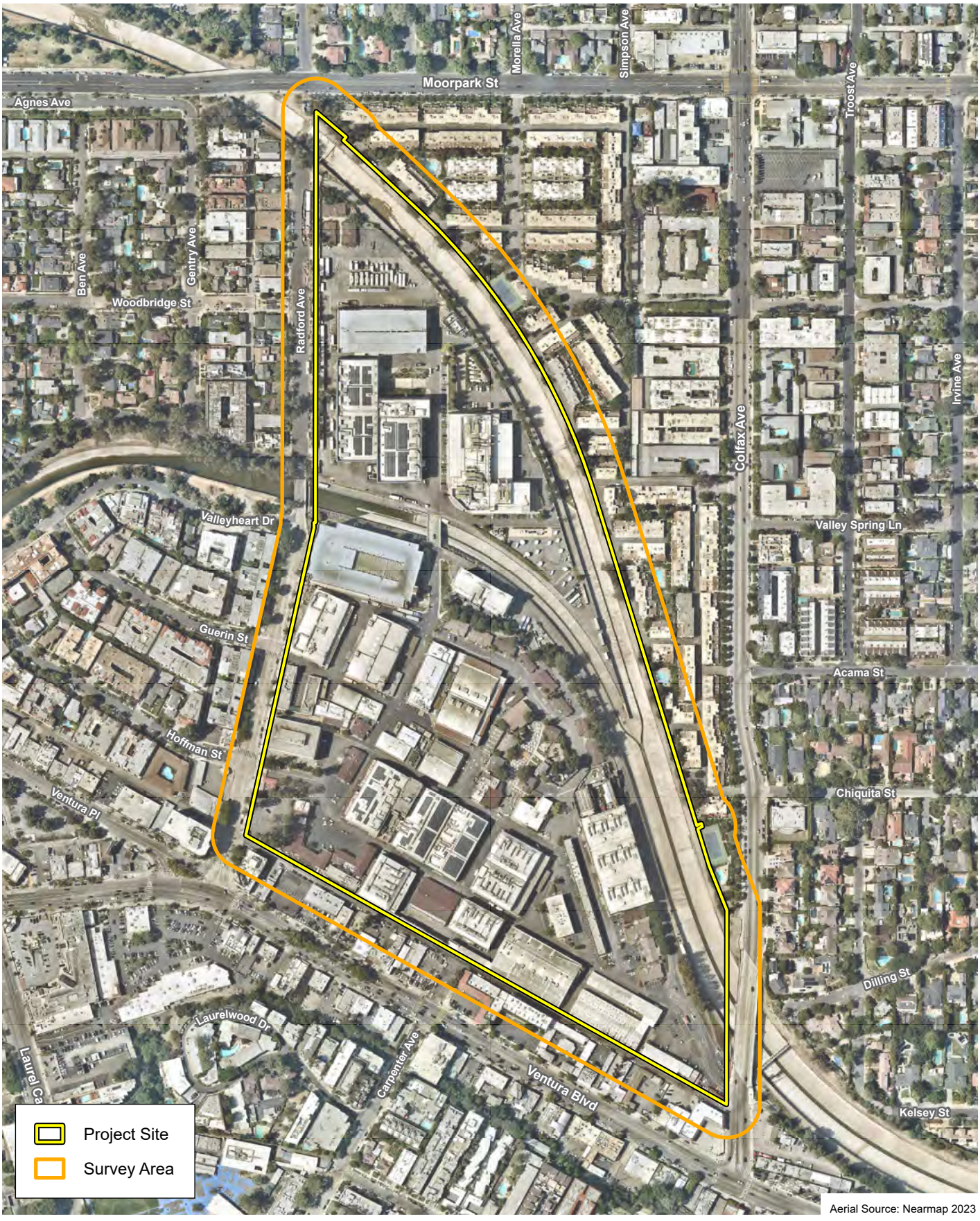
The Project's open space and landscaping plan has been designed to enhance the public realm along all Project Site frontages and maximize public access to the Los Angeles River and Tujunga Wash. A key component of the open space and landscaping plan is the construction of a new bridge, the Los Angeles River Connector, extending from the northern terminus of Radford Avenue north across the Tujunga Wash to Moorpark Street, and the revitalization of the public access pathway along the Tujunga Wash, which would include a new paved pedestrian/bicycle path, fencing, lighting, and way-finding signage. The pathway would also include limited planting and irrigation to promote riparian habitat consistent with current adjacency plans and guidelines. The existing bridge internally connecting the North Lot to the South Lot across the Los Angeles River would also be maintained and widened.

Approximately 109,569 square feet of open space would be provided along the Project Site frontages, including approximately 77,406 square feet of open space along the Los Angeles River and Tujunga Wash frontages, approximately 4,454 square feet of open space along Colfax Avenue, and approximately 27,709 square feet along Radford Avenue. Additional open space and landscaping would be provided within the Project Site, including various ground level open space areas and rooftop terraces. The Project also includes off-site improvements such as utility improvements and improvements to the public realm.

As part of the Project, outdoor production activities, including use of basecamps, would continue to be used throughout portions of the Project Site. In addition, Mobility Hubs that would provide features to promote a reduction in vehicle miles traveled would also be implemented. The Project Site would continue to operate on a 24-hour per day/7 days per week basis.

1.4 REGULATORY AUTHORITY

This section summarizes the federal and State agencies' regulatory jurisdiction over activities that have a potential to impact jurisdictional resources. A detailed explanation of each agency's regulatory authority is provided in Attachment A.



Aerial Source: Nearmap 2023

Project Site

Exhibit 3

Jurisdictional Delineation Report for the Radford Studio Center Project

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Feet

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1.4.1 U.S. Army Corps of Engineers

Clean Water Act Section 404

The USACE Regulatory Branch regulates activities that discharge dredged or fill materials into "waters of the United States" (WOTUS) under Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. Its authority applies to all WOTUS where the material (1) replaces any portion of a WOTUS with dry land or (2) changes the bottom elevation of any portion of any WOTUS. Activities that result in fill or dredge of WOTUS require a permit from the USACE.

On January 18, 2023, the United States Environmental Protection Agency (USEPA) published a final Water Rule in the Federal Register that took effect on March 20, 2023. To conform to the May 25, 2023 ruling by the U.S. Supreme Court (*Sackett v. EPA*), the USEPA issued a revised definition of WOTUS that was published in the Code of Federal Regulations (CFR) on September 8, 2023. The updated definition of WOTUS is provided in Title 40 §120.2(a) of the CFR and identifies federal jurisdiction under the CWA as:

1. Traditional Navigable Waters (TNWs), the territorial seas, and interstate non-wetland waters ("paragraph (a)(1) waters");
2. Impoundments of "waters of the United States" ("paragraph (a)(2) impoundments");
3. Tributaries to paragraph (a)(1) waters or (a)(2) impoundments when the tributaries are relatively permanent, standing or continuously flowing bodies of waters ("jurisdictional tributaries");
4. Wetlands that have a continuous surface connection to paragraph (a)(1) waters, or relatively permanent, standing or continuously flowing jurisdictional tributaries that have a continuous surface connection to paragraph (a)(1) waters; and
5. Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to paragraph (a)(1) waters or jurisdictional tributaries.

Clean Water Act Section 408

The USACE Civil Works Branch reviews projects that propose to occupy or use an existing USACE civil works project pursuant to Section 408 of the CWA. Examples of civil works projects include levees, dams, sea walls, jetties, dikes, wharfs, piers, and wetland restoration projects funded by or built by the USACE. Areas subject to USACE review for a Section 408 permit extend outward from the facility itself to include an associated maintenance easement. The USACE may grant such permission if it determines the alteration proposed will not be "injurious to the public interest" and "will not impair the usefulness" of the civil works project. Under USACE policy, a Section 408 permission will not be issued before the USACE Regulatory Branch provides a decision on a Section 404 permit.

1.4.2 Regional Water Quality Control Board

The State Water Resources Control Board (SWRCB), in conjunction with the nine RWQCBs, is the primary agency responsible for protecting water quality in California through the regulation of discharges to surface waters under the CWA and the California Porter-Cologne Water Quality Control Act (Porter-Cologne Act). The SWRCB's and RWQCBs' jurisdictions extend to all "waters of the State" and to all WOTUS, including wetlands (isolated and non-isolated).

The Porter-Cologne Act broadly defines "waters of the State" as any surface water or groundwater, including saline waters, within the boundaries of the State. On August 28, 2019, the Office of Administrative Law approved the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* which went into effect on May 28, 2020. Under these new regulations, the SWRCB and its nine RWQCBs will assert jurisdiction over all existing WOTUS, and all waters that have been considered WOTUS under any historical definition.

Impacts to WOTUS are authorized by the RWQCBs through a Water Quality Certification per Section 401 of the CWA. Impacts to "waters of the State" that are not considered WOTUS would be authorized by Waste Discharge Requirements issued by the RWQCB, pursuant to the Porter-Cologne Act.

On April 6, 2022, the U.S. Supreme Court issued a stay of the October 2021 order by the U.S. District Court for the Northern District of California that vacated EPA's 2020 CWA Section 401 Certification Rule (2020). The stay of the vacatur applies nationwide. Therefore, the CWA section 401 certification process is once again governed by the CWA section 401 certification regulations promulgated by USEPA in 2020, codified at 40 CFR 121. This 2020 rule requires all project proponents to request a pre-filing meeting with the RWQCB at least 30 days prior to filing a 401 Certification Request. The filing procedure has been simplified to require the filing of a Certification Request rather than the acceptance of a complete application.

There is a mandatory 30-day wait period between a pre-filing meeting request and the filing of a Certification Request. A Certification Request must be filed with the RWQCB and the USACE concurrently. USACE reviews the Certification Request for the nine required components. The USACE has 15 days to review the Certification Request. The USACE then notifies the RWQCB that request is complete and provides the reasonable time period to act on the Certification Request. The reasonable time period is not to exceed 1 year. Within 15 days of receipt of the Certification Request the RWQCB must provide the applicant with the following: 1) date of receipt; 2) applicable reasonable period of time to act on the Certification Request; and 3) date upon which waiver will occur if the certifying authority fails or refuses to act on the Certification Request. It should be noted that the RWQCB may require that the findings of the Jurisdictional Delineation Report be certified by the USACE prior to issuing a Section 401 Water Quality Certification (Section 401 Certification).

Once the RWQCB issues the Section 401 Certification, the USACE has 5 days to notify the USEPA that the Section 401 Certification has been issued. The USEPA then has 30 days to notify neighboring jurisdictions of the Section 401 Certification. Neighboring jurisdictions have 60 days to respond. If there are no objections to the Section 401 Certification, then the USACE issues the Section 404 permit. It should be noted that the RWQCB may require that the findings of the Jurisdictional Delineation Report be certified by the USACE prior to issuing a Section 401 Certification.

1.4.3 California Department of Fish and Wildlife

The CDFW regulates activities that may affect rivers, streams, and lakes pursuant to Sections 1600–1616 of the *California Fish and Game Code*. According to Section 1602 of the *California Fish and Game Code,* the CDFW has jurisdictional authority over any work that will (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

2.0 METHODS

2.1 LITERATURE REVIEW

Prior to conducting the delineation and during the course of report preparation, Psomas reviewed the following documents to identify areas that may fall under agency jurisdiction: the USGS' Van Nuys 7.5-minute topographic quadrangle map; color aerial photography provided by Google Earth; soil data provided by the U.S. Department of Agriculture's (USDA's) Natural Resources Conservation Service (USDA NRCS 2023a); the National Hydric Soils List (USDA NRCS 2023b); the National Wetlands Inventory's Wetland Mapper (USFWS 2023); and the Water Quality Control Plan for the Los Angeles Region (Los Angeles RWQCB 1994).

2.2 FIELD SURVEY

The analysis contained in this report uses the results of a field survey conducted by Psomas Regulatory Specialist David Hughes on June 2, 2023. Jurisdictional features were delineated using a 1 inch equals 100 feet (1″ = 100′) scale aerial photograph.

2.3 JURISDICTIONAL DELINEATION

2.3.1 Non-Wetlands

Non-wetland WOTUS are delineated based on the limits of the Ordinary High Water Mark (OHWM), which can be determined by a number of factors, including the presence of a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; and the presence of litter and debris. The OHWM limits (i.e., active floodplain) occurring on the Project Site were delineated based on methods contained in *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States*, *A Delineation Manual* (Lichvar and McColley 2008) and the *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (Curtis and Lichvar 2010).

It should be noted that the RWQCB shares USACE jurisdiction unless isolated conditions are present. If isolated waters are present, the RWQCB takes jurisdiction using the USACE's definition of the OHWM and/or the three-parameter wetlands method pursuant to the 1987 Wetlands Manual. The CDFW's jurisdiction is defined as the top of the bank on either side of a stream, channel, or basin or to the outer limit of riparian vegetation located within or immediately adjacent to the river, stream, creek, pond, lake, or other impoundment.

2.3.2 Wetlands

Technical methods and guidelines to determine the presence and extent of wetlands are described by the USACE in the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008). The presence of wetlands is determined by a three-parameter approach requiring evidence of (1) wetland hydrology, (2) hydrophytic vegetation, and (3) hydric soils.

Wetland hydrology is determined by the presence of indicators such as observed surface water; presence of past surface flow; and the depth to saturated soils or free water in soil test pits.

Procedures for determining whether the hydrophytic vegetation criterion is met is based on three potential indicators that are described in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008). These include the "Dominance

Test" using the "50/20 Rule"; the "Prevalence Index"; or the presence of "Morphological Adaptation" of vegetation that is present. These indicators are based on determining the presence and relative abundance of plant species that are categorized as Obligate Wetland (typically associated with wetland conditions); Facultative Wetland (predominantly present in wetland conditions); Facultative (equally likely to occur in wetland or non-wetland areas); Facultative Upland (predominantly found in non-wetland areas); or Upland (typically found in mesic to xeric non-wetland habitats). Plant species are categorized in the National Wetland Plant List, created by the USEPA, the U.S. Fish and Wildlife Service (USFWS), and the USDA.

Soils are determined to be hydric when they form under conditions of saturation, flooding, or ponding that occurs long enough during the growing season to develop anaerobic conditions (or conditions of limited oxygen) at or near the soil surface and that favor the establishment of hydrophytic vegetation (USDA NRCS 2023c). The presence of hydric soil conditions is determined where various indicators are observed by digging soil test pits to a depth of approximately 20 inches. Common hydric soil indicators include presence of redoximorphic features (i.e., areas where iron is reduced under anaerobic conditions and oxidized following a return to aerobic conditions); buried organic matter; organic streaking; reduced soil conditions; or sulfuric odor.

3.0 LITERATURE REVIEW

This section provides a summary of literature review results that were reviewed prior to the field survey and during report preparation that have helped inform the analysis provided in this report.

3.1 USGS TOPOGRAPHIC QUADRANGLE

The USGS topographic quadrangle maps show geological formations and their characteristics; they describe the physical settings of an area through topographic contour lines and other major surface features. These features include lakes, streams, rivers, buildings, roadways, landmarks, and other features that may fall under the jurisdiction of one or more regulatory agencies. In addition, the USGS maps provide topographic information that is useful in determining elevations, latitude and longitude, and Universal Transverse Mercator (UTM) Grid coordinates.

The Project Site occurs on the USGS' Van Nuys 7.5-minute topographic quadrangle map. The Los Angeles River and Tujunga Wash appear as blueline streams on the quadrangle map.

3.2 SOIL SURVEY

The presence of hydric soils is one of the chief indicators of jurisdictional wetlands. The Project Site is located in the Southeastern Los Angeles County Soil Survey Area. Psomas reviewed the USDA's soil data (Exhibit 4) associated with the Project Site and determined that the following soil types are present:

- **Cropley-Urban land complex, 0 to 5 percent slopes**. The Cropley component is a soil type that is comprised of clay loam to a depth of approximately 79 inches. It is described as moderately well drained and the depth to the water table is more than 80 inches. It generally does not support ponding. The urban land component is a manufactured soil type that is the result of past grading. Neither component is listed as a hydric soil on the National Hydric Soils List (USDA NRCS 2023c).
- **Urban land-Tujunga-Typic Xerothents, sandy substratum complex, 0 to 2 percent slopes**. The urban land soil type is associated with previous grading and development and has a high rate of runoff. The upper layers of the Tujunga soil type consists of fine sandy loam that is underlain by coarse sand and loamy coarse sand. It is described as somewhat excessively drained, does not support ponding, and the depth to the water table is more than 80 inches. Typic Xerothents soil consists of clay loam, sandy loam, fine sandy loam, and sand. It is described as well drained and the depth to the water table is more than 80 inches. None of the soil type components are listed as hydric on the National Hydric Soils List.
- **Urban land-Grommet-Ballona complex, 0 to 5 percent slopes**. The urban land soil type is associated with previous grading and development and has a high rate of runoff. The Grommet and Ballona components consist of loam and clay loam soils underlain with a clay layer approximately 37 inches below the surface. This soil type is comprised of clay loam to a depth of approximately 79 inches. Both the Grommet and Ballona components are described as well drained and the depth to the water table is more than 80 inches. It generally does not support ponding. None of the soil type components are listed as hydric on the National Hydric Soils List.
- **Urban land, frequently flooded, 0 to 5 percent slopes**. This soil type is associated with the concrete-lined Los Angeles River within the Project Site. As a result, this soil type is impermeable and has a very high rate of runoff. It is not listed as a hydric soil on the National Hydric Soils List.

A detailed summary of the characteristics of these soil types is provided in Attachment B of this report.

3.3 NATIONAL WETLANDS INVENTORY

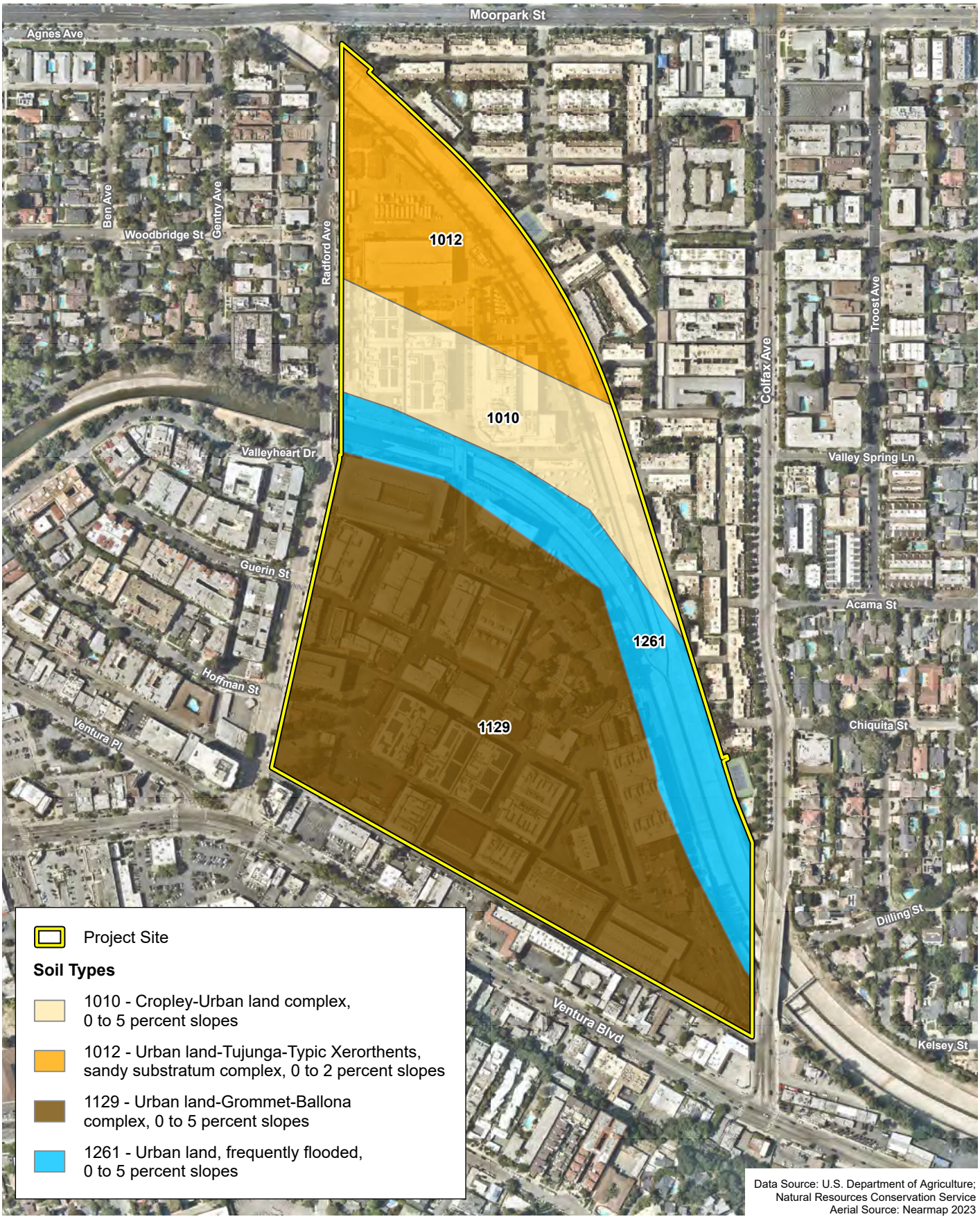
The USFWS' Wetland Mapper (USFWS 2023) shows wetland resources available from the Wetlands Spatial Data Layer of the National Spatial Data Infrastructure. This resource provides the classification of known wetlands following the Classification of Wetlands and Deepwater Habitats of the United States (FGDC 2013). This classification system is arranged in a hierarchy of (1) Systems that share the influence of similar hydrologic, geomorphologic, chemical, or biological factors (i.e., Marine Estuarine, Riverine, Lacustrine, and Palustrine); (2) Subsystems (i.e., Subtidal and Intertidal; Tidal, Lower Perennial, Upper Perennial, and Intermittent; or Littoral and Limnetic); (3) Classes, which are based on substrate material and flooding regime or on vegetative life forms; (4) Subclasses; and (5) Dominance Types, which are named for the dominant plant or wildlife forms. In addition, there are modifying terms applied to Classes or Subclasses.

The Los Angeles River and Tujunga Wash both appear on the National Wetland Inventory (Exhibit 5). The Los Angeles River upstream of the confluence with Tujunga Wash is listed as R2UBHr (Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded, Artificial Substrate). This classification is also associated with the Los Angeles River downstream of its confluence with Tujunga Wash, but only in the center entrainment portion of the channel. The description for this code is as follows:

- **R: System RIVERINE.** The Riverine System includes all wetlands and deepwater habitats contained within a channel, with two exceptions: (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and (2) habitats with water containing ocean-derived salts of 0.5 parts per trillion (ppt) or greater. A channel is an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water.
    - **2: Subsystem LOWER PERENNIAL.** This Subsystem is characterized by a low gradient. There is no tidal influence, and some water flows all year, except during years of extreme drought. The substrate consists mainly of sand and mud. Oxygen deficits may sometimes occur. The fauna is composed mostly of species that reach their maximum abundance in still water, and true planktonic organisms are common. The gradient is lower than that of the Upper Perennial Subsystem and the floodplain is well developed.
        - **UB: Class UNCONSOLIDATED BOTTOM.** Includes all wetlands and deepwater habitats with at least 25 percent cover of particles smaller than stones (less than 6-7 cm), and a vegetative cover less than 30 percent.
            - **H: Water Regime PERMANENTLY FLOODED.** Water covers the substrate throughout the year in all years.
                - **r: Special Modifier ARTIFICIAL SUBSTRATE**: This Modifier describes concrete-lined drainage ways, as well as Rock Bottom, Unconsolidated Bottom, Rocky Shore and Unconsolidated Shore where the substrate material has been emplaced by humans.

Tujunga Wash is listed as R4SBCr (Riverine, Intermittent, Streambed, Seasonally Flooded, Artificial Substrate). The description for this code is as follows:

- **R: System RIVERINE.** The Riverine System includes all wetlands and deepwater habitats contained within a channel, with two exceptions: (1) wetlands dominated by trees, shrubs,



Soil Map

Exhibit 4

Jurisdictional Delineation Report for the Radford Studio Center Project

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persistent emergents, emergent mosses, or lichens, and (2) habitats with water containing ocean-derived salts of 0.5 ppt or greater. A channel is an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water.

- **4: Subsystem INTERMITTENT.** This Subsystem includes channels that contain flowing water only part of the year. When the water is not flowing, it may remain in isolated pools or surface water may be absent.
  - **SB: Class STREAMBED.** Includes all wetlands contained within the Intermittent Subsystem of the Riverine System and all channels of the Estuarine System or of the Tidal Subsystem of the Riverine System that are completely dewatered at low tide.
    - **C: Water Regime SEASONALLY FLOODED.** Surface water is present for extended periods especially early in the growing season but is absent by the end of the growing season in most years. The water table after flooding ceases is variable, extending from saturated to the surface to a water table well below the ground surface.
      - **r: Special Modifier ARTIFICIAL SUBSTRATE**: This Modifier describes concrete-lined drainage ways, as well as Rock Bottom, Unconsolidated Bottom, Rocky Shore and Unconsolidated Shore where the substrate material has been emplaced by humans.

At the confluence of Tujunga Wash and the Los Angeles River, the NWI classification changes to R2USCr (Riverine, Lower Perennial, Unconsolidated Shore, Seasonally Flooded, Artificial Substrate). This classification only applies to portions of the Los Angeles River that are outside of the river's center entrainment channel. The description for this code is as follows:

- **R: System RIVERINE.** The Riverine System includes all wetlands and deepwater habitats contained within a channel, with two exceptions: (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and (2) habitats with water containing ocean-derived salts of 0.5 ppt or greater. A channel is an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water.
  - **2: Subsystem LOWER PERENNIAL.** This Subsystem is characterized by a low gradient. There is no tidal influence, and some water flows all year, except during years of extreme drought. The substrate consists mainly of sand and mud. Oxygen deficits may sometimes occur. The fauna is composed mostly of species that reach their maximum abundance in still water, and true planktonic organisms are common. The gradient is lower than that of the Upper Perennial Subsystem and the floodplain is well developed.
    - **US: Class UNCONSOLIDATED SHORE.** Includes all wetland habitats having two characteristics: (1) unconsolidated substrates with less than 75 percent areal cover of stones, boulders or bedrock and (2) less than 30 percent areal cover of vegetation. Landforms such as beaches, bars, and flats are included in the Unconsolidated Shore class.
      - **C: Water Regime SEASONALLY FLOODED.** Surface water is present for extended periods especially early in the growing season but is absent by the end of the growing season in most years. The water table after flooding ceases is variable, extending from saturated to the surface to a water table well below the ground surface.
        - **r: Special Modifier ARTIFICIAL SUBSTRATE**: This Modifier describes concrete-lined drainage ways, as well as Rock Bottom, Unconsolidated

Bottom, Rocky Shore and Unconsolidated Shore where the substrate material has been emplaced by humans.

3.4 REGIONAL WATER QUALITY CONTROL PLAN

There are nine RWQCBs in California. The Project Site is located within RWQCB Region 4, the Los Angeles Region. The SWRCB and the Los Angeles RWQCB have adopted a Water Quality Control Plan (or "Basin Plan") for the region. The Basin Plan contains goals and policies, descriptions of conditions, and proposed solutions to surface and groundwater issues. The Basin Plan also establishes water quality standards for surface and groundwater resources and includes beneficial uses and levels of water quality that must be met and maintained to protect these uses. These water quality standards are implemented through various regulatory permits pursuant to CWA Section 401 for Water Quality Certifications and Section 402 for Report of Waste Discharge permits.

As described in the Basin Plan, drainage features on the Project Site include Los Angeles River Reach 3 (Watershed Boundary Dataset [WBD] 180701050402) and Tujunga Wash (WBD 180701050208). Beneficial Uses associated with these drainage features include: Municipal Water Supply (MUN); Industrial Service Supply (IND); Ground Water Recharge (GWR); Warm Freshwater Habitat (WARM); Cold Freshwater Habitat (COLD); Wildlife Habitat (WILD); Wetland Habitat (WET); Limited Water Contact Recreation (REC-1); and Non-Contact Water Recreation (REC-2) (Los Angeles RWQCB 1994) (Table 1). Descriptions of the various Beneficial Uses are provided in Attachment B.

Project related activities are not anticipated to result in any direct impacts to the Beneficial Uses listed above. The Project will not cause any disruption to existing water flows in either drainage feature so that no impacts to MUN, IND, or GWR will result. The drainage bottoms are hardened and no vegetation is found in the channels, so that there is no aquatic or riparian habitat. Therefore, no impacts will occur to the WARM, COLD, WILD, or WET Beneficial Uses. The drainage features provide limited REC-1 and REC-2 opportunities and the Project will enhance these Beneficial Uses as improved access will be provided for pedestrian and bicycle access to trails that are adjacent to the drainage features.

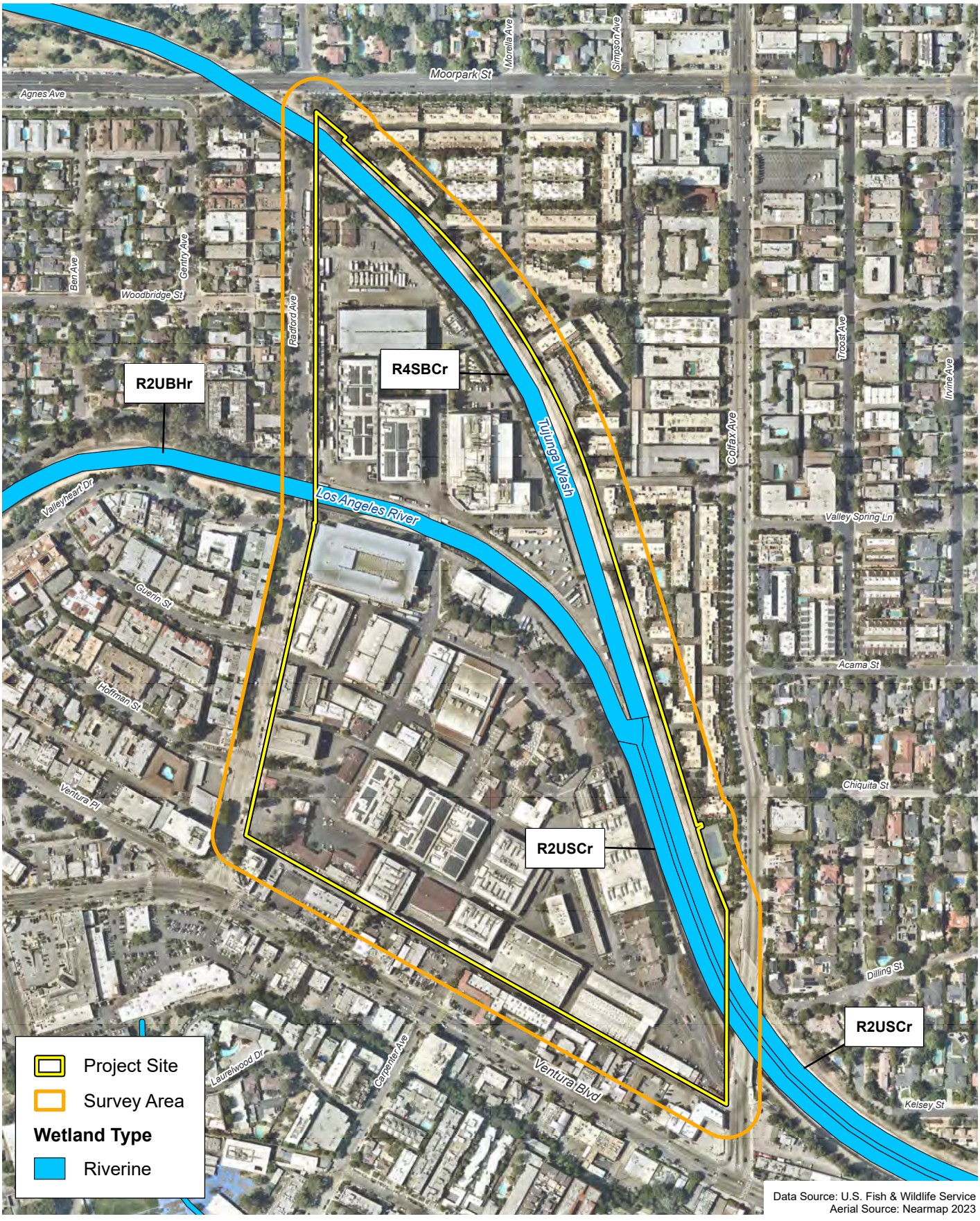
TABLE 1
SUMMARY OF BENEFICIAL USES

Feature	Beneficial Uses								
	MUN	IND	GWR	WARM	COLD	WILD	WET	REC-1	REC-2
Los Angeles River Reach 3 WBD 180701050402	P	P	E	E		E	E	E	E
Tujunga Wash WBD 180701050208	P		I	P	P	P		P	I

WBD: Watershed Boundary Dataset; MUN: Municipal Water Supply; IND: Industrial Service Supply; GWR: Ground Water Recharge; WARM: Warm Freshwater Habitat; WILD: Wildlife Habitat; REC-1: Limited Water Contact Recreation; REC-2: Non-Contact Water Recreation

E: Existing Beneficial Use; I: Intermittent Beneficial Use; P: Potential Beneficial Use

Source: Los Angeles RWQCB 1994.



National Wetland Inventory

Exhibit 5

Jurisdictional Delineation Report for the Radford Studio Center Project

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4.0 JURISDICTIONAL ANALYSIS

As described earlier in this report, the survey area contains two drainage features: the Los Angeles River and Tujunga Wash. These are naturally occurring drainage features that have been converted to concrete-lined storm drains over 70 years ago to protect surrounding residential areas from flood damage. Because the channels are lined with concrete, they do not support aquatic or riparian vegetation. The channel bottom is flat and the sides are vertical so that the jurisdictional limits of the three regulatory agencies are equal.

A summary of the channel's characteristics is provided in Table 2 and photographs are provided in Attachment C that illustrate the conditions on the Project Site.

TABLE 2
SUMMARY OF JURISDICTIONAL RESOURCES IN THE SURVEY AREA

Feature	Latitude/Longitude (decimal degrees)		Feature Length (linear feet)	OHWM Width Range (feet)	Area of USACE/RWQCB Jurisdiction* (acres)		CDFW Jurisdiction Width Range (feet)	Area of CDFW Jurisdiction (acres)
	Upstream End	Downstream End			Wetland	Non-wetland		
Los Angeles River WBD 180701050402	34.147061°, -118.392344°	34.142801°, -118.387737°	2,405	60-120	0.00	4.73	60-120	4.73
Tujunga Wash WBD 180701050208	34.150559°, -118.393428°	34.144919°, -118.388703°	3,750	65	0.00	5.60	17	5.60
Total					**0.00**	**10.33**		**10.33**

*Because there are no isolated waters on the Project Site, the RWQCB jurisdiction is the same as the USACE's

OHWM: Ordinary High Water Mark; USACE: U.S. Army Corps of Engineers; RWQCB: Regional Water Quality Control Board; CDFW: California Department of Fish and Wildlife

4.1 U.S. ARMY CORPS OF ENGINEERS JURISDICTION

As discussed in Section 1.4, the federal government recently put forth a final Water Rule that contains an updated definition of WOTUS (see Attachment A). This WOTUS definition covers features that have been consistently regulated by the CWA such as TNWs, the territorial seas, interstate waters, and any impoundments of these waters. The Los Angeles River has been determined by the USACE to be a TNW downstream of the confluence of Bell Creek and Arroyo Calabasas in the community of Canoga Park. Therefore, the Los Angeles River is considered to be WOTUS by definition.

WOTUS also consist of "jurisdictional tributaries" to TNWs, which are drainage features that meet either the relatively permanent standard or the significant nexus standard. These standards are discussed below as they relate to Tujunga Wash which is a tributary to the Los Angeles River.

Relatively Permanent Standard

The relatively permanent standard identifies drainage features that convey surface water flows for a period that is at least seasonal (i.e., surface water must be continuously present for a minimum period of 3 months). The hydrology of Tujunga Wash is significantly affected by the management of Hansen Dam which discharges water to Tujunga Wash. Additional inputs to Tujunga Wash come from urban runoff from the neighborhoods within its watershed, producing minor dry season flows. A review of historic aerial photos indicates that water is present at various

times of the year, so that flows appear to be sustained on a seasonal basis at minimum. Therefore, Tujunga Wash appears to satisfy the relatively permanent standard.

Significant Nexus Standard

Tujunga Wash flows into the Los Angeles River (a TNW) within the limits of the Project Site. Due to this surface connection with a TNW, Tujunga Wash meets the significant nexus standard.

Limits of "Waters of the U.S."

As a TNW, the Los Angeles River is WOTUS by definition pursuant to paragraph (a)(1) of the 2023 Water Rule. Tujunga Wash satisfies the relatively permanent and significant nexus standards and is considered to be a jurisdictional tributary and under the jurisdiction of the USACE. The limits of WOTUS were mapped to encompass the entire width of the flat bottom channels. Therefore, approximately 10.33 acres of non-wetland WOTUS under the regulatory authority of the USACE occur in the survey area (Table 2; Exhibit 6).

Wetlands Determination

As stated above, the Los Angeles River and Tujunga Wash are concrete-lined channels so that no soil test pits could be excavated to check for hydric soil indicators. Furthermore, the channel is unvegetated and no hydrophytic plant species are present. Therefore, it is assumed that no wetland conditions are present.

Section 408 Limits

The Los Angeles River and Tujunga Wash are USACE civil works projects and any modifications or use of these flood control structures requires an authorization from the Civil Works Branch of the USACE. In addition to direct modification of any USACE civil works project, the limits of USACE jurisdiction extend outward to include maintenance rights-of-way. For the Los Angeles River and Tujunga Wash within the survey area, the maintenance right-of-way extends approximately 25 feet outward (landward), as indicated on Exhibit 6 (LACPW 2024).

4.2 REGIONAL WATER QUALITY CONTROL BOARD JURISDICTION

No isolated drainage features occur on the Project Site; therefore, the jurisdictional limits of the RWQCB are equal to that of the USACE. Based on these findings, the survey area contains a total of approximately 10.33 acres of unvegetated, non-wetland "waters of the State" (Table 2; Exhibit 6).

4.3 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION

The limits of CDFW jurisdiction in the survey area were mapped to the top of the bank of the Los Angeles River and Tujunga Wash. Because the channel side walls are vertical, the width of the top of the bank equals the width of the channel bottom. Therefore, the amount of CDFW jurisdictional waters is equal to that of the USACE and RWQCB, measuring approximately 10.33 acres (Table 2; Exhibit 6).

Jurisdictional Resources

Exhibit 6

Jurisdictional Delineation Report for the Radford Studio Center Project

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5.0 IMPACT ANALYSIS

The Radford Studio Center Project consists of the continuation of the existing studio use and the modernization and expansion of Radford Studio Center through the proposed Radford Studio Center Specific Plan, which would allow for the development of up to approximately 1,667,010 square feet of new sound stage, production support, production office, creative office, and retail uses, as well as associated ingress/egress, circulation, parking, landscaping, and open space improvements. The only Project components that have the potential to affect jurisdictional waters involve the construction and/or expansion of two bridges. These include:

1. A new bridge, referred to as the Los Angeles River Connector, that will cross Tujunga Wash in the northwestern corner of the Project Site to connect Radford Avenue to Moorpark Street for a new studio entrance.
2. An existing bridge in the center of the Project Site (Gilligan's Island Road) which crosses the Los Angeles River that will be expanded from its current width of approximately 36 feet to approximately 56 feet wide.

The locations of the two bridges are presented in Exhibit 7. Neither bridge will result in a permanent discharge to the channels and will not require a stream diversion or other impact to flowing water. Bridge falsework (temporary supports for bridge construction) may be placed in Tujunga Wash for the Radford Avenue bridge, which may be considered a temporary fill. Though no direct impacts will result, both bridges will increase the amount of shade cast onto the stream bottom which the agencies may consider to be an indirect impact on surface waters. Indirect shading impacts would include approximately 5,410 square feet (0.12 acre) associated with the Los Angeles River Connector bridge and approximately 1,350 square feet (0.03 acre) associated with the Gilligan's Island Road bridge expansion.

Additionally, the USACE would require a Section 408 permit if the bridge construction activities at either site would require modification of the sidewall of the concrete channels or if construction activities are required within the maintenance rights-of-way of the Los Angeles River or Tujunga Wash. Currently, the Gilligan's Island Road bridge spans the Los Angeles River without touching the sidewalls and it is likely that the expanded bridge would similarly span the river. Similarly, the Radford Avenue Bridge over Tujunga Wash will not require any modification to the concrete lined channel, but the construction footprint will occur within the maintenance right-of-way. Consultation with the USACE will be needed to determine if the encroachment within the channel rights-of-way will require a Section 408 permit.

Impacts to Jurisdictional Resources

Exhibit 7

Jurisdictional Delineation Report for the Radford Studio Center Project

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Feet

PSOMAS

6.0 REGULATORY APPROVAL PROCESS

This section summarizes the various permits, agreements, and certifications that may be required prior to initiation of the proposed Project activities that involve impacts to jurisdictional waters, including:

- USACE Section 404/408 Permits
- RWQCB Section 401 Water Quality Certification
- CDFW Section 1602 Notification of Lake or Streambed Alteration

It should be noted that all regulatory permit applications can be processed concurrently.

6.1 U.S. ARMY CORPS OF ENGINEERS

The Project will not result in a permanent discharge to WOTUS, though temporary fills may be required for bridge falsework and/or a stream diversion. Consultation with the USACE Regulatory Branch is needed to determine if these activities will require a Section 404 permit.

As part of the USACE consultation, the Civil Work Branch will be consulted to determine if construction activities that encroach into the maintenance right-of-way for the two channels will require issuance of a Section 408 permit.

6.2 REGIONAL WATER QUALITY CONTROL BOARD

Consultation with the RWQCB is recommended to determine if the indirect impacts via increased shade on jurisdictional waters would require a permit. Because a Section 404 permit is not anticipated for the Project, the RWQCB would not need to issue a Section 401 Certification. Instead, if the bridge construction/expansion activities are determined to be a regulated activity, the RWQCB would issue Waste Discharge Requirements (WDRs) to authorize the Project. For issuance of WDRs, the RWQCB requires the Applicant to address urban storm water runoff during and after construction in the form of Best Management Practices (BMPs). These BMPs are intended to address the treatment of pollutants carried by storm water runoff and are required in all complete applications.

6.3 CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE

As with the RWQCB, consultation with the CDFW is recommended to determine if a Notification of a Lake or Streambed Alteration (LSA) should be submitted. The CDFW requires a LSA to be issued to authorize substantial changes to the bed or bank of a drainage feature or to authorize impacts to aquatic or riparian habitat. Because there is no aquatic or riparian habitat present in the channels, the shading from the bridges would not result in impacts to habitat. The CDFW would not likely require a permit for shading a concrete channel. However, confirmation from the CDFW would be recommended to confirm that a LSA would not be required.

7.0 REFERENCES

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ATTACHMENT A

SUMMARY OF REGULATORY AUTHORITY

REGULATORY AUTHORITY

This attachment summarizes the regulatory authority of the U.S. Army Corps of Engineers (USACE), the Regional Water Quality Control Board (RWQCB), and the California Department of Fish and Wildlife (CDFW) over activities that have potential to impact jurisdictional resources.

U.S. Army Corps of Engineers

The USACE Regulatory Branch regulates activities that discharge dredged or fill materials into "waters of the United States" (WOTUS) under Section 404 of the Federal Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act. This permitting authority applies to all WOTUS where the material (1) replaces any portion of WOTUS with dry land or (2) changes the bottom elevation of any portion of any WOTUS. These fill materials would include sand, rock, clay, construction debris, wood chips, and materials used to create any structure or infrastructure in these waters.

Waters of the United States

Regulations surrounding WOTUS have undergone several revisions over the past several years, including new Water Rules put forth by the Obama Administration in 2015 and the Trump Administration in 2020, which was vacated by the U.S. District Court for the District of Arizona in August 2021. Most recently, the United States Environmental Protection Agency (USEPA) and the USACE published a new Water Rule in the *Federal Register* on January 18, 2023 which became effective on March 20, 2023.

On May 25, 2023, the U.S. Supreme Court overruled the USEPA's interpretation of the CWA pursuant to the definition of WOTUS in the case of *Sackett v. U.S. Environmental Protection Agency*. To conform to the Supreme Court decision, the USEPA issued a revised definition of WOTUS that was published in the Code of Federal Regulations on September 8, 2023.

The current definition of WOTUS includes:

1. Waters which are:
   (i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
   (ii) The territorial seas; or;
   (iii) Interstate waters
2. Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph 5 of this section;
3. Tributaries of waters identified in paragraphs 1 or 2 that are relatively permanent, standing or continuously flowing bodies of water;
4. Wetlands adjacent to the following waters:
   (i) Waters identified in paragraph 1; or
   (ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph 2 or 3 and with a continuous surface connection to those waters.
5. Intrastate lakes and ponds not identified in paragraphs 1 through 4
   (i) That are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraphs 1 or 3.

The regulatory text for this rule specifically identifies several features that are non-jurisdictional by definition. These include:

- waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;
- prior converted cropland designated by the Secretary of Agriculture;
- ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;
- artificially irrigated areas that would revert to dry land if the irrigation ceased;
- artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;
- artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;
- waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of WOTUS; and
- swales and erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow.

Ordinary High Water Mark

The landward limit of tidal "waters of the U.S." is the high-tide line. In non-tidal waters where adjacent wetlands are absent, the lateral limits of USACE jurisdiction extend to the ordinary high water mark (OHWM).[1] The OHWM is defined as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas"[2]. When wetlands are present, the lateral limits of USACE jurisdiction extend beyond the OHWM to the limits of the adjacent wetlands.[3]

Wetlands

A wetland is a subset of jurisdictional waters and is defined by the USACE and the USEPA as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions"[4]. Wetlands generally include swamps, marshes, bogs, and areas containing similar features.

The definition and methods for identifying wetland resources can be found in the USACE's *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region*,[5]

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1 U.S. Army Corps of Engineers (USACE). 2005 (December 7). Regulatory Guidance Letter. Ordinary High Water Mark Identification. Washington, D.C.: USACE.

2 *Code of Federal Regulations* (CFR), Title 33, §328.3(e)

3 USACE 2005

4 33 CFR §328.3(b)

5 USACE. 2008a. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*. (J.S. Wakeley, R.W. Lichvar, and C.V. Noble, Eds.). Vicksburg, MS: U.S. Army Engineer Research and Development Center.

a supplement to the 1987 *Corps of Engineers Wetlands Delineation Manual*.[6] Both the 1987 Wetlands Manual and the 2008 Arid West Supplement to the manual provide technical methods and guidelines for determining the presence of wetland "waters of the U.S." Pursuant to these manuals, a three-parameter approach is used to identify wetlands and requires evidence of wetland hydrology, hydrophytic vegetation, and hydric soils. In order to be considered a wetland, an area must exhibit one or more indicators of all three of these parameters. However, problem areas may periodically or permanently lack certain indicators for reasons such as seasonal or annual variability of rainfall, vegetation, and other factors. Atypical wetlands lack certain indicators due to recent human activities or natural events. Guidance for determining the presence of wetlands in these situations is presented in the regional supplement.

Section 404 Permit

Except as specified in Section 323.4 of the CFR, impacts to "waters of the U.S." require a Section 404 Permit. Permit authorization may be in the form of (1) a "general permit" authorizing a category of activities in a specific geographical region or nationwide or (2) an "individual permit" (IP) following a review of an individual application form (to be obtained from the district office having jurisdiction over the waters in which the activity is proposed to be located).

Regulatory authorization in the form of a Nationwide Permit (NWP) is provided for certain categories of activities such as repair, rehabilitation, or replacement of a structure or fill which was previously authorized; utility line placement; or bank stabilization. NWPs authorize only those activities with minimal adverse effects on the aquatic environment and are valid only if the conditions applicable to the permits are met or waivers to these conditions are provided in writing from the USACE. Please note that waivers may require consultation with affected federal and State agencies, which can be a lengthy process with no mandated processing time frames. Certain activities do not require submission of an application form but may require a separate notification. If the NWP conditions cannot be met, an IP will be required. "Waters of the U.S." temporarily filled, flooded, excavated, or drained but restored to pre-construction contours and elevations after construction are not included in the measurement of loss of "waters of the U.S." The appropriate permit authorization will be based on the amount of impacts to "waters of the U.S.", as determined by the USACE. There is no filing fee for the Section 404 Permit.

Approximately three or four months are typically required to process a routine permit application; large or complex activities may take longer to process. When a permit application is received, it will be assigned an identification number and reviewed for completeness by the District Engineer. If an application is incomplete, additional information will be requested within 15 days of receipt of the application. If an application is complete, the District Engineer will issue a public notice within 15 days unless specifically exempted by provisions of the CFR. Public comments will be accepted no more than 30 days but not less than 15 days from the date of public notice; these will become part of the administrative record of the application. Generally, the District Engineer will decide on the application no later than 60 days after receipt of the completed application. Additional permit situations may increase the permit processing time (e.g., projects involving a Section 401 Water Quality Certification (Section 401 Certification), a coastal zone management consistency analysis, historic properties, a federal agency, and/or Endangered species). The Project Applicant will be given time, not to exceed 30 days, to respond to requests of the District Engineer.

On January 31, 2007, the USACE published a memorandum clarifying the Interim Guidance for Amendments to the National Historic Preservation Act and the Advisory Council on Historic

[6] Environmental Laboratory. 1987. Cor*ps of Engineers Wetlands Delineation Manual (Technical Report Y-87-1)*. Vicksburg, MS: U.S. Army Engineer Waterways Experiment Station.

Preservation (ACHP) implementing regulations.[7] The Interim Guidance applies to all Department of the Army requests for authorization/verification, including Individual Permits (IPs, i.e., standard permits and letters of permission) and all Regional General Permits (RGPs) and Nationwide Permits (NWPs). The State or Tribal Historic Preservation Officer (SHPO/THPO) has 30 days to respond to a determination that a proposed activity, which otherwise qualifies for an NWP or an RGP, has no effect or no adverse effect on a historic property. If the SHPO/THPO does not respond within 30 days of notification, the Los Angeles District may proceed with verification. If the SHPO/THPO disagrees with the District's determination, the District may work with the SHPO/THPO to resolve the disagreement or request an opinion from the ACHP. The USACE will submit the Draft Jurisdictional Delineation Report to the SHPO/THPO for review prior to initiating the actual regulatory process.

Please note that, if the USACE determines that the drainages/waterbodies are jurisdictional and would be impacted by project implementation, the Applicant will be required to obtain a CWA Section 401 Certification from the RWQCB before the USACE will issue the Section 404 Permit. If the USACE determines that the impacted drainage/waterbody is not jurisdictional, the Applicant will be required to obtain RWQCB authorization under the provisions of a Report of Waste Discharge (ROWD).

Jurisdictional Determinations

Pursuant to USACE Regulatory Guidance Letter (RGL) 08-02 (dated June 26, 2008), the USACE can issue two types of jurisdictional determinations to implement Section 404 of the CWA: Approved Jurisdictional Determinations and Preliminary Jurisdictional Determinations.[8] An Approved Jurisdictional Determination is an official USACE determination that jurisdictional "waters of the U.S.", "Navigable Waters of the U.S.", or both are either present or absent on a site. An Approved Jurisdictional Determination also identifies the precise limits of jurisdictional waters on a project site.

The USACE will provide an Approved Jurisdictional Determination when (1) an Applicant requests an official jurisdictional determination; (2) an Applicant contests jurisdiction over a particular water body or wetland; or (3) when the USACE determines that jurisdiction does not exist over a particular water body or wetland. The Approved Jurisdictional Determination then becomes the USACE's official determination that can then be relied upon over a five-year period to request regulatory authorization as part of the permit application.

In addition, an Applicant may decline to request an Approved Jurisdictional Determination and instead obtain a USACE IP or General Permit Authorization based on a Preliminary Jurisdictional Determination or, in certain circumstances (e.g., authorizations by non-reporting nationwide general permits), with no Jurisdictional Determination.

Preliminary Jurisdictional Determinations are non-binding, advisory in nature, and may not be appealed. They indicate that there may be "waters of the U.S." on a project site. An Applicant may elect to use a Preliminary Jurisdictional Determination to voluntarily waive or set aside questions regarding CWA jurisdiction over a site, usually in the interest of expediting the permitting process. The USACE will determine what form of Jurisdictional Determination is appropriate for a particular project site.

The USACE Regulatory Branch Offices will coordinate with the USEPA Regional Office and USACE Headquarters (HQ), as outlined in its January 28, 2008, memorandum entitled "Process

[7] USACE. 2007 (January 31). Memorandum: Interim Guidance for Amendments to the National Historic Preservation Act and the Advisory Council on Historic Preservation (ACHP) Implementing Regulations. Washington, D.C.: USACE.

[8] USACE. 2008b (June 26). Regulatory Guidance Letter. Jurisdictional Determinations. Washington, D.C.: USACE.

for Coordinating Jurisdictional Determinations Conducted Pursuant to Section 404 of the CWA in Light of the *Rapanos* and *SWANCC* Supreme Court Decisions".[9] The guidance provided in this memorandum is quoted as follows:

1. Effective immediately, unless and until paragraph 5(b) of the June 5, 2007, Rapanos guidance coordination memorandum is modified by a joint memorandum from Army and EPA, we will follow these procedures:
    a. For jurisdictional determinations involving significant nexus determinations, USACE districts will send copies of draft jurisdictional delineations via e-mail to appropriate EPA regional offices. The EPA regional office will have 15 calendar days to decide whether to take the draft jurisdictional delineation as a special case under the January 19, 1989, "Memorandum of Agreement Between the Department of the Army and the USEPA Concerning the Determination of the Section 404 Program and the Application of the Exceptions under Section 404(f) of the Clean Water Act." If the EPA regional office does not respond to the district within 15 days, the district will finalize the jurisdictional determination.
    b. For jurisdictional determinations involving isolated waters determinations, the agencies will continue to follow the procedure in paragraph 5(b) of June 5, 2007, coordination memorandum, until a new coordination memorandum is signed by USACE and EPA. (In accordance with paragraph 6 of the June 5, 2007, coordination memorandum, this is a 21-day timeline that can only be changed through a joint memorandum between agencies).
2. Approved JDs are not required for non-reporting NWPs, unless the project proponent specifically requests an approved JD. For proposed activities that may qualify for authorization under a State Programmatic General Permit (SPGP) or RGP, an approved JD is not required unless requested by the project proponent.
3. The USACE will continue to work with EPA to resolve the JDs involving significant nexus and isolated waters determinations that are currently in the elevation process.
4. USACE districts will continue posting completed Approved JD Forms on their web pages.

Section 408 Permit

The USACE Civil Works Branch reviews projects that propose to occupy or use an existing USACE civil works project pursuant to Section 408 of the CWA. Examples of civil works projects include levees, dams, sea walls, jetties, dikes, wharfs, piers, and wetland restoration projects funded by or built by the USACE. Areas subject to USACE review for a Section 408 permit extend outward from the facility itself to include an associated maintenance easement. The USACE may grant such permission if it determines the alteration proposed will not be "injurious to the public interest" and "will not impair the usefulness" of the civil works project. Under USACE policy, a Section 408 permission will not be issued before the USACE Regulatory Branch provides a decision on a Section 404 permit.

[9] USACE. 2008c (January 28). *Memorandum for Commander, Major Subordinate Commands and District Commands. Process for Coordinating Jurisdictional Determinations Conducted Pursuant to Section 404 of the Clean Water Act in Light of the Rapanos and SWANCC Supreme Court Decisions.* Washington, D.C.: USACE.

Regional Water Quality Control Board

The RWQCB is the primary agency responsible for protecting water quality in California through the regulation of discharges to surface waters under the CWA and the California Porter-Cologne Water Quality Control Act (Porter-Cologne Act). The RWQCB's jurisdiction extends to all "waters of the State" and to all "waters of the U.S.", including wetlands (isolated and non-isolated).

Section 401 of the CWA provides the RWQCB with the authority to regulate, through a Section 401 Certification, any proposed, federally permitted activity that may affect water quality. Among such activities are discharges of dredged or fill material permitted by the USACE pursuant to Section 404 of the CWA. Section 401 requires the RWQCB to provide certification that there is reasonable assurance that an activity which may result in discharge to navigable waters will not violate water quality standards. The Section 401 Certification must be based on a finding that the proposed discharge will comply with water quality standards, which contain numeric and narrative objectives that can be found in each of the nine RWQCBs' Basin Plans.

The Porter-Cologne Act provides the State with very broad authority to regulate "waters of the State" (which are defined as any surface water or groundwater, including saline waters). The Porter-Cologne Act has become an important tool in the post-SWANCC (Solid Waste Agency of Northern Cook Counties vs. Unites States Army Corps of Engineers) and Rapanos era with respect to the State's authority over isolated waters. Generally, any person proposing to discharge waste into a water body that could affect its water quality must file an ROWD when there is no federal nexus, such as under Section 404(b)(1) of the CWA. Although "waste" is partially defined as any waste substance associated with human habitation, the RWQCB interprets this to include fill discharge into water bodies.

Section 401 Water Quality Certification

Issuance of the USACE Section 404 Permit would be contingent upon the approval of a Section 401 Certification from the RWQCB. Also, the RWQCB requires certification of the project's California Environmental Quality Act (CEQA) documentation before it will approve the Section 401 Certification or ROWD. The RWQCB, as a responsible agency, will use the project's CEQA document to satisfy its own CEQA-compliance requirements.

On June 1, 2020, the USEPA finalized the "Clean Water Act Section 401 Certification Rule" to implement the Section 401 Certification process consistent with the text and structure of the CWA. The final rule establishes procedures that promote consistent implementation of CWA section 401 and regulatory certainty in the federal licensing and permitting process. The new regulation includes reviews and approvals by the USACE prior to the RWQCB issuing a 401 Certification and reviews and approvals by the EPA prior to the USACE issuing a 404. The new 401 rule went into effect on September 11, 2020.

The new certification rule defines a discharge subject to 401 Certification as a discharge from a point source into a water of the United States. The new rule also states that States with additional water quality regulations cannot use these to expand the certification request.

The new rule requires all project proponents to request a pre-filing meeting with the RWQCB at least 30 days prior to filing a 401 "Certification Request". The filing procedure has been simplified to require the filing of a "Certification Request", rather than the acceptance of a "complete application". The certification request has nine mandatory components:

1. identify the project proponent(s) and a point of contact;
2. identify the proposed project;

3. identify the applicable federal license or permit;
4. identify the location and nature of any potential discharge that may result from the proposed project and the location of receiving waters;
5. include a description of any methods and means proposed to monitor the discharge and the equipment or measures planned to treat, control, or manage the discharge;
6. include a list of all other federal, interstate, tribal, state, territorial, or local agency authorizations required for the proposed project, including all approvals or denials already received;
7. include documentation that a pre-filing meeting request was submitted to the certifying authority at least 30 days prior to submitting the certification request;
8. contain the following statement: ”The project proponent hereby certifies that all information contained herein is true, accurate, and complete, to the best of my knowledge and belief”; and
9. contain the following statement: “The project proponent hereby requests that the certifying authority review and take action on this CWA 401 certification request within the applicable reasonable period of time.”

There is a mandatory 30 day wait period between a pre-filing meeting request and the filing of a Section 401 Certification Request. A Section 401 Certification Request must be filed with the RWQCB and the USACE concurrently. USACE reviews the Section 401 Certification Request for the nine required components. The USACE has 15 days to review the Section 401 Certification Request. The USACE then notifies the RWQCB that request is complete. And concurrently notifies the RWQCB of the reasonable time period to act on the Section 401 Certification Request. The reasonable time period is not to exceed 1 year. Within 15 days of receipt of the Section 401 Certification Request, the RWQCB must provide the applicant with the following: 1) date of receipt; 2) applicable reasonable period of time to act on the Section 401 Certification Request; and 3) date upon which waiver will occur if the certifying authority fails or refuses to act on the Certification Request.

Once the RWQCB issues the Section 401 Certification, the USACE has 5 days to notify the USEPA that the Section 401 Certification has been issued. The USEPA then has 30 days to notify neighboring jurisdictions of the Section 401 Certification. Neighboring jurisdictions have 60 days to respond. If there are no objections to the Section 401 Certification, then the USACE would issue the 404 permit.

On June 2, 2021, the USEPA published a notice of intention to reconsider and revise the CWA Section 401 Certification Rule. At this time, they are currently accepting public comment. Until a new rule goes into effect, the current Section 401 Certification Rule stands.

The RWQCB is required under the *California Code of Regulations* (CCR) to have a “minimum 21-day public comment period” before any action can be taken on the Section 401 application.[10] This period closes when the RWQCB acts on the application. Since projects often change or are revised during the Section 401 permit process, the comment period can remain open. The public comment period starts as soon as an application has been received. Generally, the RWQCB Section 401, USACE Section 404, and CDFW Section 1602 permit applications are submitted at the same time.

The RWQCB requires the Applicant to address urban storm water runoff during and after construction in the form of Best Management Practices (BMPs). These BMPs are intended

[10] 23 CCR §3858(a)

to address the treatment of pollutants carried by storm water runoff and are required in all complete applications. The notification/application for a CWA Section 401 Certification must also address compliance with the Basin Plan. Please note that filing an application would also require the payment of an application fee which would be based on project impacts. The fee schedule calculator is available at https://www.waterboards.ca.gov/resources/fees/water_quality/#wqfees.

California Department of Fish and Wildlife

The CDFW has jurisdictional authority over wetland resources associated with rivers, streams, and lakes pursuant to the *California Fish and Game Code*.[11] Activities of State and local agencies as well as public utilities that are project proponents are regulated by the CDFW under Section 1602 of the *California Fish and Game Code.* This section regulates any work that will (1) substantially divert or obstruct the natural flow of any river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. Section 1602 of the *California Fish and Game Code* applies to all perennial, intermittent, and ephemeral rivers, streams, and lakes in the State.

The CDFW jurisdictional limits are not as clearly defined by regulation as those of the USACE. While they closely resemble the limits described by USACE regulations, they include riparian habitat supported by a river, stream, or lake regardless of the presence or absence of hydric and saturated soils conditions. In general, the CDFW takes jurisdiction from the top of a stream bank or to the outer limits of the adjacent riparian vegetation (outer drip line), whichever is greater. Notification is generally required for any project that will take place within or in the vicinity of a river, stream, lake or within or in the vicinity of tributaries to a river, stream, or lake. This includes rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish and other aquatic plant and/or wildlife species. It also includes watercourses that have a surface or subsurface flow that support or have supported riparian vegetation.

Section 1602 Lake or Streambed Alteration Agreement

The CDFW enters into a Lake or Streambed Alteration (LSA) Agreement with a project proponent to ensure protection of wildlife and habitat values and acreages.

Prior to construction, a Notification of an LSA must be submitted to the CDFW that describes any proposed lake or streambed alteration that would occur with implementation of a project. The Notification of an LSA must address the initial construction and long-term operation and maintenance of any structures (such as a culvert or a desilting basin) included in the project design that are located within any river, stream, or lake and that may require periodic maintenance. In addition to the formal application materials and the fee, a copy of the appropriate environmental document (e.g., a Mitigated Negative Declaration) should be included in the submittal, consistent with CEQA requirements. The complete notification package must be completed on CDFW's Environmental Permit Information Management System (EPIMS). This notification will serve as the basis for the CDFW's issuance of a Section 1602 LSA Agreement. Note that notification is not required before beginning emergency work, but the CDFW must be notified in writing within 14 days after beginning the work.

After receiving Notification of an LSA Agreement, the CDFW will determine whether an LSA Agreement will be required for the proposed activity. An LSA Agreement will be required if

[11] See §§1600–1616.

the activity could substantially adversely affect an existing fish and wildlife resource. If an LSA Agreement is required, the CDFW may want to conduct an on-site inspection.

If the CDFW does not respond in writing concerning the completeness of the Notification within 30 days of its submittal, the Notification automatically becomes complete. If the CDFW does not submit a draft LSA Agreement to the Applicant within 60 days of the determination of a completed Notification package, the CDFW will issue a letter that either (1) identifies the final date to transmit a draft LSA Agreement or (2) indicates that an LSA Agreement was not required. The CDFW will also indicate that it was unable to meet this mandated compliance date and that, by law, the Applicant is authorized to complete the project without an LSA Agreement as long as the Applicant constructs the project as proposed and complies with all avoidance, minimization, and mitigation measures described in the submitted Notification package. Please note that, if the project requires revisions to the design or project construction, the CDFW may require submittal of a new Notification/application with an additional 90-day permit process.

If determined to be necessary, the CDFW will prepare a draft LSA Agreement, which will include standard measures to protect fish and wildlife resources during project construction and during ongoing operation and maintenance of any project element that occurs within a CDFW jurisdictional area. The draft Agreement must be transmitted to the Applicant within 60 calendar days of the CDFW's determination that the notification is complete. It should be noted that the 60-day timeframe might not apply to long-range agreements.

Following receipt of a draft LSA Agreement from the CDFW, the Applicant has 30 calendar days to notify the CDFW concerning the acceptability of the proposed terms, conditions, and measures. If the Applicant agrees with these terms, conditions and measures, the Agreement must be signed and returned to the CDFW. The Agreement becomes final once the CDFW executes it and an LSA Agreement is issued. Please note that all application fees must be paid and the final certified CEQA documentation must be provided prior to the CDFW's execution of the Agreement.

ATTACHMENT B

LITERATURE REVIEW DETAILS

DESCRIPTIONS OF SOILS IN SURVEY AREA

LOS ANGELES COUNTY, CALIFORNIA, SOUTHEASTERN PART

Cropley-Urban land complex, 0 to 5 percent slopes

Map Unit Setting

- National map unit symbol: 2pt3w
- Elevation: 50 to 690 feet
- Mean annual precipitation: 13 to 20 inches
- Mean annual air temperature: 64 to 65 degrees F
- Frost-free period: 350 to 365 days
- Farmland classification: Prime farmland if irrigated

Map Unit Composition

- Cropley and similar soils: 50 percent
- Urban land: 45 percent
- Minor components: 5 percent
- Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cropley

Setting

- Landform: Floodplains, alluvial fans
- Landform position (three-dimensional): Tread
- Down-slope shape: Linear
- Across-slope shape: Linear
- Parent material: Discontinuous human transported material over alluvium derived from sedimentary rock.

Typical profile

- A - 0 to 4 inches: clay loam
- Bss - 4 to 25 inches: clay loam
- BCk1 - 25 to 55 inches: clay loam
- BCk2 - 55 to 71 inches: clay loam

Properties and qualities

- Slope: 0 to 5 percent
- Depth to restrictive feature: more than 80 inches
- Drainage class: Moderately well drained
- Runoff class: Medium
- Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr).
- Depth to water table: More than 80 inches
- Frequency of flooding: None, Rare
- Frequency of ponding: Rare
- Calcium carbonate, maximum content: 5 percent
- Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
- Available water supply, 0 to 60 inches: High (about 10.3 inches)

Interpretive groups

- Land capability classification (irrigated): None specified
- Land capability classification (nonirrigated): 3s
- Hydrologic Soil Group: C
- Ecological site: R019XG907CA - Loamy Bottom
- Hydric soil rating: No

Description of Urban Land

Setting

- Landform: Alluvial fans

Properties and qualities

- Slope: 0 to 5 percent
- Depth to restrictive feature: 0 inches to manufactured layer
- Runoff class: Very high

Interpretive groups

- Land capability classification (irrigated): None specified
- Land capability classification (nonirrigated): 8
- Ecological site: R019XG911CA - Loamy Fan
- Hydric soil rating: No

Minor Components

Ballona

- Percent of map unit: 3 percent
- Landform: Alluvial fans
- Landform position (three-dimensional): Tread
- Down-slope shape: Linear
- Across-slope shape: Linear
- Hydric soil rating: No

Biscailuz

- Percent of map unit: 2 percent
- Landform: Flood plains, alluvial fans
- Landform position (three-dimensional): Tread
- Down-slope shape: Linear
- Across-slope shape: Linear
- Hydric soil rating: No

Urban land-Tujunga-Typic Xerothents, sandy substratum complex, 0 to 2 percent slopes

Map Unit Setting

- National map unit symbol: 2rshr
- Elevation: 230 to 870 feet
- Mean annual precipitation: 16 to 20 inches
- Mean annual air temperature: 65 to 66 degrees F
- Frost-free period: 355 to 365 days
- Farmland classification: Farmland of statewide importance

Map Unit Composition

- Urban land: 45 percent
- Tujunga and similar soils: 35 percent
- Typic xerorthents, sandy substratum, and similar soils: 15 percent
- Minor components: 5 percent
- Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

- Landform: Floodplains

Properties and qualities

- Slope: 0 to 2 percent
- Depth to restrictive feature: 0 inches to manufactured layer
- Runoff class: Very high

Interpretive groups

- Land capability classification (irrigated): None specified
- Land capability classification (nonirrigated): 8
- Ecological site: R019XG907CA - Loamy Bottom
- Hydric soil rating: No

Description of Tujunga

Setting

- Landform: Floodplains
- Landform position (three-dimensional): Tread
- Down-slope shape: Linear
- Across-slope shape: Linear
- Parent material: Discontinuous human transported material over alluvium derived from granite

Typical profile

- A - 0 to 2 inches: fine sandy loam
- C1 - 2 to 8 inches: fine sandy loam
- C2 - 8 to 28 inches: coarse sand
- C3 - 28 to 49 inches: loamy coarse sand
- C4 - 49 to 79 inches: loamy fine sand

Properties and qualities

- Slope: 0 to 2 percent
- Depth to restrictive feature: more than 80 inches
- Drainage class: Somewhat excessively drained
- Runoff class: Negligible
- Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
- Depth to water table: More than 80 inches
- Frequency of flooding: None, Rare
- Frequency of ponding: None
- Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
- Available water supply, 0 to 60 inches: Low (about 4.2 inches)

Interpretive groups

- Land capability classification (irrigated): None specified
- Land capability classification (nonirrigated): 3e
- Hydrological Soil Group: A
- Ecological site: R019XG911CA - Loamy Bottom
- Hydric soil rating: No

Description of Typic Xerorthents, Sandy Substratum

Setting

- Landform: Floodplains
- Landform position (three-dimensional): Tread
- Down-slope shape: Linear
- Across-slope shape: Linear
- Parent material: Discontinuous human transported material over alluvium derived from granite

Typical profile

- A - 0 to 6 inches: clay loam
- Cu1 - 6 to 18 inches: sandy loam
- Cu2 - 18 to 37 inches: fine sandy loam
- 2C - 37 to 79 inches: sand

Properties and qualities

- Slope: 0 to 2 percent
- Depth to restrictive feature: more than 80 inches
- Drainage class: Well drained
- Runoff class: Very low
- Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)
- Depth to water table: More than 80 inches
- Frequency of flooding: None, Rare
- Frequency of ponding: None
- Maximum salinity: Nonsaline (0.0 to 1.0 mmhos/cm)
- Available water supply, 0 to 60 inches: Moderate (about 6.5 inches)

Interpretive groups

- Land capability classification (irrigated): None specified
- Land capability classification (nonirrigated): 3e
- Hydrological Soil Group: C
- Ecological site: R019XG911CA - Loamy Bottom
- Hydric soil rating: No

Minor Components

Palmview

- Percent of map unit: 5 percent
- Landform: Floodplains
- Landform position (three-dimensional): Tread
- Down-slope shape: Linear
- Across-slope shape: Linear
- Hydric soil rating: No

Urban land-Grommet-Ballona complex, 0 to 5 percent slopes

Map Unit Setting

- National map unit symbol: 2sthw
- Elevation: 180 to 790 feet
- Mean annual precipitation: 16 to 21 inches
- Mean annual air temperature: 64 to 66 degrees F
- Frost-free period: 355 to 365 days
- Farmland classification: Prime farmland if irrigated

Map Unit Composition

- Urban land: 45 percent
- Grommet and similar soils: 25 percent
- Ballona and similar soils: 15 percent
- Minor components: 15 percent
- Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land

Setting

- Landform: Alluvial fans

Properties and qualities

- Slope: 0 to 5 percent
- Depth to restrictive feature: 0 inches to manufactured layer
- Runoff class: Very high

Interpretive groups

- Land capability classification (irrigated): None specified
- Land capability classification (nonirrigated): 8
- Ecological site: R019XG907CA - Loamy Fan
- Hydric soil rating: No

Description of Grommet

Setting

- Landform: Alluvial fans
- Landform position (three-dimensional): Tread
- Down-slope shape: Linear
- Across-slope shape: Linear
- Parent material: Discontinuous human transported material over young alluvium derived from sedimentary rock

Typical profile

- A1 - 0 to 4 inches: loam
- A2 - 4 to 9 inches: loam
- A3 - 9 to 51 inches: loam
- Bk1 - 51 to 63 inches: loam
- Bk2 - 63 to 79 inches: loam

Properties and qualities

- Slope: 0 to 5 percent
- Depth to restrictive feature: more than 80 inches
- Drainage class: Well drained
- Runoff class: Low
- Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
- Depth to water table: More than 80 inches
- Frequency of flooding: None
- Frequency of ponding: None
- Calcium carbonate, maximum content: 5 percent
- Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
- Available water supply, 0 to 60 inches: Low (about 10.8 inches)

Interpretive groups

- Land capability classification (irrigated): None specified
- Land capability classification (nonirrigated): 3e
- Hydrological Soil Group: B
- Ecological site: R019XG911CA - Loamy Fan
- Hydric soil rating: No

Description of Ballona

Setting

- Landform: Alluvial fans
- Landform position (three-dimensional): Tread
- Down-slope shape: Linear
- Across-slope shape: Linear
- Parent material: Discontinuous human transported material over young alluvium derived from sedimentary rock

Typical profile

- A1 - 0 to 3 inches: loam
- A2 - 3 to 12 inches: clay loam
- 2AB1 - 12 to 28 inches: clay loam
- 2AB2 - 28 to 37 inches: clay loam
- 2Bk1 - 37 to 47 inches: clay
- 2Bk2 - 47 to 79 inches: clay

Properties and qualities

- Slope: 0 to 5 percent
- Depth to restrictive feature: more than 80 inches
- Drainage class: Well drained
- Runoff class: Medium
- Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
- Depth to water table: More than 80 inches
- Frequency of flooding: None

- Frequency of ponding: None
- Calcium carbonate, maximum content: 15 percent
- Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
- Available water supply, 0 to 60 inches: High (about 10.3 inches)

Interpretive groups

- Land capability classification (irrigated): None specified
- Land capability classification (nonirrigated): 3s
- Hydrological Soil Group: C
- Ecological site: R019XG911CA - Loamy Fan
- Hydric soil rating: No

Minor Components

Typic xerorthents, graded alluvium

- Percent of map unit: 8 percent
- Landform: Alluvial fans
- Landform position (three-dimensional): Tread
- Down-slope shape: Linear
- Across-slope shape: Linear
- Hydric soil rating: No

Pico

- Percent of map unit: 5 percent
- Landform: Floodplains, alluvial fans
- Landform position (three-dimensional): Tread
- Down-slope shape: Linear
- Across-slope shape: Linear
- Hydric soil rating: No

Cropley

- Percent of map unit: 2 percent
- Landform: Floodplains
- Landform position (three-dimensional): Tread
- Down-slope shape: Linear
- Across-slope shape: Linear
- Hydric soil rating: No

Urban land, frequently flooded, 0 to 5 percent slopes

Map Unit Setting

- National map unit symbol: 2myv7
- Elevation: 0 to 1,190 feet
- Mean annual precipitation: 12 to 24 inches
- Mean annual air temperature: 63 to 66 degrees F
- Frost-free period: 320 to 365 days
- Farmland classification: Not prime farmland

Map Unit Composition

- Urban land, frequently flooded: 95 percent
- Minor components: 5 percent
- Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Urban Land, Frequently Flooded

Setting

- Landform: Channels

Properties and qualities

- Slope: 0 to 5 percent
- Depth to restrictive feature: 0 inches to manufactured layer
- Runoff class: Very high

Interpretive groups

- Land capability classification (irrigated): None specified
- Land capability classification (nonirrigated): 8
- Hydrologic Soil Group: B
- Hydric soil rating: No

Minor Components

Water

- Percent of map unit: 5 percent

BASIN PLAN BENEFICIAL USES

The *Water Quality Control Plan for the Lahontan Region* (Basin Plan) identifies a number of Beneficial Uses, some or all of which may apply to a specific hydrologic unit (HSA), including: Agricultural Supply (AGR) waters; Aquaculture (AQUA) waters; Preservation of Biological Habitats of Special Significance (BIOL) waters; Cold Fresh Water Habitat (COLD) waters; Commercial and Sport Fishing (COMM) waters; Estuarine Habitat (EST) waters; Freshwater Replenishment (FRSH); Groundwater Recharge (GWR) waters; Industrial Service Supply waters (IND); Marine Habitat (MAR) waters; Migration of Aquatic Organisms (MIGR) waters; Municipal and Domestic Water Supply (MUN) waters; Navigation (NAV) waters; Hydropower Generation (POW) waters; Industrial Process Supply (PROC) waters; Rare, Threatened or Endangered Species (RARE) waters; Water Contact Recreation (REC-1) waters; Non-Contact Water Recreation (REC-2) waters; Inland Saline Water Habitat (SAL) waters; Shellfish Harvesting (SHELL) waters; Spawning, Reproduction and Development (SPWN) waters; Warm Fresh Water Habitat (WARM) waters; Wetland Habitat (WET) waters; and Wildlife Habitat (WILD) waters.

Beneficial Uses associated with the Los Angeles River and/or Tujunga Wash are described below; Beneficial Uses not described below do not apply to these features.

- MUN waters support community, military, or individual water supply systems including, but not limited to, drinking water supply.
- IND waters are used for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization.
- GWR waters are used for natural or artificial recharge of groundwater for purposes that may include, but are not limited to, future extraction, maintaining water quality, or halting saltwater intrusion into freshwater aquifers.
- WARM waters support warm water ecosystems that may include, but are not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, and wildlife (including invertebrates).
- COLD waters support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
- WILD waters support terrestrial ecosystems including, but not limited to, preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians, invertebrates), or wildlife water and food sources.
- WET waters support wetland ecosystems, including, but not limited to, preservation or enhancement of wetland habitats, vegetation, fish, shellfish, or wildlife, and other unique wetland functions which enhance water quality, such as providing flood and erosion control, stream bank stabilization, and filtration and purification of naturally occurring contaminants.
- REC-1 waters are used for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, or use of natural hot springs.
- REC-2 waters are used for recreational activities involving proximity to water, but not normally involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tidepool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.

ATTACHMENT C

SITE PHOTOGRAPHS

Aerial Source: Nearmap 2023

Photo Locations

Exhibit C-1

Jurisdictional Delineation Report for the Radford Studio Center Project

N
W E
S

400 200 0 400

Feet

PSOMAS

Photo Location 1, facing northwest. June 2, 2023. View of Tujunga Wash near northern terminus of Radford Avenue.

Photo Location 2, facing north. June 2, 2023. View of conditions in Tujunga Wash where proposed bridge would connect to Moorpark Street for new entrance gate to Radford Studio.

Photo Location 3, facing northeast. June 2, 2023. View of western side of bridge to be expanded over Los Angeles River. Note the bridge footings are located above the concrete side levee of the river.

Photo Location 4, facing northwest. June 2, 2023. View of eastern side of bridge to be expanded over Los Angeles River.

Photo Location 5, facing north. June 2, 2023. View of confluence of Los Angeles River and Tujunga Wash. Channel conditions seen are typical throughout survey area.

Photo Location 6, facing southeast. June 2, 2023. View of conditions in Los Angeles River downstream of confluence with Tujunga Wash.

APPENDIX B

TREE REPORT

Carlberg ASSOCIATES

Horticulturists and
Registered Consulting
ARBORISTS

PROTECTED TREE REPORT
REVISION 1
RADFORD STUDIO CENTER
4024 RADFORD AVENUE
STUDIO CITY, CALIFONIA 91604

SHERMAN OAKS, STUDIO CITY, TOLUCA LAKE, AND CUHUENGA PASS COMMUNITY PLAN AREA
LOS ANGELES CITY COUNCIL DISTRICT 4
ENVIRONMENTAL CASE - ENV-2023-1348-EIR
ENTITLEMENT CASE - CPC-2023-1347-GPA-VZC-SP-SN

SUBMITTED TO:

RADFORD STUDIO CENTER, LLC
C/O HACKMAN CAPITAL PARTNERS, LLC
4060 INCE BLVD.
CULVER CITY, CA 90232

PREPARED BY:

CHRISTY CUBA
ASCA REGISTERED CONSULTING ARBORIST #502
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ISA QUALIFIED TREE RISK ASSESSOR

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Sierra Madre, California 91024
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JULY 15, 2024

CITY OF LOS ANGELES PROTECTED TREE REPORT – RADFORD STUDIO CENTER

TABLE OF CONTENTS

ADDITIONAL EXHIBITS / APPENDICES

ATTACHMENTS SENT SEPARATELY FOR SUBMITTAL WITH THIS REPORT:

FULL-SIZE TREE LOCATION EXHIBIT (15 COLOR SHEETS, 30" x 42", 1:50 SCALE)

FULL-SIZE TREE IMPACT EXHIBIT AND PROTECTION PLAN (10 COLOR SHEETS, 24" X 36", 1/32=1' SCALE)

Carlberg ASSOCIATES
Horticulturists and
Registered Consulting
ARBORISTS

July 15, 2024

Radford Studio Center, LLC
c/o Hackman Capital Partners, LLC
4060 Ince Blvd.
Culver City, CA 90232
Attn: Brent Iloulian

Re: Radford Studio Center – Combined North and South Lots, 4024 Radford Avenue, Studio City
City of Los Angeles Protected Tree Report, Revision 1

Dear Mr. Iloulian,

This revised report is submitted in response to your request for updated arboricultural consulting services to bring the report current to the requirements of the City of Los Angeles Planning Department's Tree Report Template for the Radford Studio Center property located at 4024 Radford Avenue in Studio City, California.

EXECUTIVE SUMMARY

Radford Studio Center, LLC (Radford) is proposing the Radford Studio Center Project (Project), which entails the continuation of the existing studio use and the modernization and expansion of Radford Studio Center through the proposed Radford Studio Center Specific Plan (RSC Specific Plan).

The Project Site is generally bound by the Los Angeles river and Tujunga wash to the north and east, Colfax Avenue to the east, an alley to the south with various commercial uses across the alley fronting on Ventura Boulevard, and Radford Avenue to the west. The site is bisected by the Los Angeles river into a North Lot and a South Lot. The existing Project Site area (prior to dedications or mergers that would occur as part of the Project) is 2,377,372 square feet (approximately 55 acres). The Project Site area after dedications and mergers would be 2,276,215 square feet (approximately 52 acres). The Project Site is located in the Sherman Oaks, Studio City, Toluca Lake, Cahuenga Pass Community Plan area of the city of Los Angeles.

The Radford Studio Center Project (Project) would establish the Radford Studio Center Specific Plan (Specific Plan) to allow for the continuation of the existing studio use and the modernization and expansion of media production facilities within the approximately 55-acre Radford Studio Center (Project Site).

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The Specific Plan would establish standards to regulate land use, massing, design, and development, and permit up to 2,200,000 square feet of sound stage, production support, production office, general office, and retail uses within the Project Site upon build out, as well as associated ingress/egress, circulation, parking, landscaping, and open space improvements. Specifically, the Specific Plan would permit up to 1,667,010 square feet of new floor area, the retention of 532,990 square feet of existing floor area, and the demolition of up to 646,120 square feet of existing floor area. Buildout under the proposed Specific Plan could take place in one or multiple phases and is anticipated to be completed as early as 2028 or as late as 2045.

Proposed new buildings could range in height from approximately 60 feet up to 135 feet. A total of 6,050 vehicular parking spaces, including 2,170 existing vehicular parking spaces to remain, would be provided at full build out permitted under the proposed RSC Specific Plan. Open space and landscaping improvements are included to enhance the public spaces along Project Site frontages and improves public access to the Los Angeles river and the Tujunga wash. Additional open space and landscaping would be provided within the Project Site, including various ground level open space areas and rooftop terraces.

Proposed Project specifics, such as the areas of proposed grading, areas of new development and redevelopment, locations and sizes of proposed structures and redevelopment or repurposing of current structures, access, mobility, and parking improvements, proposed open space and river and wash frontage plans, etc., may be found in the attached Radford Studio Center Project drawings prepared by Skidmore, Owings, and Merrill (SOM).

Carlberg Associates (Carlberg) was retained to conduct a comprehensive tree inventory and to prepare a Tree Report in accordance with guidelines set forth by the City of Los Angeles's Tree Protection Ordinance and Tree Report Template. Carlberg arborists walked the Project Site and adjacent public streets when performing the tree inventory update in March and April, 2024. **Table 1**, on the next page, summarizes the tree inventory, our opinion of planted vs. naturally occurring trees, and their proposed dispositions. It also provides additional details as to the number of trees that were found to be less than or more than four (4) inches in diameter at the time of our inventory.

A total of 625 trees were inventoried: 609 are located on the Project Site and 16 are City of Los Angeles street trees. There are no offsite trees whose canopies or protected zones overhang the Project Site boundaries.

There are 45 City of Los Angeles Tree Protection Ordinance trees onsite. They comprise 35 coast live oak (*Quercus agrifolia*) and 9 western sycamore (*Platanus racemosa*) trees, and 1 toyon (*Heteromeles arbutifolia*) shrub.

Based on the current Project plans, a total of 220 trees will be preserved onsite and 405 trees are proposed for removal. All of the street trees will be preserved. Of the proposed removals, there are 25 palms or other monocots, 39 Protected trees, and 341 non-protected trees. The proposed Protected tree removals include 35 coast live oak and 3 western sycamore trees, and 1 toyon shrub. In our opinion, five (5) of the coast live oaks proposed for removal may be naturally occurring as volunteers in the landscape. The other 30 coast live oaks, 3 western sycamores, and the 1 toyon proposed for removal appear to have been planted in the landscape, and in our opinion, they should not be subject to the protected tree permit process or replacement requirements. The City of Los Angeles Urban Forestry Division will make the final determination in this regard.

No Protected California bay (*Umbellularia californica*) trees, Southern California black walnut (*Juglans californica*) trees, or Mexican elderberry (*Sambucus mexicana*) shrubs occur on- or immediately offsite.

TABLE 1 - TREE INVENTORY AND IMPACT SUMMARY

625 Total Inventoried Trees (Tree form and Hedge form) and Palms						
16	**Public ROW Street trees (all planted, no palms)**					
	0	**Remove**				
	16	**Preserve**				
0	**Offsite Private Property Trees**					
609	**Onsite Private Property Trees**					
	45	**non-protected hedge form tree species (all planted)**				
		2	**>4 inches diameter**			
			0	**Remove**		
			2	**Preserve**		
		43	**<4 inches diameter**			
			0	**Remove**		
			43	**Preserve**		
	26	**palms and other monocot species (all planted)**				
		25	**Remove**			
		1	**Preserve**			
	538	**'tree' form trees**				
		49	**Protected species (not all meet protected size of 4"+)**			
			45	**>4 inches diameter**	**PROTECTED**	
				5	**Natural (volunteer)**	
					5	**Remove**
					0	**Preserve**
				40	**Planted**	
					34	**Remove**
					6	**Preserve**
			4	**<4 inches diameter**	**NOT PROTECTED YET**	
				4	**Natural (volunteer)**	
					4	**Remove**
					0	**Preserve**
				0	**Planted**	
					0	**Remove**
					0	**Preserve**
		489	**Non-Protected species**			
			452	**>4 inches diameter**		
				0	**Natural (volunteer)**	
					0	**Remove**
					0	**Preserve**
				452	**Planted**	
					313	**Remove**
					139	**Preserve**
			37	**<4 inches diameter**		
				0	**Natural (volunteer)**	
					0	**Remove**
					0	**Preserve**
				37	**Planted**	
					24	**Remove**
					13	**Preserve**

As indicated in **Table 1**, Project implementation could potentially result in the **removal** of the following **405 trees**:

- 0 street trees
- 0 offsite, private property trees
- **39 onsite, private property, Protected species** that were planted or likely occur as volunteers in the landscape
    - 30 greater than 4” diameter coast live oaks (planted)
    - 3 greater than 4” diameter western sycamores (planted)
    - 5 greater than 4" diameter coast live oaks (natural volunteers)
    - 1 greater than 4’ diameter toyon shrub (planted)
- **366 onsite, private property, non-protected palms and trees** of various genera and species, most of which were planted in the landscape
    - 0 greater than 4” diameter hedge or topiary form (planted)
    - 0 less than 4” diameter hedge or topiary form (planted)
    - 25 palms or other monocot species (planted)
    - 0 greater than 4” diameter ‘tree’ form trees (natural volunteers)
    - 313 greater than 4” diameter ‘tree’ form trees (planted)
    - 4 less than 4” diameter ‘tree’ form trees (natural volunteers)
    - 24 less than 4” diameter ‘tree’ form trees (planted)

As indicated in Table 1, Project implementation would result in the **preservation** of the following **220 trees**:

- **16 street trees** (planted, no palms)
- 0 offsite, private property trees
- **6 onsite, private property Protected species** that were likely planted in the landscape
    - 6 greater than 4” diameter western sycamores (planted)
- **198 onsite, private property, non-protected palms and trees** of various genera and species, which were likely all planted in the landscape
    - 2 greater than 4” diameter hedge or topiary form (planted)
    - 43 less than 4” diameter hedge or topiary form (planted)
    - 1 palm or other monocot species (planted)
    - 139 greater than 4” diameter ‘tree’ form trees (planted)
    - 0 less than 4” diameter ‘tree’ form trees (natural volunteers)
    - 13 less than 4” diameter ‘tree’ form trees (planted)

Removal of Protected private trees or street trees requires a Tree Removal Permit through the Department of Public Works, Urban Forestry Division, and replacement trees are required at a ratio that is consistent with the Tree Protection Ordinance. The current replacement ratio for permitted Protected tree removals is 4:1 and the replacement ratio for street tree removals is 2:1. The Tree Protection Ordinance does not regulate the removal of non-protected trees.

If subject to the Tree Protection Ordinance, removal of thirty-nine (39) Protected trees may require installation, bonding for, and post-planting monitoring of 156 replacement trees of the same species as those removed. Since many of the onsite Protected tree species appear to be planted, they may not be subject to separate permitting or replacement under the Ordinance. Regardless of protection status, required and recommended best management practices for tree protection, including exclusionary fencing and monitoring during demolition, construction, and landscape installation are included in this report.

In our opinion, with proper engineering and drainage improvements, the subject tree removals will not result in an undesirable, irreversible soil erosion through diversion or increase flow of surface waters that cannot be mitigated. Additional Findings for the Protected tree removals may include one of the following:

- The physical location of the tree is such that its continued presence in its existing location prevents the reasonable development of the property.
- The project site is in a densely urban area. In our opinion, of the 45 Protected trees proposed for removal, 34 appear to have been planted in the landscape and may be exempt from the Ordinance.

Recommendations for tree preservation during construction include exclusionary fencing and other measures listed in this report. Tree protection notes are included in the accompanying Tree Impact Exhibit. If replacement trees are required, City Planning and/or Urban Forestry will determine the number of trees, species, and container sizes required. Replacement trees will be included in the ultimate landscape plans for the project.

ASSIGNMENT AND PURPOSE OF THE TREE REPORT

Carlberg was retained to conduct a tree inventory and prepare a Tree Report in accordance with guidelines set forth by the City of Los Angeles's Tree Protection Ordinance No. 186,873 and Tree Report Template (CP-4068, July 13, 2023).

City of Los Angeles's Tree Protection Ordinance No. 186,873 (Ordinance)
Protected trees and shrubs as set forth in the Ordinance comprise the following species which measure four inches or greater in "cumulative"[1] trunk diameter (measured at 4.5 feet above natural grade):

- coast live oak (*Quercus agrifolia*)
- valley oak (*Quercus lobata*)
- any other southern California indigenous oak trees but excluding scrub oak (*Quercus berberidifolia*)
- western sycamore (*Platanus racemosa*)
- Southern California black walnut (*Juglans californica)*
- California bay laurel (*Umbellularia californica*)
- Mexican elderberry (*Sambucus mexicana*)
- toyon (*Heteromeles californica*)

Public rights-of-way, parkway, median, and street trees are protected regardless of species or size and must be included in the tree inventory and report.

Los Angeles City Planning CP-4068 [07.07.2022] Tree Report Template (Template)
The Template (dated July 13, 2023) requires the collection and reporting on additional data beyond that required by the Ordinance, both on- and offsite. Some key requirements of the Template include inventory and assessment of all onsite trees regardless of species or size, inventory of offsite trees whose protected zones may be impacted by the project, inventory of all adjacent street trees, indexed photographs of each tree, mapping of all trees' locations and their canopies (driplines) plus protected zones[2], and the tree expert's opinion as to whether the tree occurs naturally or was planted. These factors may be estimated if access is restricted.

[1] For this report, diameters of multi-stemmed trees will be converted to a single trunk diameter by adding the diameters together.
[2] Tree Protection Zone is defined in the Template as an area emanating radially 12 times the trunk diameter at standard height four and one-half feet up from grade (DSH; also known in the Forestry / Arboricultural industry as Diameter at Breast Height or DBH).

This Tree Report will be used during the entitlement and environmental approval process to aid decision-makers and the public in understanding the potential impacts to tree resources present on and immediately adjacent to the Project Site, the proposed recommendations for tree protection and monitoring, and required mitigation.

PROJECT OVERVIEW

Project Location

The Project Site is located at 4024, 4064, and 4200 North Radford Avenue, near the northeast corner of Radford Avenue and Ventura Boulevard, within the Sherman Oaks–Studio City–Toluca Lake–Cahuenga Pass Community Plan area of the City of Los Angeles (City). More specifically, the Project Site is comprised of two addressed parcels located at 4200 North Radford Avenue (referred to herein as the North Lot) and 4024 and 4064 North Radford Avenue (referred to herein as the South Lot), and two unaddressed parcels located within and around the Los Angeles River and the Tujunga Wash.

The Project Site is generally bounded by the Los Angeles River and Tujunga Wash to the north and east, Colfax Avenue to the east, a public alley of varying width to the south with various commercial uses across the alley fronting Ventura Boulevard, and Radford Avenue to the west. The North Lot and the South Lot are bisected by the Los Angeles River. The existing Project Site area (prior to dedications or mergers that would occur as part of the Project) is 2,377,372 square feet (approximately 55 acres). The Project Site area after dedications and mergers would be 2,276,215 square feet (approximately 52 acres).

Project Description

The Radford Studio Center Project (Project) would establish the Radford Studio Center Specific Plan (Specific Plan) to allow for the continuation of the existing studio use and the modernization and expansion of media production facilities within the approximately 55-acre Radford Studio Center (Project Site). The Specific Plan would establish standards to regulate land use, massing, design, and development, and permit up to 2,200,000 square feet of sound stage, production support, production office, general office, and retail uses within the Project Site upon build out, as well as associated ingress/egress, circulation, parking, landscaping, and open space improvements. Specifically, the Specific Plan would permit up to 1,667,010 square feet of new floor area, the retention of 532,990 square feet of existing floor area, and the demolition of up to 646,120 square feet of existing floor area. In addition, the Radford Studio Center Sign District (Sign District) would also be established to permit studio-specific on-site signage.

The current Project Site area prior to dedications and mergers that would occur as part of the Project is 2,377,372 square feet (approximately 55 acres). The Project Site after dedications and mergers would be 2,276,215 square feet (approximately 52.25 acres).

Proposed new buildings could range in height from approximately 60 feet up to 135 feet. A total of 6,050 vehicular parking spaces, including 2,170 existing vehicular parking spaces to remain, would be provided at full build out permitted under the proposed RSC Specific Plan.

The Project includes open space and landscaping improvements to enhance the public spaces along Project Site frontages and improves public access to the Los Angeles river and the Tujunga wash. Specifically, approximately 109,569 square feet of open space would be provided along the perimeter of the Project Site, including approximately 77,406 square feet of open space along the Los Angeles River and Tujunga Wash, 4,454 square

feet of open space along Colfax Avenue, and 27,709 square feet of open space along Radford Avenue. Additional open space and landscaping would be provided within the Project Site, including various ground level open space areas and rooftop terraces.

Buildout under the proposed Specific Plan could take place in one or multiple phases and is anticipated to be completed as early as 2028 or as late as 2045.[3]

Proposed Project specifics, such as the areas of proposed grading, areas of new development and redevelopment, locations and sizes of proposed structures and redevelopment or repurposing of current structures, access, mobility, and parking improvements, proposed open space and river and wash frontage plans, etc., may be found in the attached Radford Studio Center Project drawings prepared by Skidmore, Owings, and Merrill (SOM).

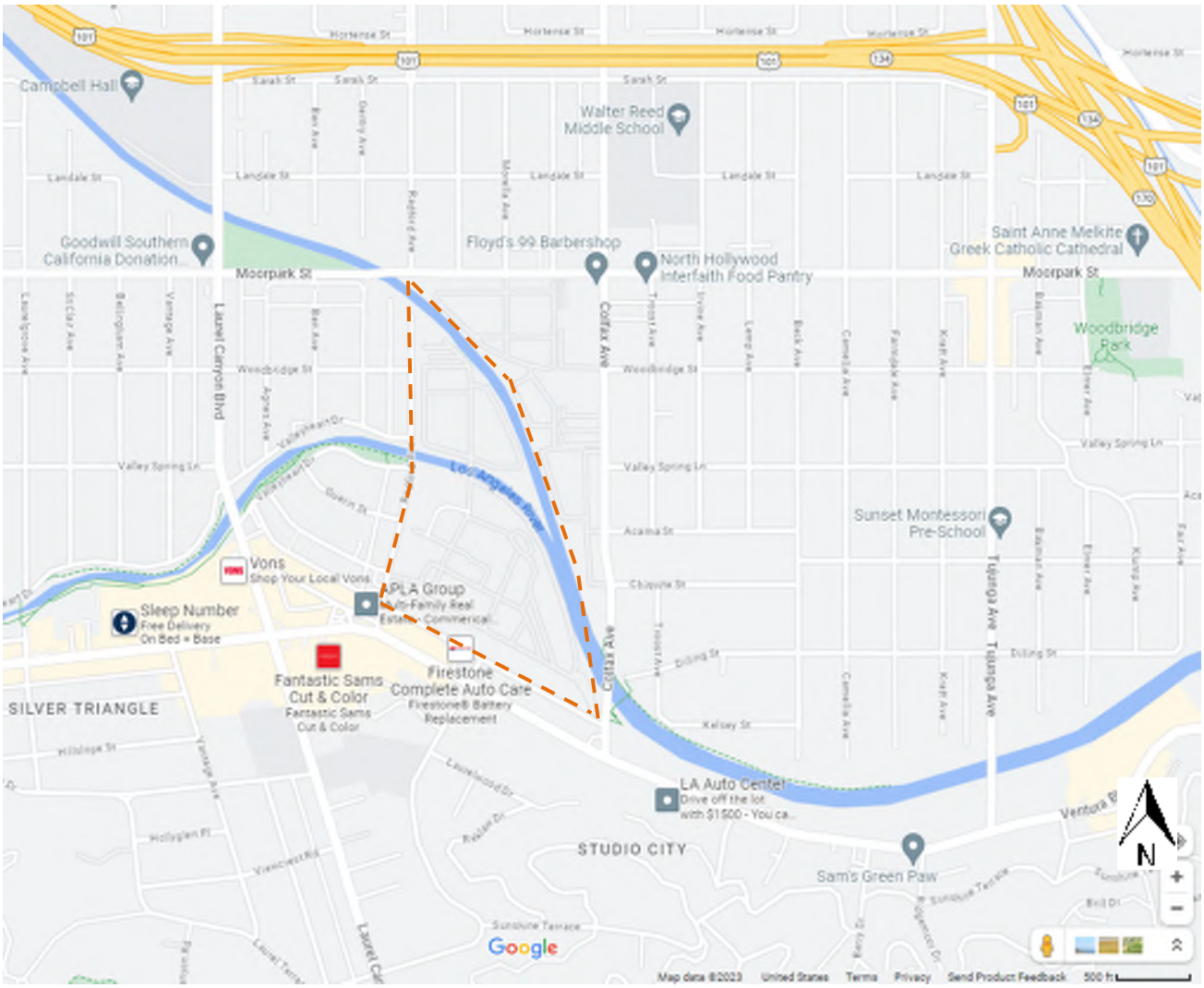
Table 2 includes basic Project information. **Exhibits A and B** illustrate the general Project location and an aerial image of the site, respectively.

TABLE 2 – PROJECT INFORMATION

Project Name	Radford Studio Center Project
Project Address	4024, 4064 and 4200 Radford Avenue Studio City, California 91604
Project APN	North Lot = 2368-001-028 South Lot = 2368-005-011 Unaddressed parcel - LA River = 2368-001-029 Unaddressed parcel - Tujunga Wash = 2368-001-030
Project Site Area	Northern Lot (Area 1): 611,303 SF (14.03 Acres) Southern Lot (Area 2): 1,447,712 SF (33.23 Acres) LA River & Tujunga Wash (Area 3): 318,357 SF (7.31 Acres) TOTAL: 2,377,372 SF (54.58 Acres)
Entitlement Case No.	CPC-2023-1347-GPA-VZC-SP-SN
Environmental Case No.	ENV-2023-1348-EIR
Owner / Applicant	Radford Studio Center, LLC 4200 N. Radford Avenue c/o Hackman Capital Partners Studio City, CA 91604
Owner Representative	Lisa Trifiletti Trifiletti Consulting 1545 Wilshire Blvd., Suite 700 Los Angeles, CA 90017

[3] Construction of the proposed Radford Mobility Connector, extending from the northern terminus of Radford Avenue north across the Tujunga Wash to Moorpark Street, may be completed as early as 2028.

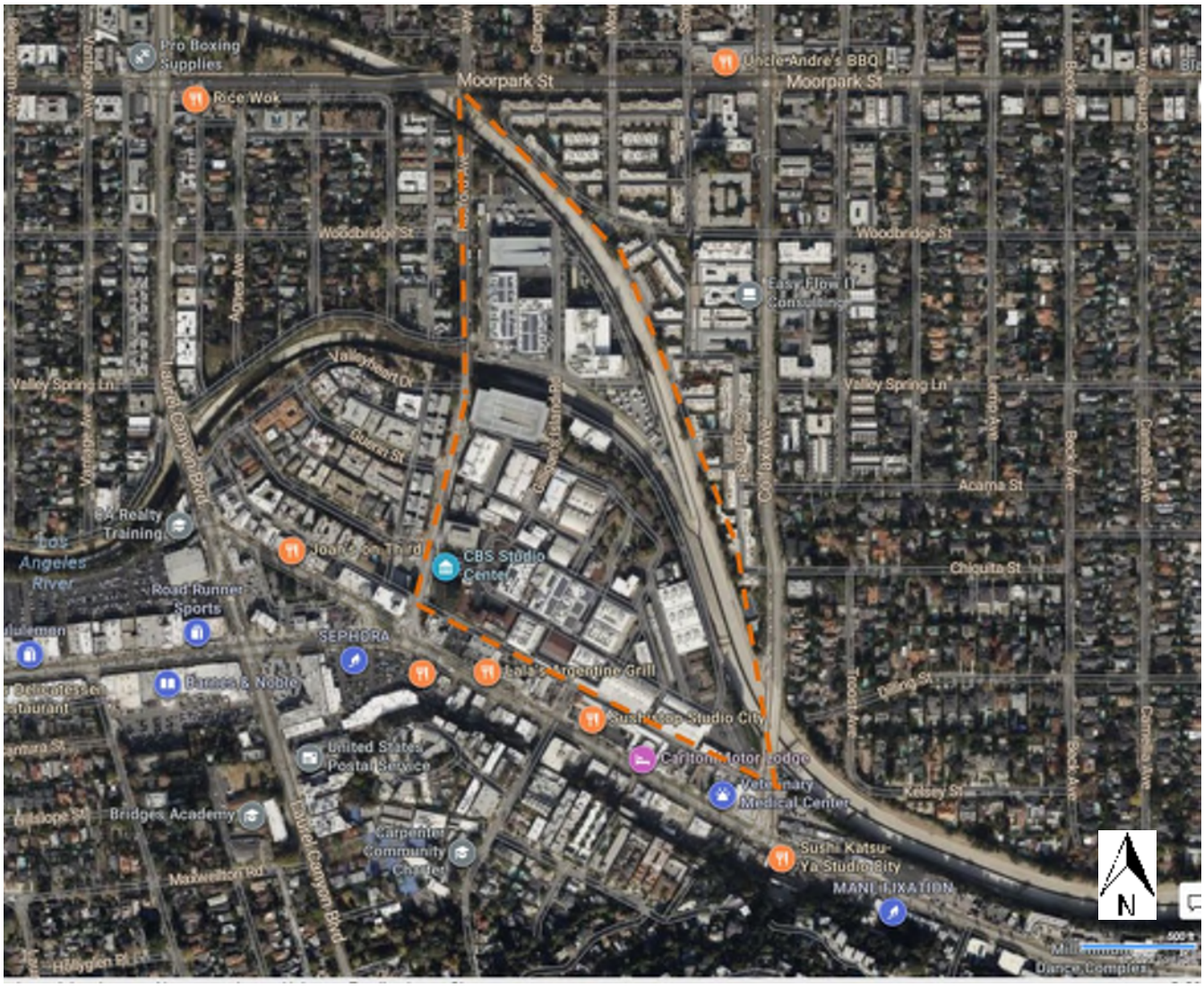
EXHIBIT A – PROJECT LOCATION MAP



Radford Studio Center – 4024, 4064, and 4200 Radford Avenue, Studio City
(Boundary is illustrative only)

(SOURCE – GOOGLE MAPS, 2023)

EXHIBIT B – AERIAL IMAGE OF THE PROJECT SITE



Radford Studio Center – 4024, 4064, and 4200 Radford Avenue, Studio City
(Boundary is illustrative only)

(SOURCE – BING MAPS, 2023)

TREE ASSESSMENT METHODOLOGY AND DATA PRESENTATION

Carlberg arborists conducted the updated tree inventory on March 21, March 26, April 3, and April 11, 2024. Our field inventory days began around 8 AM and ended between 4 – 5 PM. Weather conditions were varied, ranging from mostly cloudy to sunny throughout the duration of the inventory.

The tree inventory was conducted on foot. We walked the roughly 55-acre Project Site to inventory and assess all onsite trees and any offsite private property trees whose canopies or protected zones extended into the Project Site. Individually numbered tree identification tags were nailed or tied with nursery wire to each tree.
We generally tagged trees on whichever side of the trunk faced away from casual observation. This was due to the potential for the tags to be seen and removed by production crews during filming situations that may occur throughout the site.

We walked along the Project-bordering streets of Radford Avenue and Colfax Avenue to inventory and assess trees in the public rights of way (street trees). Street trees were not physically tagged but are numbered on the map and in the inventory with a 'ST" designation in front of the tree identification number.

The trees were tagged with a metal, numbered tag (as appropriate), identified by genus and species, their health and structural condition evaluated, trunk diameters measured, heights and canopy spreads approximated, and trunk locations plotted on the topographic survey map provided to us by the project team. Each tree received two letter grades, one for overall health and one for structure. Definitions for the letter grades are included in the attachments / appendices of this report.

Specifically, the inventory included the following assessment factors for Protected and non-protected, onsite, immediately offsite, and street trees (as found):

The trees were identified, their health and structural condition evaluated, trunk diameters measured, heights and canopy spreads approximated, and trunk locations plotted on the topographic survey map provided to us.

- **Tree Number** (unique tree number engraved on an aluminum tag affixed to each tree, as access allowed)
- **Botanical and Common Name**
- **Trunk Diameter** (diameter at standard height (DSH) / diameter at breast height (DBH) is measured at 4.5 feet above natural grade, or as indicted in the spreadsheet if deviated)
- **Indication** if the tree is a sapling or has a diameter of less than 4 inches
- **Height and Canopy Spread** (approximated)
- **Physiological Condition (health)**
- **Structural Condition**
- **Presence of infectious tree diseases and / or pests**
- **Treatments** (if pests or diseases are outwardly apparent, treatment is generally recommended, but no specific treatment will be called out since only a licensed pest control advisor may opine on specific treatments)
- **Expert opinion** if the tree appears to be naturally occurring or intentionally planted
- **Photographs of All Trees** (or groups of trees where applicable)

Palms and other tree-like monocots were also included in the inventory, as their locations are supposed to be shown on existing landscape plans.

Field data was collected on tablets, tree trunk locations were generally mapped on a 50-scale, 36" x 48" topographic sheet map, and photographs were taken with digital cameras. Tree identification numbers, trunk locations, and tree canopies with protection zones are graphically represented on the Tree Location Exhibit (dated 06.24.24) prepared by Carlberg in AutoCAD. Trees are color-coded as required by the Ordinance.

The Tree Impact Exhibit & Protection Plan, prepared in AutoCAD by Carlberg, was developed using site plans provided to us by the project team. Reduced and full-size copies of the Tree Impact Exhibit & Protection Plan are provided in PDF format with this report. The reduced, 11" x 17" version, in 10 sheets, is provided as **Exhibit D**. The full-size, color, 24" x 30", 1'= 50' scale, 10-sheet set is provided as a separate attachment to this report.

OBSERVATIONS

Radford Studio Center is in a highly urbanized area of Los Angeles. Single-family and multifamily residential and commercial land uses surround the site. While there are recreational areas in the vicinity, the area immediately surrounding the Project Site is completely urbanized and devoid of naturally occurring open space areas.

The Project Site includes at-grade parking and parking structures, sound stages, production and creative offices, driveways and private roads, pedestrian corridors, and general outdoor seating areas. The Project Site perimeter is enclosed with chain link, wrought iron, or combination block wall/chain link fencing, some of which is lined with trees, shrubs, and climbing vines. Additional landscaping within the Project Site includes trees and shrubs, and some of the parking areas include landscaped stormwater infiltration basins. Adjacent Street trees are located along Radford Avenue.

PROJECT SITE TREES

We inventoried and assessed 625 trees comprising 79 species onsite and, on the streets, immediately adjacent to the property. Of the 625 trees, 16 are street trees and 45 are Ordinance-Protected trees. No offsite, private property trees occur immediately adjacent to the site. The following list provides additional details:

- **16 street trees** – all planted, no palms
- **0 offsite private property trees**
- **609 onsite, private property, Project Site trees**
    - 26 palms or other monocots presenting as 'trees' (all planted)
    - 45 non-protected hedge form tree species (all planted)
        - 2 greater than 4 inches diameter
        - 43 less than 4 inches diameter
    - 538 'tree' form trees
        - 45 Protected trees
            - 40 planted, greater that 4 inches diameter (1 toyon, 9 western sycamores, 30 coast live oaks)
            - 5 likely natural volunteers, greater than 4 inches diameter (all coast live oaks)
        - 493 non-protected trees
            - 41 less than 4 inches diameter
                - 4 likely natural volunteers, all coast live oaks
                - 37
            - 452 greater than 4 inches diameter
                - 0 natural volunteers
                - 452 planted

Tables 3 and 4 summarize the 79 types of trees found, their onsite or street tree status, and how many of each type are included in the inventory. Protected tree species are indicated in bold font within the summary table.

TABLE 3 – SUMMARY OF INVENTORIED PROJECT SITE TREES AND IMMEDIATELY ADJACENT STREET TREES

COMMON NAME	BOTANICAL NAME	TOTAL NO. ONSITE	TOTAL NO. OFFSITE	TOTAL NO. STREET TREES	TOTAL NO. TREE SPECIES
Afghan pine	*Pinus eldarica*	6	0	0	6
African sumac	*Searsia lancea*	2	0	0	2
Aleppo pine	*Pinus halepensis*	2	0	0	2
American elm	*Ulmus americana*	1	0	0	1
American sweetgum	*Liquidambar styraciflua*	15	0	10	25
Arizona ash	*Fraxinus velutina*	1	0	0	1
Arizona cypress	*Hesperocyparis arizonica*	1	0	0	1
Australian brush cherry	*Syzygium australe*	4	0	0	4
Australian willow	*Geijera parviflora*	1	0	0	1
blackwood acacia	*Acacia melanoxylon*	12	0	0	12
Brisbane box	*Lophostemon confertus*	28	0	0	28
California ash	*Fraxinus dipetala*	19	0	0	19
California pepper	*Schinus molle*	20	0	0	20
Callery pear	*Pyrus calleryana*	16	0	0	16
camphor	*Cinnamomum camphora*	5	0	0	5
Canary Island pine	*Pinus canariensis*	23	0	0	23
carob	*Ceratonia siliqua*	2	0	0	2
Carolina cherry	*Prunus caroliniana*	10	0	0	10
carrotwood	*Cupaniopsis anacardioides*	7	0	0	7
Catalina cherry	*Prunus ilicifolia subsp. lyonii*	2	0	0	2
Chinese elm	*Ulmus parvifolia*	5	0	0	5
Chinese pistache	*Pistacia chinensis*	1	0	0	1
coast live oak	***Quercus agrifolia***	**39**	**0**	**0**	**39**
coast redwood	*Sequoia sempervirens*	11	0	0	11
crape myrtle	*Lagerstroemia indica*	16	0	0	16
desert willow	*x Chitalpa tashkentensis*	8	0	2	10
eastern redbud	*Cercis canadensis*	5	0	0	5
fern pine	*Afrocarpus falcatus*	4	0	0	4
fiddle leaf fig	*Ficus lyrata*	1	0	0	1
Fremont cottonwood	*Populus fremontii*	4	0	0	4
giant bird of paradise	*Strelitzia nicolai*	10	0	0	10
ginkgo	*Ginkgo biloba*	1	0	0	1

TABLE 3 – SUMMARY OF INVENTORIED PROJECT SITE TREES AND IMMEDIATELY ADJACENT STREET TREES

COMMON NAME	BOTANICAL NAME	TOTAL NO. ONSITE	TOTAL NO. OFFSITE	TOTAL NO. STREET TREES	TOTAL NO. TREE SPECIES
glossy leaf privet	*Ligustrum lucidum*	1	0	0	1
guava	*Psidium guajava*	1	0	0	1
holly leaf cherry	*Prunus ilicifolia*	2	0	0	2
holly oak	*Quercus ilex*	6	0	0	6
Indian laurel fig	*Ficus microcarpa*	28	0	0	28
Italian cypress	*Cupressus sempervirens*	1	0	0	1
jacaranda	*Jacaranda mimosifolia*	8	0	0	8
Japanese maple	*Acer palmatum*	3	0	0	3
kurrajong	*Brachychiton populneus*	11	0	0	11
London plane	*Platanus x hispanica*	1	0	0	1
long leafed yellowwood	*Podocarpus henkelii*	37	0	0	37
loquat	*Eriobotrya japonica*	1	0	0	1
Moreton Bay fig	*Ficus macrophylla*	1	0	0	1
olive	*Olea europaea*	4	0	0	4
palo verde	*Parkinsonia florida*	2	0	0	2
paperbark	*Melaleuca quinquenervia*	56	0	0	56
pink trumpet tree	*Handroanthus heptaphyllus*	1	0	0	1
poplar	*Populus alba*	1	0	0	1
purple-leaf plum	*Prunus cerasifera*	5	0	0	5
red ironbark	*Eucalyptus sideroxylon*	2	0	0	2
red river gum	*Eucalyptus camaldulensis*	5	0	0	5
rusty leaf fig	*Ficus rubiginosa*	4	0	0	4
Shamel ash	*Fraxinus uhdei*	12	0	0	12
South African coral tree	*Erythrina caffra*	5	0	0	5
silk oak	*Grevillea robusta*	16	0	0	16
strawberry tree	*Arbutus 'Marina'*	12	0	0	12
sweetshade	*Hymenosporum flavum*	8	0	0	8
sycamore hybrid	*Platanus x*	1	0	0	1
Tasmanian blue gum	*Eucalyptus globulus*	1	0	0	1
Texas privet	*Ligustrum japonicum 'texanum'*	24	0	0	24
toyon	***Heteromeles arbutifolia***	**1**	0	**0**	**1**
umbrella tree	*Heptapleurum actinophyllum*	1	0	0	1
Victorian box	*Pittosporum undulatum*	1	0	0	1
wax leaf privet	*Ligustrum lucidum*	8	0	0	8
weeping boer-bean	*Schotia brachypetala*	2	0	0	2

TABLE 3 – SUMMARY OF INVENTORIED PROJECT SITE TREES AND IMMEDIATELY ADJACENT STREET TREES

COMMON NAME	BOTANICAL NAME	TOTAL NO. ONSITE	TOTAL NO. OFFSITE	TOTAL NO. STREET TREES	TOTAL NO. TREE SPECIES
weeping bottlebrush	*Callistemon viminalis*	2	0	0	2
weeping fig	*Ficus benjamina*	4	0	0	4
western redbud	*Cercis occidentalis*	5	0	1	6
western sycamore	***Platanus racemosa***	**9**	0	**0**	**9**
white birch	*Betula pendula*	3	0	0	3
Willard acacia	*Acacia willardiana*	1	0	3	4
xylosma	*Xylosma congesta*	15	0	0	15
		583	**0**	**16**	**599**

TABLE 4 – SUMMARY OF INVENTORIED PROJECT SITE, IMMEDIATE OFFSITE, AND IMMEDIATELY ADJACENT PALMS AND OTHER TREE-LIKE MONOCOTS

COMMON NAME	BOTANICAL NAME	TOTAL NO. ONSITE	TOTAL NO. OFFSITE PRIVATE	TOTAL NO. STREET TREE	TOTAL NO. TREE SPECIES
Canary Island date palm	*Phoenix canariensis*	2	0	0	2
giant bird of paradise	*Strelitzia nicolai*	10	0	0	10
King palm	*Archontophoenix cunninghamiana*	4	0	0	4
pygmy date palm	*Phoenix roebelenii*	3	0	0	3
queen palm	*Syagrus romanzoffiana*	6	0	0	6
sago palm	*Cycas revoluta*	1	0	0	1
		26	**0**	**0**	**26**

Exhibit C – **Reduced Copy of the Tree Location Exhibits** provides an illustrative presentation of the existing trees in reduced form (15, 11" x 17" pages), is provided as **Exhibit C**. The full-size, 30" x 42", 1'= 50' scale, color, 15-sheet set is provided as a separate attachment to this report.

Tables 5 and 6 summarize the 45 of the **Onsite Protected Trees** and **Street Trees**, respectively. **Exhibit H** of the appendices includes **Table 11 - Tree Inventory Field Data,** which comprises the complete field data spreadsheet for all inventoried trees. Given the high number of non-protected trees, a lengthy summary table is not included in the body of this report.

The Tree Photograph Exhibit (**Exhibit I**) includes captioned photographs of the trees, and provides an idea of site context, tree densities, conformation, and vigor. The captions contain tree identification and photo-directional information as required by the Template.

TABLE 5 - SUMMARY OF ONSITE PROTECTED TREES

TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
9	western sycamore	*Platanus racemosa*	17.7	35	21	25	13	25	B+	B-
127	western sycamore	*Platanus racemosa*	22.3	40	15	12	7	8	A-	B-
128	western sycamore	*Platanus racemosa*	21.3	40	14	6	6	14	A-	B-
143	coast live oak	*Quercus agrifolia*	4.2	16	16	16	0	0	B-	C
152	coast live oak	*Quercus agrifolia*	3, .5, .5, .5, .5, .25, .25, .25, .25, .25, .25	8	5	3	4	4	B	B-
153	coast live oak	*Quercus agrifolia*	3, 6.9	25	15	10	8	10	A-	B
157	coast live oak	*Quercus agrifolia*	6	8	5	2	4	5	C	C-
293	coast live oak	*Quercus agrifolia*	23	25	0	27	26	24	B	B-
295	coast live oak	*Quercus agrifolia*	6, 17	40	17	21	12	18	B+	B
296	coast live oak	*Quercus agrifolia*	19.6	40	15	18	19	8	B+	B
302	coast live oak	*Quercus agrifolia*	9.6	20	27	0	0	0	A-	B-
305	coast live oak	*Quercus agrifolia*	17.5	30	20	16	0	7	A-	B
317	coast live oak	*Quercus agrifolia*	8.7	18	6	10	7	8	B	B-
318	coast live oak	*Quercus agrifolia*	7, 12.5	25	18	15	10	0	A-	B
322	coast live oak	*Quercus agrifolia*	17	35	15	23	7	15	B	C
324	coast live oak	*Quercus agrifolia*	4.7	15	6	4	12	10	B+	B+

TABLE 5 - SUMMARY OF ONSITE PROTECTED TREES

TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
326	coast live oak	*Quercus agrifolia*	24.2	40	21	23	13	15	A-	B
332	coast live oak	*Quercus agrifolia*	6.2, 12.6	30	0	17	22	17	B	B
333	coast live oak	*Quercus agrifolia*	15	30	3	17	15	12	B	B
334	coast live oak	*Quercus agrifolia*	10.4, 12.3	32	20	24	13	0	B	B
342	coast live oak	*Quercus agrifolia*	7.5	28	0	0	0	27	B	B-
344	coast live oak	*Quercus agrifolia*	4.9	18	22	0	0	0	B	B-
345	coast live oak	*Quercus agrifolia*	7.1, 10.6	30	10	5	8	21	B-	B-
346	coast live oak	*Quercus agrifolia*	10.6	30	15	12	3	6	B	B-
347	coast live oak	*Quercus agrifolia*	9.2	25	0	0	14	8	B	B
348	coast live oak	*Quercus agrifolia*	9.7	25	0	11	13	12	B	B
350	coast live oak	*Quercus agrifolia*	8	22	11	5	15	13	B	B
351	coast live oak	*Quercus agrifolia*	5.7	18	22	22	0	0	B	B
352	coast live oak	*Quercus agrifolia*	10	35	25	25	0	0	B+	B-
353	coast live oak	*Quercus agrifolia*	13.4	32	18	8	0	0	A-	B
354	coast live oak	*Quercus agrifolia*	10.8	28	21	0	0	15	A-	B-
355	coast live oak	*Quercus agrifolia*	10.6	25	20	7	0	8	B+	B
356	coast live oak	*Quercus agrifolia*	9.5	25	30	0	0	0	B	B-
358	coast live oak	*Quercus agrifolia*	10.8	30	25	8	3	13	B-	C+

TABLE 5 - SUMMARY OF ONSITE PROTECTED TREES

TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
402	coast live oak	*Quercus agrifolia*	19	25	22	24	14	12	B	B
403	coast live oak	*Quercus agrifolia*	18.8	24	21	15	28	14	B	B
404	coast live oak	*Quercus agrifolia*	17	24	18	18	17	7	B	B
405	toyon	*Heteromeles arbutifolia*	1.5, 1, .5, .5, 1, .5	8	2	5	5	6	A	B+
408	coast live oak	*Quercus agrifolia*	21.3	25	21	21	25	25	B	B-
551	western sycamore	*Platanus racemosa*	21.8	20	13	16	23	15	B+	B-
561	western sycamore	*Platanus racemosa*	24.5	25	17	15	24	15	A-	B+
567	western sycamore	*Platanus racemosa*	23.5	30	13	14	15	15	A	B+
574	western sycamore	*Platanus racemosa*	18.2	35	15	12	15	10	A	B+
592	western sycamore	*Platanus racemosa*	24.2	40	15	23	15	8	A	B+
595	western sycamore	*Platanus racemosa*	23	35	13	13	23	10	A	B+

TABLE 6 – SUMMARY OF STREET TREES

TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
ST1	Willard acacia	*Acacia willardiana*	2.3	2	6	2	4	8	C	C
ST2	desert willow	*x Chitalpa tashkentensis*	6	16	4	6	15	8	B+	B+
ST3	Willard acacia	*Acacia willardiana*	2.5	15	2	4	10	0	C-	C-

TABLE 6 – SUMMARY OF STREET TREES

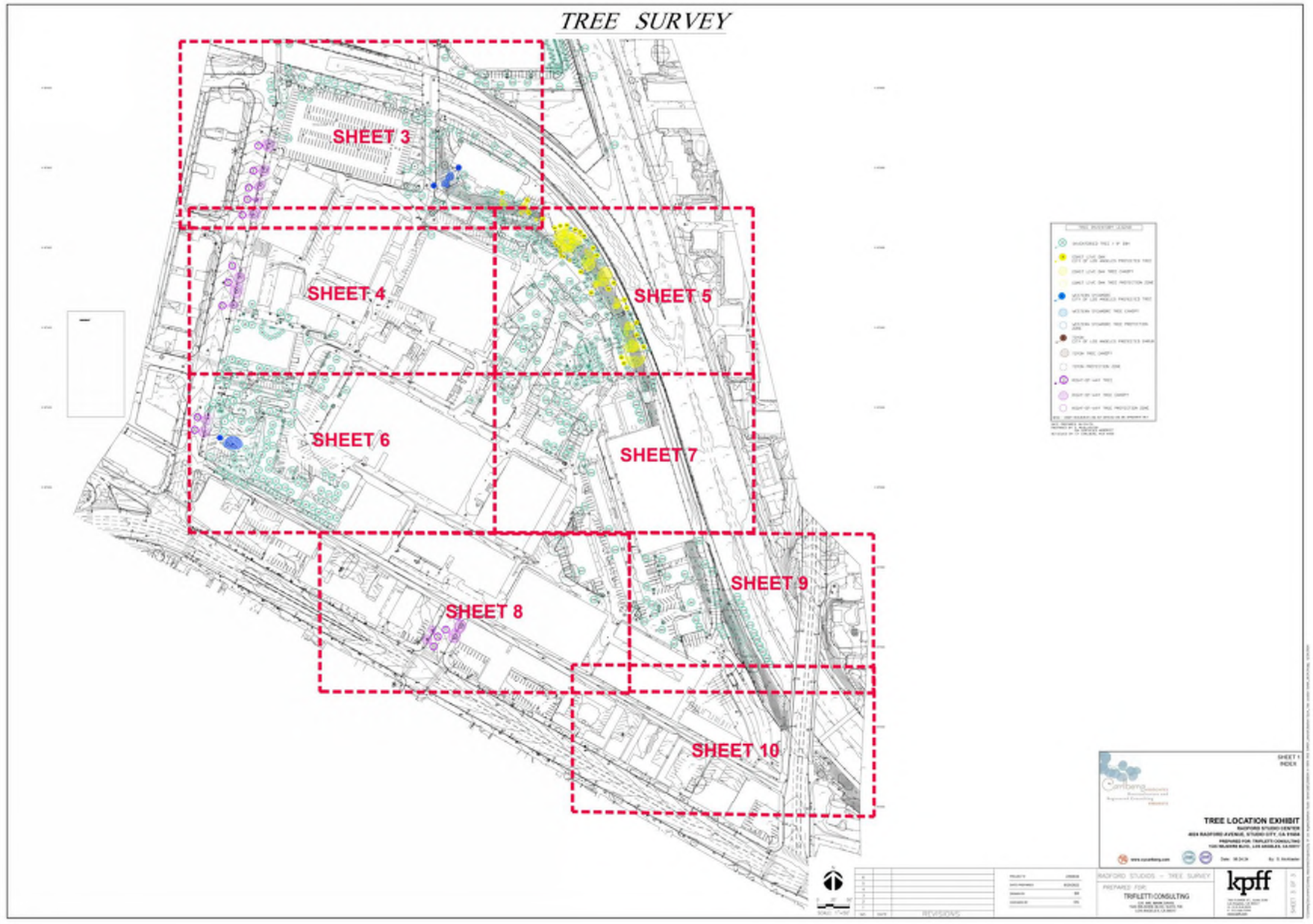
TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
ST4	desert willow	*x Chitalpa tashkentensis*	4	18	6	6	4	6	B	B-
ST5	western redbud	*Cercis occidentalis*	1.2	9	3	2	2	0	B-	B-
ST6	Willard acacia	*Acacia willardiana*	1.5	12	6	4	8	5	C+	C
ST7	American sweetgum	*Liquidambar styraciflua*	18.2	25	10	13	20	18	B	B-
ST8	American sweetgum	*Liquidambar styraciflua*	15.5	20	12	13	15	12	B	B-
ST9	American sweetgum	*Liquidambar styraciflua*	19.2	22	12	12	12	14	B	B-
ST10	American sweetgum	*Liquidambar styraciflua*	13.3	18	7	9	8	10	B	B-
ST11	American sweetgum	*Liquidambar styraciflua*	18	22	15	15	12	13	B	B-
ST12	American sweetgum	*Liquidambar styraciflua*	22	30	10	12	15	15	B	B-
ST13	American sweetgum	*Liquidambar styraciflua*	17.7	28	15	13	18	17	B	B-
ST14	American sweetgum	*Liquidambar styraciflua*	18.2	25	10	10	10	13	B-	C+
ST15	American sweetgum	*Liquidambar styraciflua*	15.8	24	10	7	15	14	B	B-
ST16	American sweetgum	*Liquidambar styraciflua*	15.4	22	11	10	15	15	B	B-

Note: Based on refined right of way boundaries noted in the field, one tree that was previously called-out as a street tree has been reclassified as an onsite tree. This is why the number of street trees was reduced to 16.

Based on their locations and sizes, it is our opinion that 40 of the Protected tree species were planted onsite as the landscape around the existing buildings evolved. Based on their locations and sizes, we believe that five (5) of the onsite coast live oaks may be naturally occurring as volunteer trees.

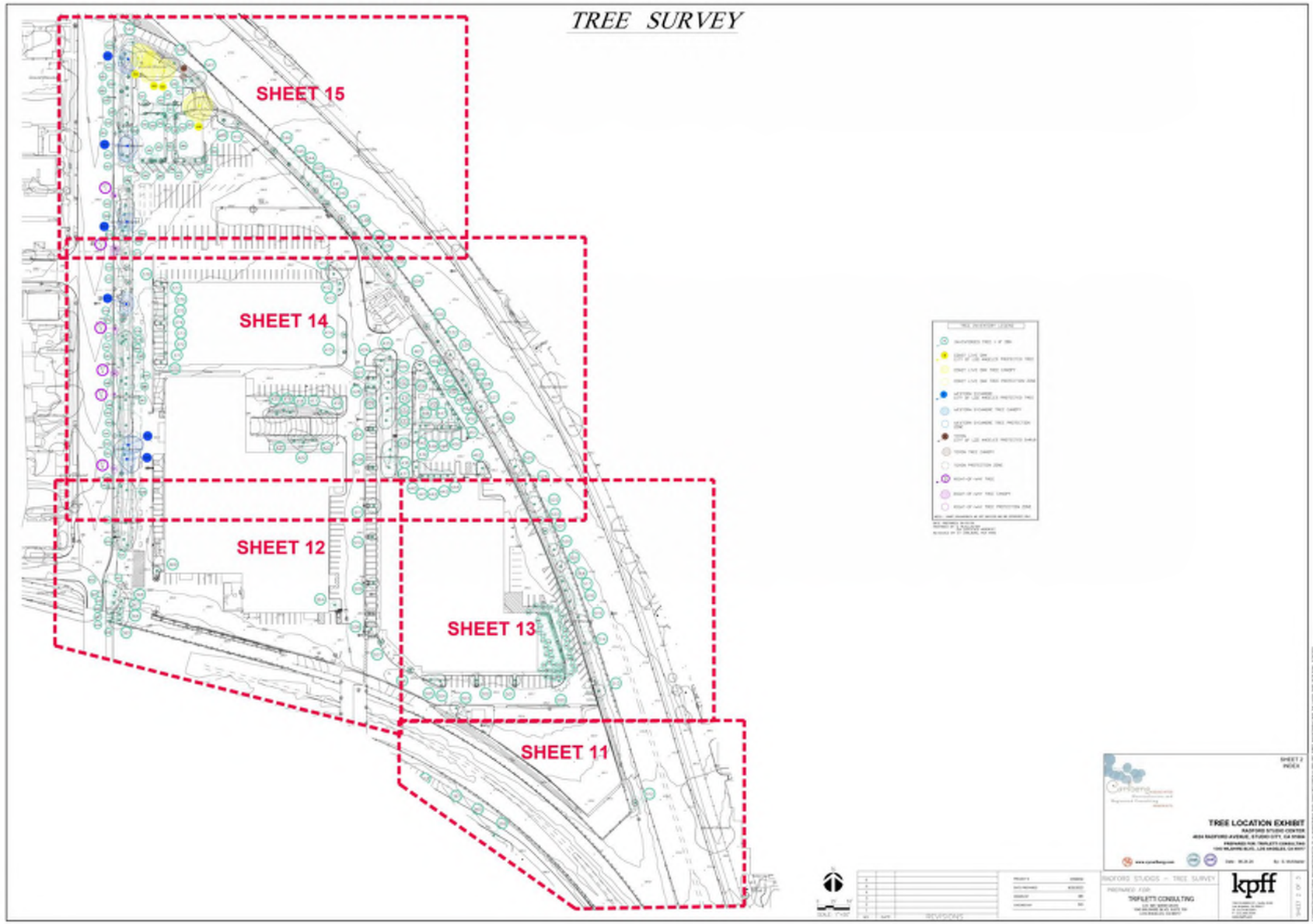
At the time of our inventory, the vast majority (~98%) of the assessed private and public tree population was found to be in good to excellent health. About three percent (~3%) of the tree population was found to be in fair condition, and another two percent (1%) of the population was found to be in poor to very poor health. Conditions were noted exclusively from the ground and limited to what we could outwardly observe with the naked eye, a jewelers loop, and binoculars. In general, the private property landscape appears to be well maintained.

EXHIBIT C – REDUCED COPY OF THE TREE LOCATION EXHIBIT (1/15, 11” x 17” page size)



Not to Scale

EXHIBIT C – REDUCED COPY OF THE TREE LOCATION EXHIBIT (2/15, 11” x 17” page size)



Not to Scale

EXHIBIT C – REDUCED COPY OF THE TREE LOCATION EXHIBIT (3/15, 11” x 17” page size)

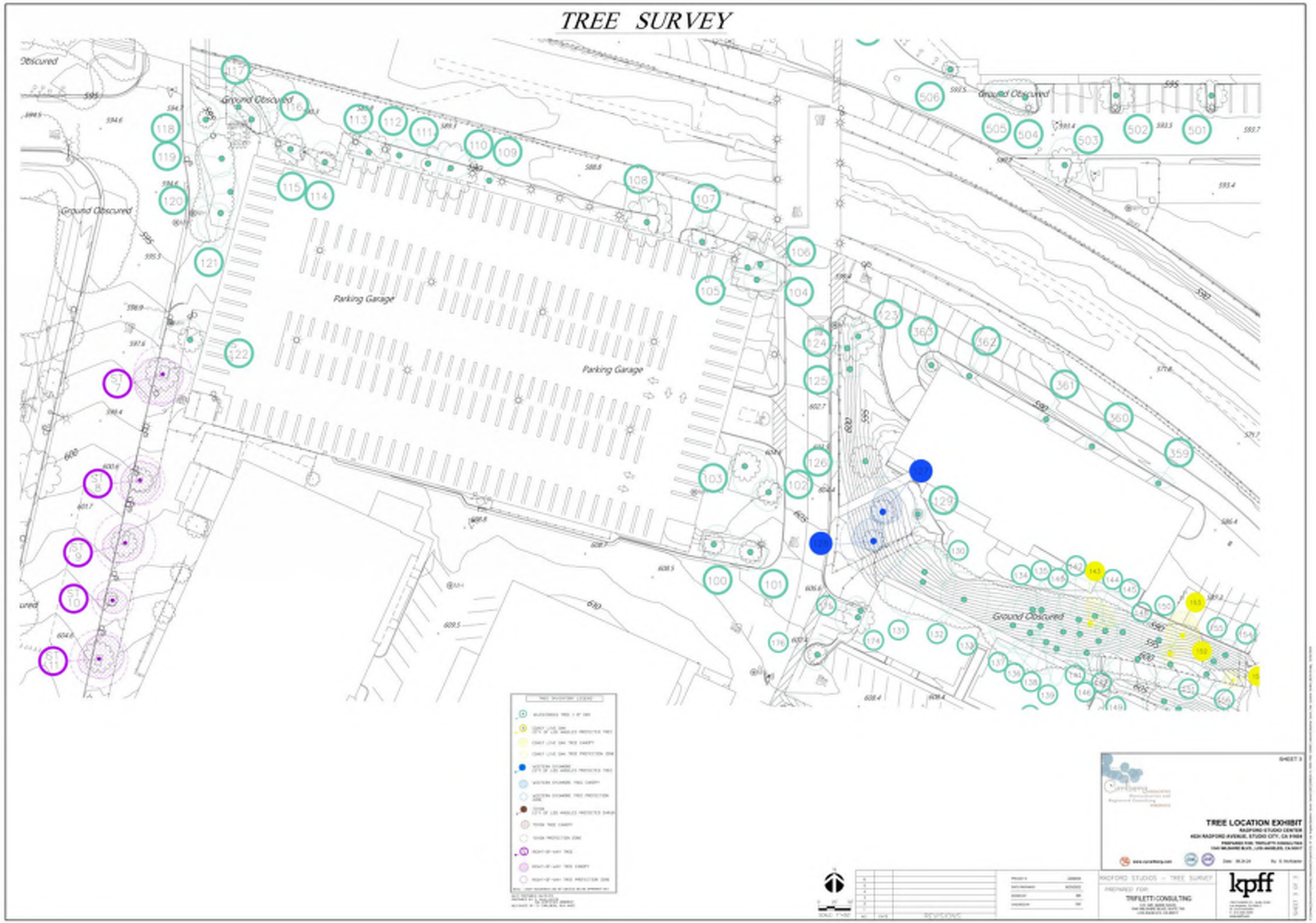


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EXHIBIT C – REDUCED COPY OF THE TREE LOCATION EXHIBIT (4/15. 11" x 17" page size)

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EXHIBIT C – REDUCED COPY OF THE TREE LOCATION EXHIBIT (5/15, 11” x 17” page size)

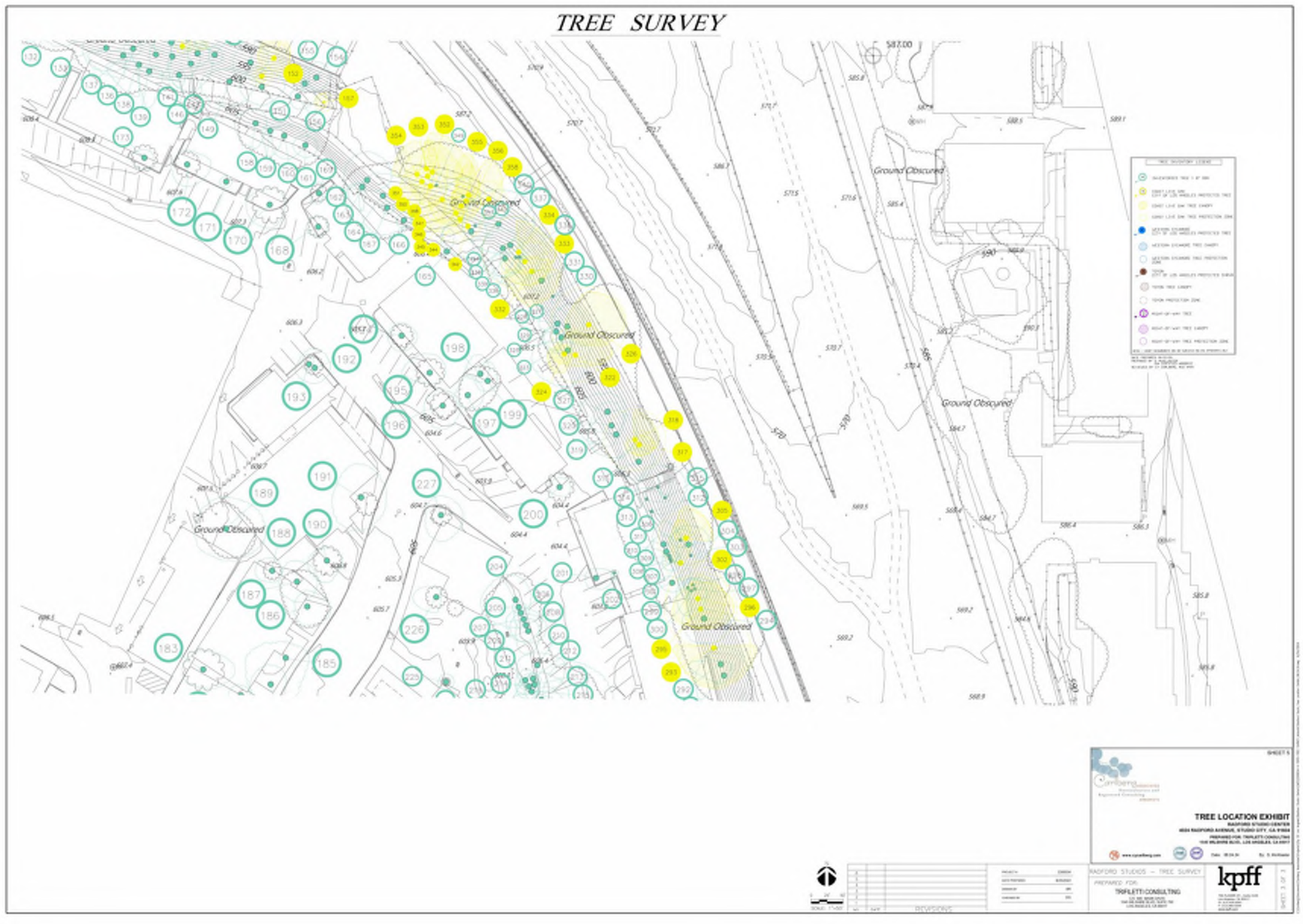

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EXHIBIT C – REDUCED COPY OF THE TREE LOCATION EXHIBIT (6/15, 11” x 17” page size)

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EXHIBIT C – REDUCED COPY OF THE TREE LOCATION EXHIBIT (7/15. 11" x 17" page size)

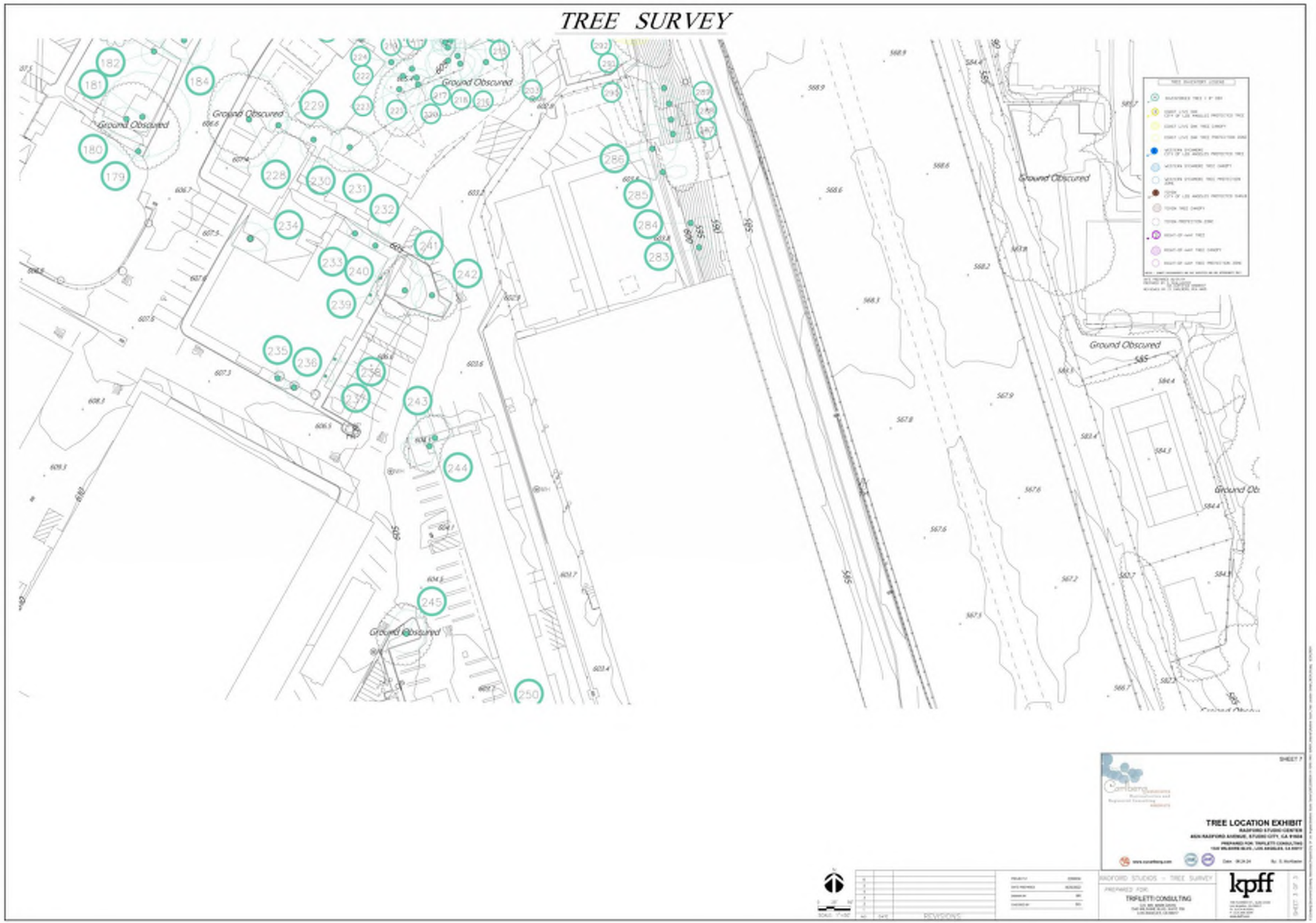
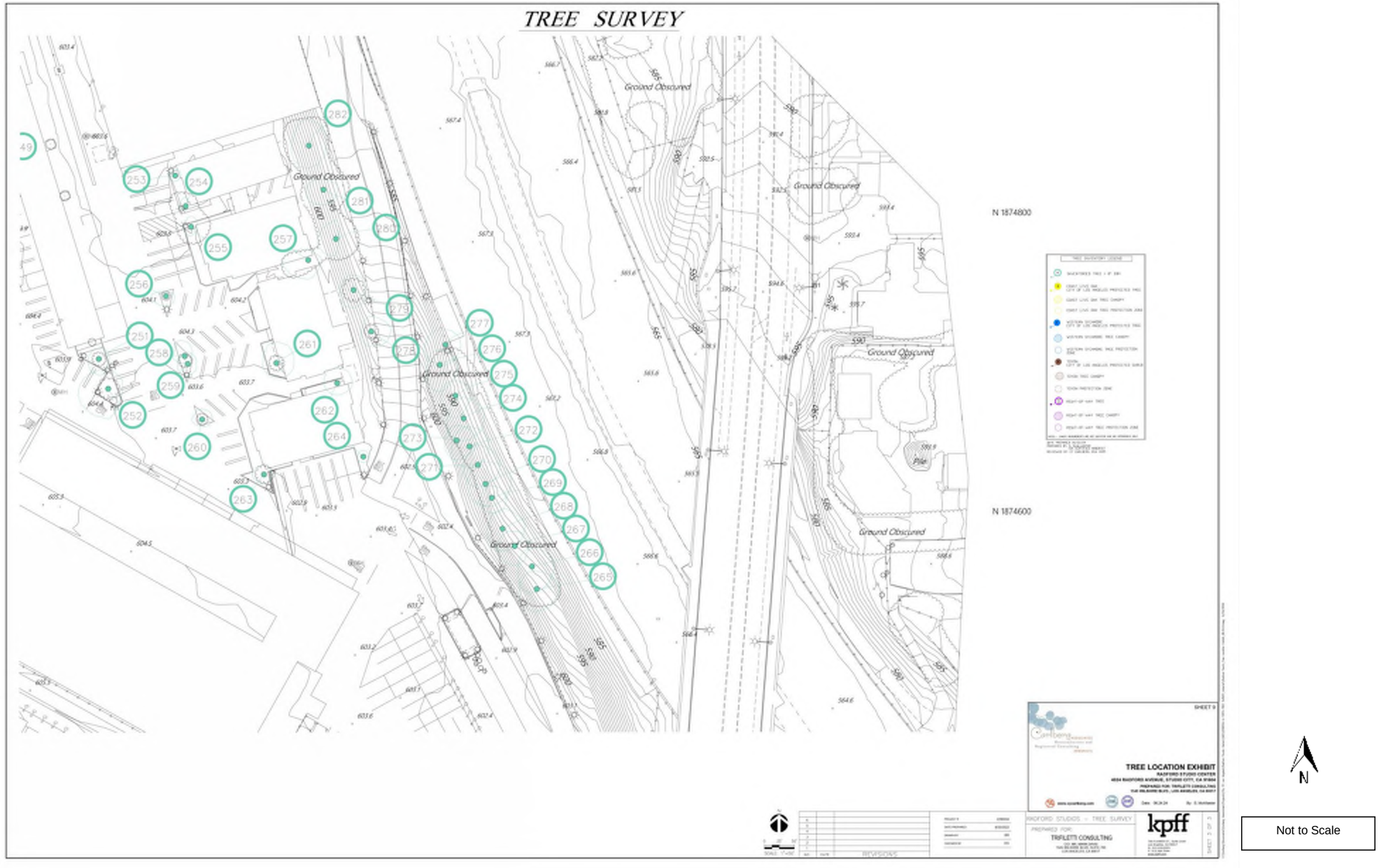


EXHIBIT C – REDUCED COPY OF THE TREE LOCATION EXHIBIT (8/15, 11” x 17” page size)

EXHIBIT C – REDUCED COPY OF THE TREE LOCATION EXHIBIT (9/15, 11” x 17” page size)



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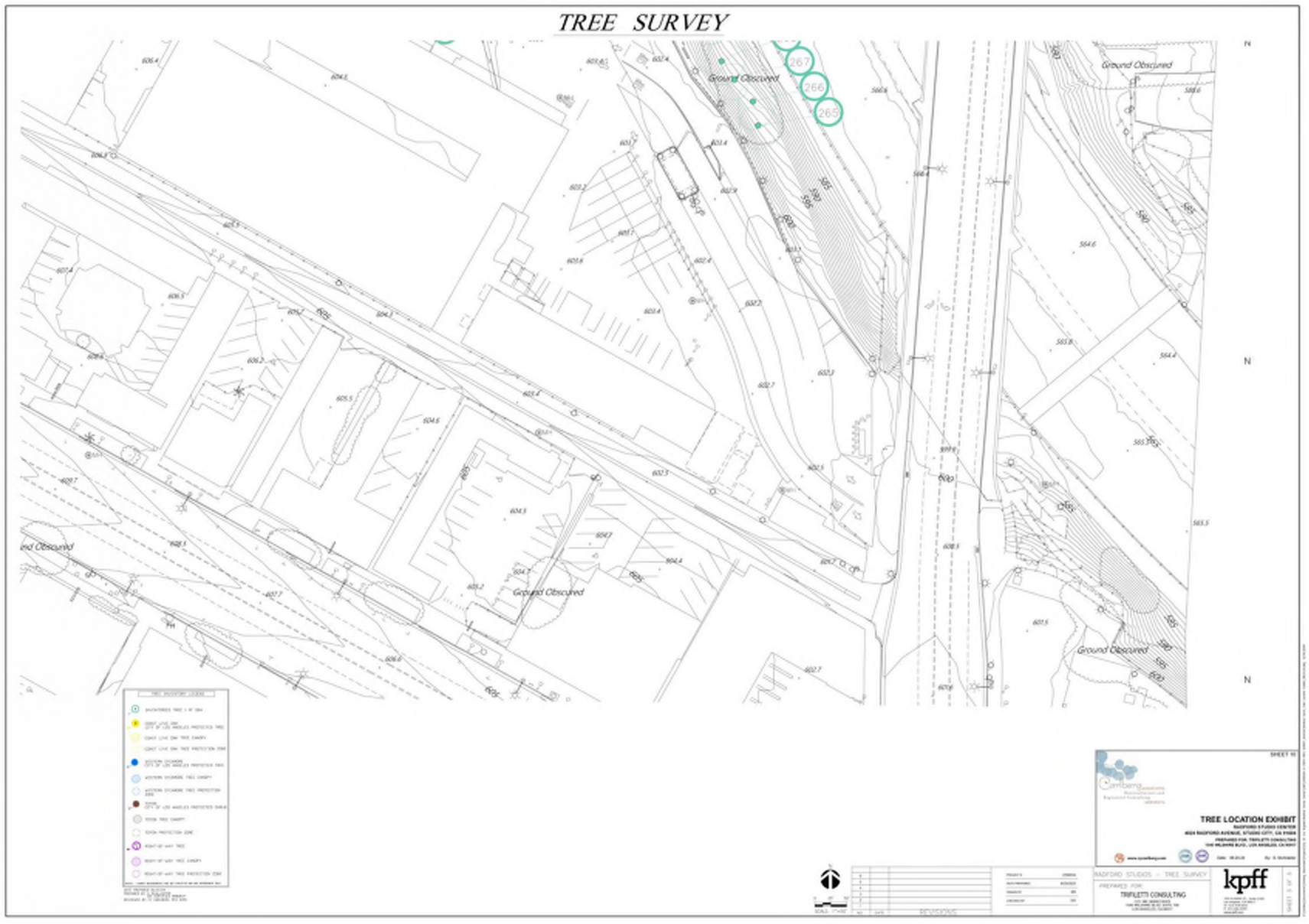

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EXHIBIT C – REDUCED COPY OF THE TREE LOCATION EXHIBIT (11/15, 11" x 17" page size)

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EXHIBIT C – REDUCED COPY OF THE TREE LOCATION EXHIBIT (12/15, 11" x 17" page size)

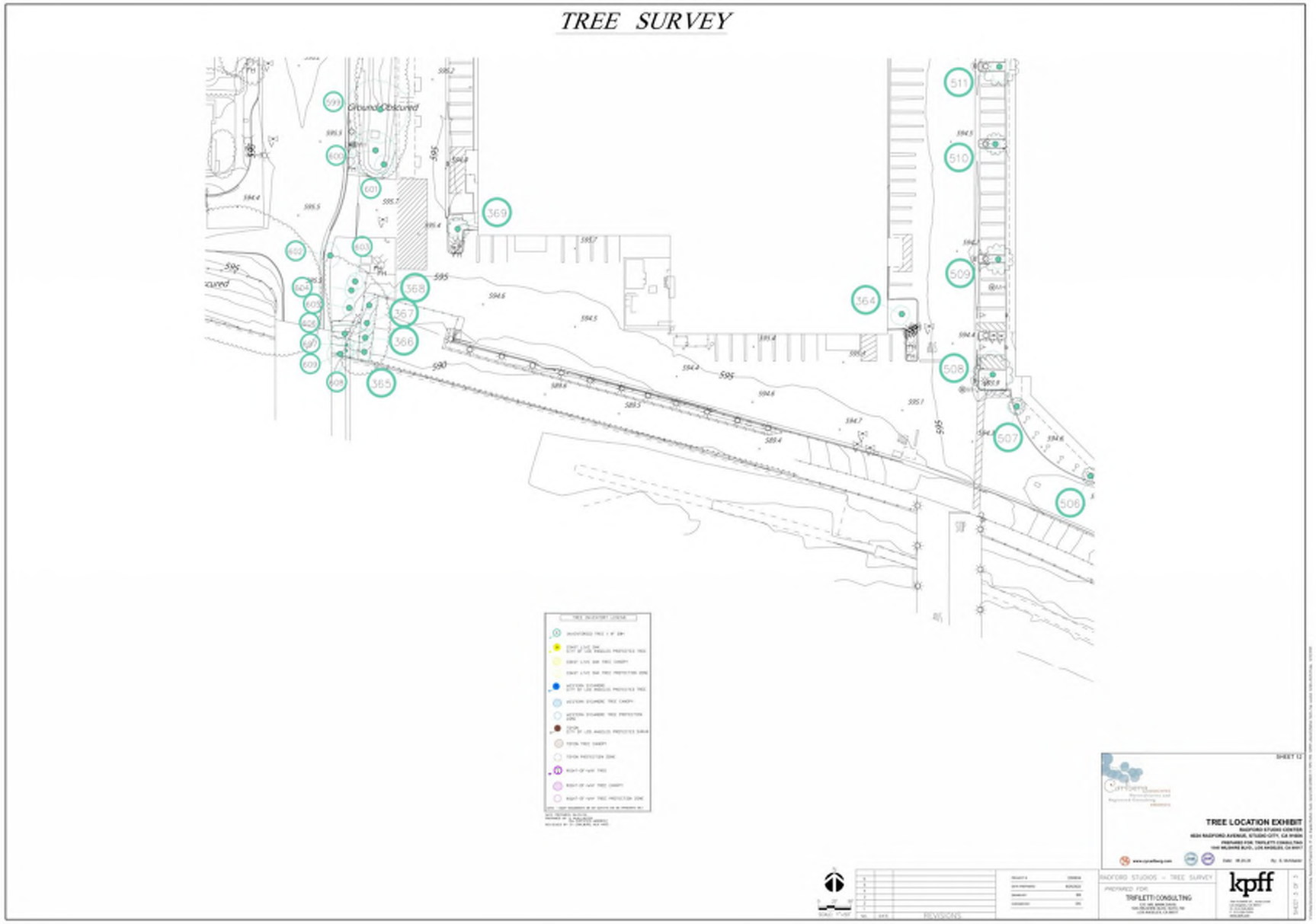

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EXHIBIT C – REDUCED COPY OF THE TREE LOCATION EXHIBIT (13/15, 11” x 17” page size)

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EXHIBIT C – REDUCED COPY OF THE TREE LOCATION EXHIBIT (14/15, 11” x 17” page size)

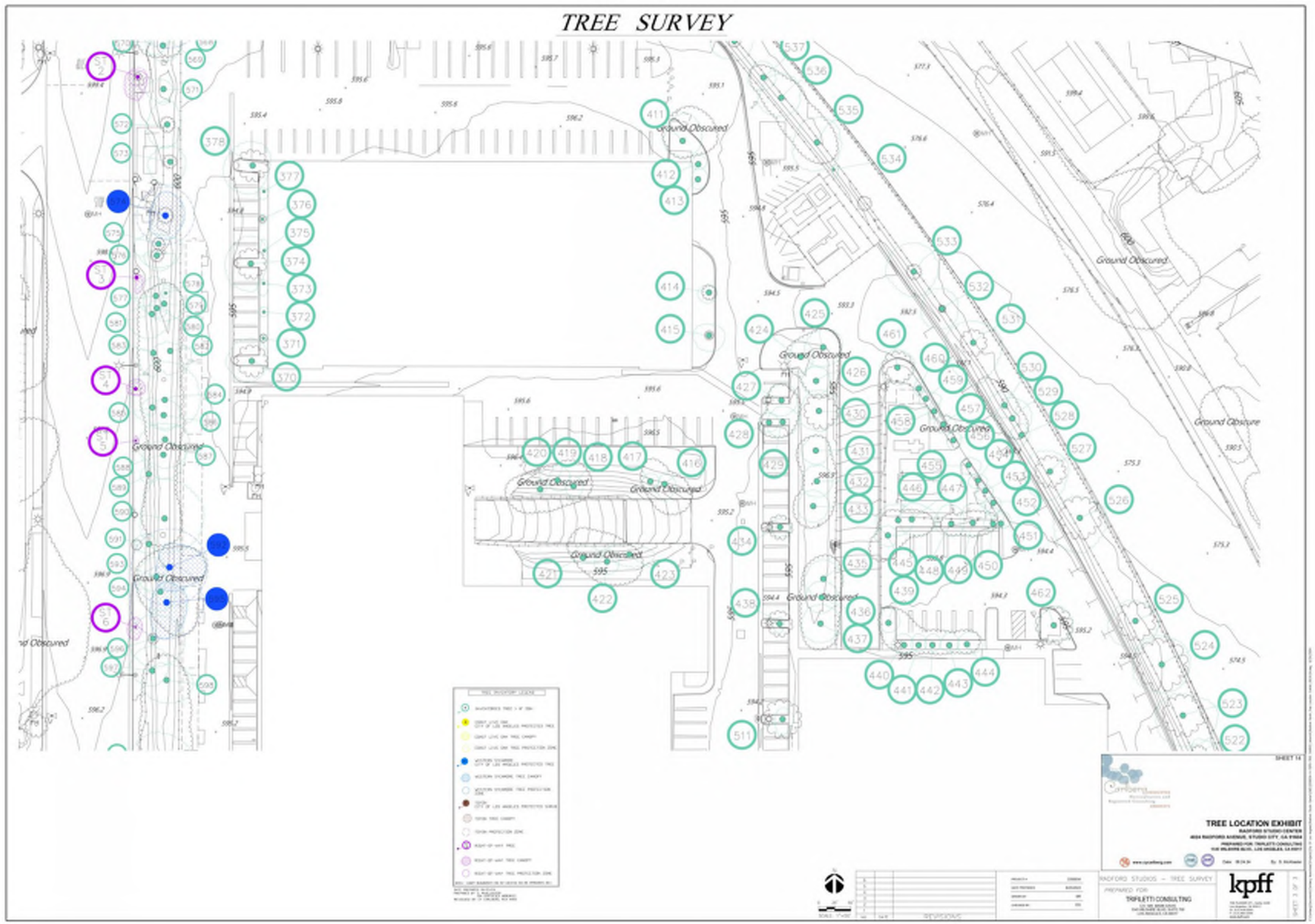

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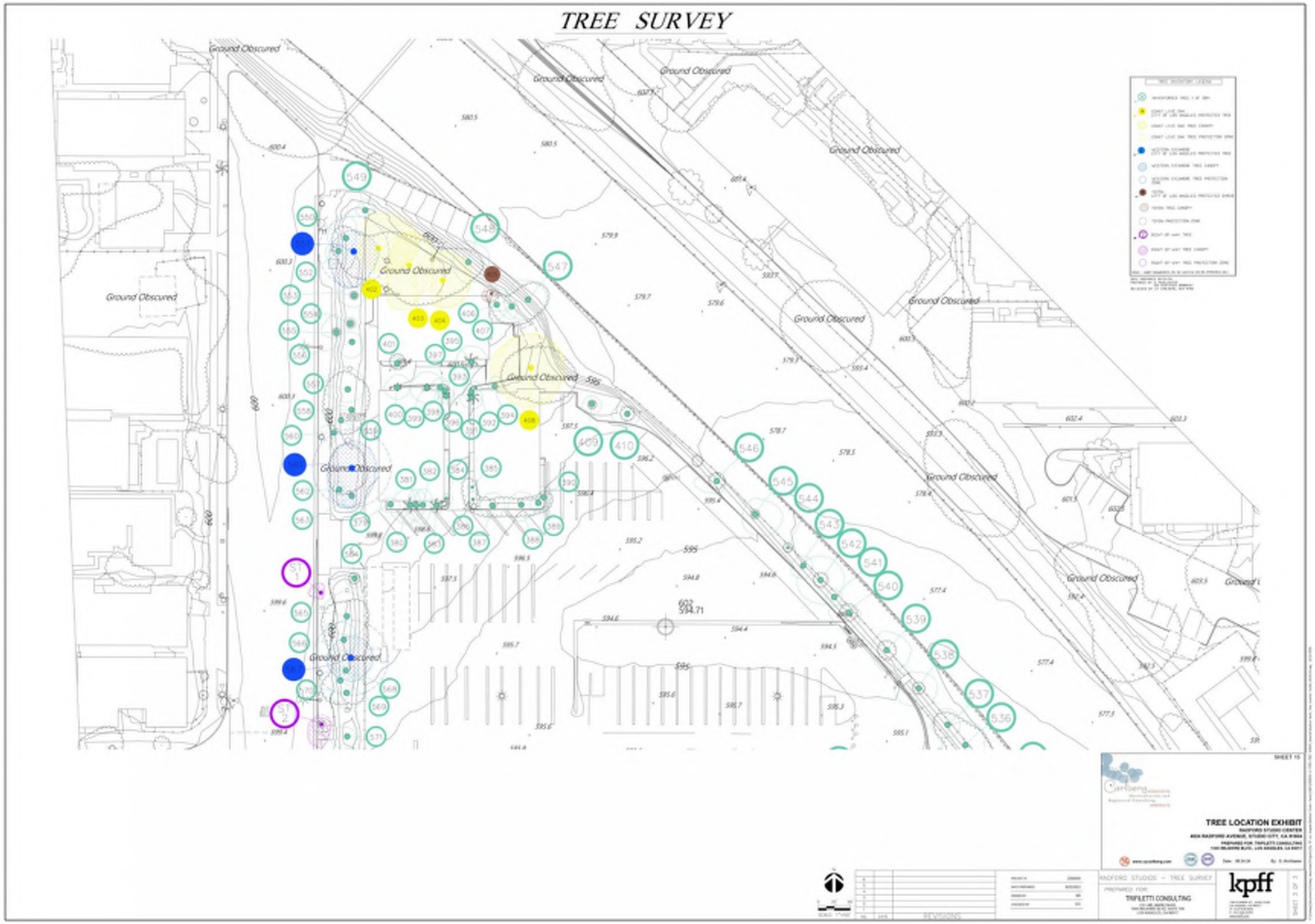
EXHIBIT C – REDUCED COPY OF THE TREE LOCATION EXHIBIT (15/15, 11” x 17” page size)



DISCUSSION OF PROJECT IMPACTS

Potential consequences related to construction that may affect trees during and after a typical construction process are as follows:

- EXCAVATION - ROOT SEVERANCE
- SOIL COMPACTION (DURING AND POST-CONSTRUCTION)
- ALTERATION OF THE WATER TABLE/SITE DRAINAGE
- CHANGES IN GRADE – CUT OR FILL
- SUBSTANTIAL TRIMMING OF CANOPY OR ROOTS

A. *Excavation/Trenching — Root Severance*

Trenching can include excavation for irrigation, utility, or drainage lines. Trenching and excavation can also be required for foundations of structures and free-standing walls. Trenching and excavation removes soil and tree roots. When performed in the critical root zone (approximately 5x the trunk diameter of any tree) or within the dripline (outer edge of the natural canopy), there is the potential to remove large areas of root mass, and to shatter and tear roots that will remain connected to the tree(s). Torn and shattered roots cannot callous over or generate new roots in the manner of cleanly-cut roots. Torn and shattered roots are potentially unstable, are entry points for disease and decay organisms, and eventually die. Significant root loss and/or severance can be critical to the health and structure of trees to remain in a landscape.

B. *Soil Compaction*

Soil compaction is a complex set of physical, chemical, and biological constraints on tree growth. Principal components leading to limited growth are the loss of aeration and pore space, poor gas exchange with the atmosphere, lack of available water, and mechanical hindrance of root growth. Soil compaction is considered the largest single factor responsible for the decline of trees on construction sites.

C. *Changes in Grade*

Changes in grade, by the addition or removal of soil (filling or cutting), can be injurious. Lowering the grade around trees can have immediate and long-term effects on trees. The addition of soil and compaction for common engineering practices also results in long-term effects on trees. Typically, the vast majority of the root mass exists within the top three feet of soil, and most of the fine roots active in water and nutrient absorption are in the top 12 inches.

D. *Alteration of the Water Table/Site Drainage*

The water table is the upper surface of the zone in which soil macropores are saturated with water; water tables may vary seasonally. Rather than a flat, static surface, the water moves down a gradient. Its depth varies, depending on the structure of the soil and rocks through which it flows. A perched water table may form in soils that have impermeable strata. Swamps are created where the water table intersects level ground.

Structures such as footings, basements, subterranean building footprints, and retaining walls may intercept impermeable layers in the soil on which water perches. If adequate drainage is not provided, the water table uphill may gradually rise and interfere with tree roots. This type of damage usually takes a period of time to be recognized and diagnosed.[4]

[4] Nelda Matheny and James R. Clark, Trees and Development: A Technical Guide to Preservation of Trees During Land Development, (Champaign, Illinois: International Society of Arboriculture, 1998), pp. 88-89.

Numerous trees are particularly susceptible to root infections, such as Armillaria and Phytophthora. Both of these fungal diseases can progressively weaken a root system, resulting in dead branches in the canopy of the tree, loss of stability of the entire tree because of decaying roots, and premature death of the tree. Trees form roots in accordance with existing soil composition and water availability. Minor drainage changes in the winter and spring months are significant to the health of the trees.

E. Canopy and Root Pruning

Leaves perform vital functions for trees. Through photosynthesis, they manufacture sugars that feed the tree and are used to create the building blocks of wood. Leaves help to move water and nutrients up from the roots and around the tree through their vascular system and cool the tree down through transpiration.
Leaves moderate temperatures beneath the tree, lessen the drying action of winds, and intercept rainfall, which reduces erosion. On the ground, they moderate soil temperatures, retain moisture, and as they decompose, return their nutrients back to the soil to be recycled and reused by the tree. A healthy canopy of leaves is essential to ensure an adequate food supply for the roots to perform their important functions.

Typically, root systems extend outward past the dripline, two to four times the diameter of the average tree's crown. Main root functions include water and mineral conduction, food and water storage, and anchorage of the tree to the soil. Root systems consist of short-lived, fine-textured, feeder roots and larger, woody, perennial roots. Feeder roots, while averaging only 1/16 inch in diameter, constitute the major portion of the root system's surface area. Feeder roots act like sponges, growing predominantly outward and upward from the large roots near the soil surface where minerals, water, and oxygen are usually abundant. Larger, woody roots and their subordinates tend to annually increase in diameter and grow horizontally. Predominantly located in the top 6 to 24 inches of the soil, these structural and storage roots usually do not grow deeper than three to seven feet. Root growth is generally inhibited by soil compaction and temperature. As the depth increases, soil compaction increases, and the availability of water, minerals, oxygen, and soil temperature all decrease.

Removal of significant amounts of the canopy and/or root system can lead to both immediate and long-term detrimental effects on trees. Effects can be physiological, structural, or both.

Our impact analysis included review of the following documents:

- Topographical base maps provided by the Applicant
- Conceptual Development Plans from RIOS

When assessing the potential impacts to trees that exist immediately adjacent to construction areas, we coordinated with the project team to decide on the trees' disposition for reasonable preservation or removal. We generally applied a 10-foot offset from the limits of the proposed construction areas to assist our decision-making process. In areas where the 10-foot offset would cross a property line into adjacent private property or public right-of-way, we used our judgement regarding potential root zone and canopy impacts that may occur.

To provide a conservative analysis, we assumed that all trees within the blocked-out polygon areas will be removed. We also assumed that onsite trees whose trunks are located within a 10-foot off-set from the proposed edges of new development areas and access improvements may be removed. This accounts for demolition of existing buildings and hardscape/utilities, etc., and over excavation that may be required for foundations, retaining walls, non-retaining wall footings, sub-drain systems, "V"-ditches as required behind freeboard heights for slough protection at the rear of retaining walls, etc. It should be noted that actual over-excavation requirements may change during construction and/or upon review by the geotechnical and structural engineers as part of the grading/building permit process. It is assumed that offsite private property trees (where applicable) and street trees within the 10-foot offset will be preserved.

All project-related activity will be confined to the Project Site. No impacts to offsite trees are anticipated. There are no street trees present along the project adjacent portion of Colfax Avenue and none of the 16 street trees present on Radford Avenue are proposed for removal. **Table 1** in the Executive Summary and **Tables 7 – 12** on the following pages prove details of the trees proposed for preservation and removal. As summarized in the tables:

Project implementation could potentially result in the **removal** of the following **405 trees**:

- 0 street trees
- 0 offsite, private property trees
- **39 onsite, private property, Protected species** that were planted or likely occur as volunteers in the landscape
    - 35 greater than 4" diameter coast live oaks (30 planted, 5 natural volunteers)
    - 3 greater than 4" diameter western sycamores (planted)
    - 1 greater than 4" diameter toyon (planted)
- **366 onsite, private property, non-protected palms and trees** of various genera and species, most of which were planted in the landscape
    - 0 greater than 4" diameter hedge or topiary form (planted)
    - 0 less than 4" diameter hedge or topiary form (planted)
    - 25 palms or other monocot species (planted)
    - 0 greater than 4" diameter 'tree' form trees (natural volunteers)
    - 313 greater than 4" diameter 'tree' form trees (planted)
    - 4 less than 4" diameter 'tree' form trees (natural volunteers) (all coast live oaks)
    - 24 less than 4" diameter 'tree' form trees (planted)

Project implementation would result in the **preservation** of the following **220 trees**:

- **16 street trees** (planted, no palms)
- 0 offsite, private property trees
- **6 onsite, private property Protected species** that were likely planted in the landscape
    - 6 greater than 4" diameter western sycamores (planted)
- **198 onsite, private property, non-protected palms and trees** of various genera and species, which were likely all planted in the landscape
    - 2 greater than 4" diameter hedge or topiary form (planted)
    - 43 less than 4" diameter hedge or topiary form (planted)
    - 1 palm or other monocot species (planted)
    - 139 greater than 4" diameter 'tree' form trees (planted)
    - 0 less than 4" diameter 'tree' form trees (natural volunteers)
    - 13 less than 4" diameter 'tree' form trees (planted)

Trees to be preserved or removed are illustrated on the reduced and full-sized copies of the Tree Impact Exhibit and Protection Plan. The reduced copies are included as **Exhibit D** after **Tables 7-13**. Full-size copies of the Tree Impact Exhibit and Protection Plan (10 sheets) have been submitted with this report.

WOODLAND AND/OR GROVE DELINEATION AND HABITAT INTEGRITY ANALYSIS

Since this project site is located in a completely urban and ornamentally landscaped community, the coast live oak trees within and immediately adjacent to the site are not part of a naturally occurring woodland or grove community. Therefore, no woodland or grove delineation, or habitat integrity analysis is included in this report.

TABLE 7 - PROTECTED TREES TO BE PRESERVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)
551	western sycamore	*Platanus racemosa*	21.8	20	13	16	23	15	B+	B-	P
561	western sycamore	*Platanus racemosa*	24.5	25	17	15	24	15	A-	B+	P
567	western sycamore	*Platanus racemosa*	23.5	30	13	14	15	15	A	B+	P
574	western sycamore	*Platanus racemosa*	18.2	35	15	12	15	10	A	B+	P
592	western sycamore	*Platanus racemosa*	24.2	40	15	23	15	8	A	B+	P
595	western sycamore	*Platanus racemosa*	23	35	13	13	23	10	A	B+	P

As listed, six (6) Ordinance 'Protected species' western sycamore trees are proposed for preservation within the redevelopment areas. In our opinion, these trees have been planted in the landscape.

TABLE 8 - STREET TREES TO BE PRESERVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)
ST1	Willard acacia	*Acacia willardiana*	2.3	2	6	2	4	8	C	C	P
ST2	desert willow	*x Chitalpa tashkentensis*	6	16	4	6	15	8	B+	B+	P
ST3	Willard acacia	*Acacia willardiana*	2.5	15	2	4	10	0	C-	C-	P
ST4	desert willow	*x Chitalpa tashkentensis*	4	18	6	6	4	6	B	B-	P

TABLE 8 - STREET TREES TO BE PRESERVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)
ST5	western redbud	*Cercis occidentalis*	1.2	9	3	2	2	0	B-	B-	P
ST6	Willard acacia	*Acacia willardiana*	1.5	12	6	4	8	5	C+	C	P
ST7	American sweetgum	*Liquidambar styraciflua*	18.2	25	10	13	20	18	B	B-	P
ST8	American sweetgum	*Liquidambar styraciflua*	15.5	20	12	13	15	12	B	B-	P
ST9	American sweetgum	*Liquidambar styraciflua*	19.2	22	12	12	12	14	B	B-	P
ST10	American sweetgum	*Liquidambar styraciflua*	13.3	18	7	9	8	10	B	B-	P
ST11	American sweetgum	*Liquidambar styraciflua*	18	22	15	15	12	13	B	B-	P
ST12	American sweetgum	*Liquidambar styraciflua*	22	30	10	12	15	15	B	B-	P
ST13	American sweetgum	*Liquidambar styraciflua*	17.7	28	15	13	18	17	B	B-	P
ST14	American sweetgum	*Liquidambar styraciflua*	18.2	25	10	10	10	13	B-	C+	P
ST15	American sweetgum	*Liquidambar styraciflua*	15.8	24	10	7	15	14	B	B-	P
ST16	American sweetgum	*Liquidambar styraciflua*	15.4	22	11	10	15	15	B	B-	P

As listed, all of the sixteen (16) inventoried street trees are proposed for preservation with the proposed Project. In our opinion, these trees have been planted in the public right-of-way.

TABLE 9 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE PRESERVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form
73	wax leaf privet	*Ligustrum lucidum*	1	8	2	2	1	2	A-	B	P	X
74	wax leaf privet	*Ligustrum lucidum*	1	8	2	2	1	2	A-	B	P	X
75	wax leaf privet	*Ligustrum lucidum*	1	8	2	2	1	2	A-	B	P	X
76	wax leaf privet	*Ligustrum lucidum*	1	8	2	2	1	2	A-	B	P	X
77	wax leaf privet	*Ligustrum lucidum*	1	8	2	2	1	2	A-	B	P	X
78	wax leaf privet	*Ligustrum lucidum*	1	8	2	2	1	2	A-	B	P	X
79	wax leaf privet	*Ligustrum lucidum*	1	8	2	2	1	2	A-	B	P	X
80	wax leaf privet	*Ligustrum lucidum*	1	8	2	2	1	2	A-	B	P	X
99	fiddle leaf fig	*Ficus lyrata*	1	10	4	4	4	4	A-	B	P	
100	Brisbane box	*Lophostemon confertus*	13.1	25	12	12	8	8	B+	B	P	
101	Brisbane box	*Lophostemon confertus*	14.3	30	12	10	12	10	B+	B	P	
102	Brisbane box	*Lophostemon confertus*	16.5	42	9	9	12	10	B+	B	P	

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Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form
103	jacaranda	*Jacaranda mimosifolia*	10.5	25	12	15	18	7	B	B-	P	
104	Afghan pine	*Pinus eldarica*	21.2	35	7	15	10	8	B	B-	P	
105	Afghan pine	*Pinus eldarica*	15.5	25	13	13	0	13	B	B-	P	
106	Afghan pine	*Pinus eldarica*	19.3	30	14	12	8	10	B	B-	P	
107	sweetshade	*Hymenosporum flavum*	10	45	12	8	6	6	A-	B	P	
108	sweetshade	*Hymenosporum flavum*	15.6	45	16	12	8	12	A-	B	P	
109	sweetshade	*Hymenosporum flavum*	4.3	30	7	3	0	3	B	B-	P	
110	sweetshade	*Hymenosporum flavum*	6.2, 5.3, 5.6, 7	35	15	12	7	8	A-	B	P	
111	sweetshade	*Hymenosporum flavum*	12.7	45	10	10	12	8	A-	B	P	
112	sweetshade	*Hymenosporum flavum*	7.7	32	10	10	8	8	A-	B	P	
113	sweetshade	*Hymenosporum flavum*	12.8	45	12	8	5	12	A	B	P	
114	Indian laurel fig	*Ficus microcarpa*	3.1, 4, 7	20	13	10	6	10	A	B	P	

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Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form
115	camphor	*Cinnamomum camphora*	3, 3.2, 3.7	20	17	7	3	10	A-	B	P	
116	camphor	*Cinnamomum camphora*	7, 7.2	25	15	12	10	10	B+	B	P	
117	camphor	*Cinnamomum camphora*	5, 7	20	13	12	6	8	B+	B	P	
118	carrotwood	*Cupaniopsis anacardioides*	6.5	20	12	9	9	13	A	B-	P	
119	jacaranda	*Jacaranda mimosifolia*	12.3	22	15	8	12	16	A-	C+	P	
120	jacaranda	*Jacaranda mimosifolia*	12.3	22	12	5	13	18	A-	C+	P	
121	jacaranda	*Jacaranda mimosifolia*	13	22	6	6	21	15	A-	C+	P	
122	jacaranda	*Jacaranda mimosifolia*	12.7	25	12	8	21	24	A-	B-	P	
265	silk oak	*Grevillea robusta*	26.7	55	12	15	15	5	B+	B	P	
266	silk oak	*Grevillea robusta*	29	55	12	15	18	9	B+	B	P	
267	silk oak	*Grevillea robusta*	19	50	10	10	13	11	B+	B	P	
268	silk oak	*Grevillea robusta*	30	60	13	15	15	10	B+	B	P	

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Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form
269	silk oak	*Grevillea robusta*	20.6	55	8	10	10	8	B+	B-	P	
270	silk oak	*Grevillea robusta*	24	50	15	17	15	12	B+	B	P	
271	silk oak	*Grevillea robusta*	22	50	13	15	15	9	B+	B	P	
272	silk oak	*Grevillea robusta*	19	50	13	13	15	12	B+	B	P	
273	silk oak	*Grevillea robusta*	24.8	55	10	13	13	8	B+	B	P	
274	silk oak	*Grevillea robusta*	22.7	45	14	14	15	11	B+	B	P	
275	silk oak	*Grevillea robusta*	21.4	45	10	10	15	10	B+	B	P	
276	silk oak	*Grevillea robusta*	23	45	10	12	18	8	B+	B	P	
277	silk oak	*Grevillea robusta*	26.3	45	10	10	14	14	B+	B	P	
364	paperbark	*Melaleuca quinquenervia*	8, 9	30	5	5	7	7	A-	B	P	
365	Callery pear	*Pyrus calleryana*	7.9	15	7	6	5	5	B-	B-	P	
366	Callery pear	*Pyrus calleryana*	6	14	6	5	5	4	B-	B-	P	

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Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form
367	Callery pear	*Pyrus calleryana*	7	15	6	4	5	4	B-	B-	P	
368	Callery pear	*Pyrus calleryana*	7.5	15	6	5	3	4	B-	B-	P	
369	paperbark	*Melaleuca quinquenervia*	7.5, 11.4	30	7	6	5	6	A-	B	P	
370	Afghan pine	*Pinus eldarica*	18.8	35	14	10	13	16	A-	B	P	
371	paperbark	*Melaleuca quinquenervia*	7	10	3	2	3	2	A-	B	P	
372	paperbark	*Melaleuca quinquenervia*	6.6	14	3	3	3	3	A-	B	P	
373	paperbark	*Melaleuca quinquenervia*	8	18	2	3	8	4	A-	B	P	
374	Afghan pine	*Pinus eldarica*	19.3	25	17	10	18	16	A-	B	P	
375	paperbark	*Melaleuca quinquenervia*	6.6	18	7	2	3	3	A-	B	P	
376	paperbark	*Melaleuca quinquenervia*	6	15	3	3	3	3	A-	B	P	
377	paperbark	*Melaleuca quinquenervia*	4.5	12	2	3	5	4	A-	B	P	
378	Afghan pine	*Pinus eldarica*	17.8	35	15	11	18	18	A-	B	P	

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Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form
414	Brisbane box	*Lophostemon confertus*	7	25	5	5	7	7	A	B	P	
415	Brisbane box	*Lophostemon confertus*	8	25	7	10	10	10	A	B	P	
424	coast redwood	*Sequoia sempervirens*	14.8	40	10	8	10	8	A	B+	P	
425	coast redwood	*Sequoia sempervirens*	19.7	40	12	12	12	12	A	B+	P	
426	coast redwood	*Sequoia sempervirens*	15.5	40	9	9	9	9	A	B+	P	
427	crape myrtle	*Lagerstroemia indica*	6.2	18	10	10	10	10	A	A-	P	
428	crape myrtle	*Lagerstroemia indica*	3.2	12	6	6	6	6	A	A-	P	
429	crape myrtle	*Lagerstroemia indica*	5.3	16	10	10	10	10	A	A-	P	
430	camphor	*Cinnamomum camphora*	3.5, 4.4, 4.1, 5, 4.6, 4.5, 4.1, 4.4	20	13	13	13	13	A-	B+	P	
431	coast redwood	*Sequoia sempervirens*	17	40	9	9	9	9	B+	B+	P	
432	coast redwood	*Sequoia sempervirens*	18.4	40	10	10	10	10	A-	B+	P	

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Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form
433	coast redwood	*Sequoia sempervirens*	17.6	40	10	10	10	10	A-	B+	P	
434	paperbark	*Melaleuca quinquenervia*	5.3, 7.5, 10.4	22	5	7	6	6	A-	B+	P	
435	coast redwood	*Sequoia sempervirens*	20	40	12	12	12	12	A-	B+	P	
436	coast redwood	*Sequoia sempervirens*	19.3	40	10	10	10	10	A-	B+	P	
437	coast redwood	*Sequoia sempervirens*	19.6	40	12	12	12	12	A-	B+	P	
438	paperbark	*Melaleuca quinquenervia*	14.8	28	4	3	6	4	A	B	P	
439	paperbark	*Melaleuca quinquenervia*	9.2, 7.5, 9.2	25	10	7	6	6	B+	B	P	
440	crape myrtle	*Lagerstroemia indica*	4.8	18	7	6	6	8	A	A-	P	
441	crape myrtle	*Lagerstroemia indica*	4	18	7	5	4	5	A	A-	P	
442	crape myrtle	*Lagerstroemia indica*	4	18	7	5	4	5	A	A-	P	
443	crape myrtle	*Lagerstroemia indica*	4.8	18	8	6	4	6	A	A-	P	
444	crape myrtle	*Lagerstroemia indica*	5.2	18	8	10	6	6	A	A-	P	

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Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form
445	paperbark	*Melaleuca quinquenervia*	5, 9.8, 8	25	6	6	7	8	A-	B	P	
446	Indian laurel fig	*Ficus microcarpa*	13	16	10	10	10	14	B+	B	P	
447	Indian laurel fig	*Ficus microcarpa*	13.5	16	10	17	10	8	B+	B	P	
448	Indian laurel fig	*Ficus microcarpa*	11.8	16	12	8	8	10	B+	B	P	
449	Indian laurel fig	*Ficus microcarpa*	7.2, 11	16	12	12	8	8	B+	B	P	
450	Indian laurel fig	*Ficus microcarpa*	8	15	10	7	3	6	B+	B	P	
451	Indian laurel fig	*Ficus microcarpa*	5.3	14	8	6	3	5	B+	B	P	
452	Indian laurel fig	*Ficus microcarpa*	7.3	15	4	5	8	6	B+	B	P	
453	Indian laurel fig	*Ficus microcarpa*	8	14	4	5	7	6	B+	B	P	
454	Indian laurel fig	*Ficus microcarpa*	6.6	12	4	6	5	6	B+	B	P	
455	Indian laurel fig	*Ficus microcarpa*	9.5	14	5	8	6	5	B+	B	P	
456	Indian laurel fig	*Ficus microcarpa*	12	14	6	5	6	4	B+	B	P	

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Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form
457	Indian laurel fig	*Ficus microcarpa*	10.8	14	6	8	6	6	B+	B	P	
458	Indian laurel fig	*Ficus microcarpa*	8.4	14	6	4	5	4	B+	B	P	
459	Indian laurel fig	*Ficus microcarpa*	10.2	14	5	10	5	4	B+	B	P	
460	Indian laurel fig	*Ficus microcarpa*	9.8	14	6	3	5	3	B+	B	P	
461	coast redwood	*Sequoia sempervirens*	15.5	40	11	11	11	11	A-	B+	P	
462	coast redwood	*Sequoia sempervirens*	18	40	12	12	10	10	A-	B+	P	
463	long leafed yellowwood	*Podocarpus henkelii*	3.5	12	4	4	4	4	A-	B	P	X
464	long leafed yellowwood	*Podocarpus henkelii*	4	12	4	4	4	4	A-	B	P	X
465	long leafed yellowwood	*Podocarpus henkelii*	1.7	8	4	4	4	4	A-	B	P	X
466	long leafed yellowwood	*Podocarpus henkelii*	3.2	10	4	4	4	4	A-	B	P	X
467	long leafed yellowwood	*Podocarpus henkelii*	3	8	4	4	4	4	A-	B	P	X
468	long leafed yellowwood	*Podocarpus henkelii*	2.3	8	4	4	4	4	A-	B	P	X

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Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form
469	long leafed yellowwood	*Podocarpus henkelii*	3	8	4	4	4	4	A-	B	P	X
470	long leafed yellowwood	*Podocarpus henkelii*	2.2	7	4	4	4	4	A-	B	P	X
471	long leafed yellowwood	*Podocarpus henkelii*	3.3	9	4	4	4	4	A-	B	P	X
472	long leafed yellowwood	*Podocarpus henkelii*	3.3	8	4	4	4	4	A-	B	P	X
473	long leafed yellowwood	*Podocarpus henkelii*	2.2	7	4	4	4	4	A-	B	P	X
474	long leafed yellowwood	*Podocarpus henkelii*	2.6, 3	13	4	4	4	4	A-	B	P	X
475	long leafed yellowwood	*Podocarpus henkelii*	2.8	8	4	4	4	4	A-	B	P	X
476	long leafed yellowwood	*Podocarpus henkelii*	2.2	7	4	4	4	4	A-	B	P	X
477	long leafed yellowwood	*Podocarpus henkelii*	2.4	7	4	4	4	4	A-	B	P	X
478	long leafed yellowwood	*Podocarpus henkelii*	2.6	8	4	4	4	4	A-	B	P	X
479	long leafed yellowwood	*Podocarpus henkelii*	2.4	7	4	4	4	4	A-	B	P	X
480	long leafed yellowwood	*Podocarpus henkelii*	1.4	9	4	4	4	4	A-	B-	P	X

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481	long leafed yellowwood	*Podocarpus henkelii*	2.6	10	4	4	4	4	A-	B	P	X
482	long leafed yellowwood	*Podocarpus henkelii*	1.8	7	3	3	3	3	A-	B	P	X
483	long leafed yellowwood	*Podocarpus henkelii*	3	8	4	4	5	4	A-	B	P	X
484	long leafed yellowwood	*Podocarpus henkelii*	0.9	7	3	3	3	3	A-	B-	P	X
485	long leafed yellowwood	*Podocarpus henkelii*	1.8	9	4	4	4	4	A-	B-	P	X
486	long leafed yellowwood	*Podocarpus henkelii*	2.8	8	4	4	4	4	A-	B	P	X
487	long leafed yellowwood	*Podocarpus henkelii*	1.8	5	3	3	3	3	A-	B	P	X
488	long leafed yellowwood	*Podocarpus henkelii*	1.6	10	4	4	4	4	A-	B-	P	X
489	long leafed yellowwood	*Podocarpus henkelii*	2.6	4	2	2	2	2	B	B	P	X
490	long leafed yellowwood	*Podocarpus henkelii*	0.8	4	2	2	2	2	B	B	P	X
491	long leafed yellowwood	*Podocarpus henkelii*	1.5	8	4	4	4	4	A-	B	P	X
492	long leafed yellowwood	*Podocarpus henkelii*	1	8	4	4	4	4	A-	B	P	X

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Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form
493	long leafed yellowwood	*Podocarpus henkelii*	2.2	8	4	4	4	4	A-	B	P	X
494	long leafed yellowwood	*Podocarpus henkelii*	1.6	6	4	4	4	4	A-	B	P	X
495	long leafed yellowwood	*Podocarpus henkelii*	1.4, .8	8	4	4	4	4	A-	B-	P	X
496	long leafed yellowwood	*Podocarpus henkelii*	1.3	7	4	4	4	4	A-	B-	P	X
497	long leafed yellowwood	*Podocarpus henkelii*	1.5	9	4	4	4	4	A-	B-	P	X
498	long leafed yellowwood	*Podocarpus henkelii*	2.4, 1	10	4	4	4	4	A-	B-	P	X
499	long leafed yellowwood	*Podocarpus henkelii*	1.3	8	4	4	4	4	A-	B-	P	X
506	strawberry tree	*Arbutus 'Marina'*	3.4	12	5	5	5	5	A	A-	P	
507	strawberry tree	*Arbutus 'Marina'*	4.2	12	5	3	5	6	A	A-	P	
508	pink trumpet tree	*Handroanthus heptaphyllus*	8	17	15	12	10	12	A	B+	P	
509	paperbark	*Melaleuca quinquenervia*	13, 19.5	30	6	4	6	4	A	B+	P	
510	paperbark	*Melaleuca quinquenervia*	9, 10.4	25	5	3	6	4	A-	B+	P	

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Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form
511	paperbark	*Melaleuca quinquenervia*	11.3, 11.4	34	7	7	10	5	A	B+	P	
550	xylosma	*Xylosma congesta*	5.2, 5	15	14	7	8	12	B	B	P	
552	Willard acacia	*Acacia willardiana*	1.2	10	5	5	8	8	B	B	P	
553	California pepper	*Schinus molle*	5.5	14	5	6	8	10	A	B+	P	
555	eastern redbud	*Cercis canadensis*	2.8, 2.8	12	11	0	4	10	A-	B-	P	
556	California pepper	*Schinus molle*	6	14	6	7	10	9	A	B+	P	
557	xylosma	*Xylosma congesta*	9.3	16	14	10	8	15	B	B	P	
558	California pepper	*Schinus molle*	14.9, 13, 10.5	22	0	0	0	0	F	F	P	
559	eastern redbud	*Cercis canadensis*	1.2, 1.5, 2.2, 3	10	9	7	9	9	A	B	P	
560	eastern redbud	*Cercis canadensis*	3.5	12	5	0	6	10	A	B	P	
562	purple-leaf plum	*Prunus cerasifera*	1.2, 1	10	5	3	4	4	A	A	P	
563	palo verde	*Parkinsonia florida*	1, 1.5	4	0	0	10	6	A-	B-	P	

TABLE 9 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE PRESERVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form
564	crape myrtle	*Lagerstroemia indica*	1, 1, 1, 1, 1.2, 1.2, 1.2, 1, 1.8	12	6	6	6	6	A	A-	P	
565	California pepper	*Schinus molle*	14, 14.5	20	15	14	12	15	B-	B-	P	
566	xylosma	*Xylosma congesta*	4.5, 5.5	15	11	8	7	13	B	B	P	
568	desert willow	*x Chitalpa tashkentensis*	3	12	3	7	5	5	B	B	P	
569	desert willow	*x Chitalpa tashkentensis*	5.3	16	7	8	13	13	B	B	P	
570	palo verde	*Parkinsonia florida*	2, 4.5	18	12	12	10	10	A	B	P	
571	California pepper	*Schinus molle*	5.3	14	6	6	10	12	A	B+	P	
572	California pepper	*Schinus molle*	24	22	15	8	15	13	B-	C-	P	
573	California pepper	*Schinus molle*	13.3, 12.5	15	10	10	15	14	B-	C+	P	
575	California pepper	*Schinus molle*	5.5, 6, 6.5	16	6	15	15	15	B+	B-	P	
576	desert willow	*x Chitalpa tashkentensis*	5.6	16	2	12	10	8	B	B	P	
577	desert willow	*x Chitalpa tashkentensis*	5	18	12	5	12	12	B	B	P	

TABLE 9 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE PRESERVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form
578	eastern redbud	*Cercis canadensis*	1.5, 2.2	8	3	3	3	3	A	A-	P	
579	California pepper	*Schinus molle*	10.6, 13.2	22	12	13	11	13	B-	B-	P	
580	eastern redbud	*Cercis canadensis*	2.5, 2.5, 2.8, 2.5, 2.5, 3, 2.8, 3.8	11	5	7	6	6	A	A-	P	
581	California pepper	*Schinus molle*	11, 10.5	28	5	12	15	15	B+	B-	P	
582	desert willow	*x Chitalpa tashkentensis*	4.4	15	0	0	15	10	B	B-	P	
583	London plane	*Platanus x hispanica*	9.3	22	5	13	15	12	B+	B	P	
584	California pepper	*Schinus molle*	21, 12.8	22	24	22	18	22	B	B	P	
585	xylosma	*Xylosma congesta*	2	7	6	3	5	7	A	A-	P	
586	xylosma	*Xylosma congesta*	5, 5.5	15	10	10	10	10	A-	B	P	
587	California pepper	*Schinus molle*	12, 18.4	22	10	15	18	16	B-	B-	P	
588	xylosma	*Xylosma congesta*	3.8, 5, 5.8	15	8	14	15	13	A-	B+	P	

TABLE 9 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE PRESERVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form
589	western redbud	*Cercis occidentalis*	2, 2	8	5	5	5	5	A	A-	P	
590	California pepper	*Schinus molle*	21.5, 20.5	28	25	25	21	15	B	B	P	
591	desert willow	*x Chitalpa tashkentensis*	3.1	14	6	5	6	9	B	B-	P	
593	xylosma	*Xylosma congesta*	2.3, 6.4, 4.5	16	12	6	12	12	B+	B	P	
594	xylosma	*Xylosma congesta*	2, 4, 5	15	11	10	12	15	B+	B	P	
596	California pepper	*Schinus molle*	20	22	15	20	18	15	B	B-	P	
597	xylosma	*Xylosma congesta*	3.8, 6.4	15	15	10	10	15	A-	B+	P	
598	California pepper	*Schinus molle*	12.9, 16, 7.4	28	10	17	15	15	B	B-	P	
599	California pepper	*Schinus molle*	10, 15, 10.3, 25.2	35	18	18	21	23	B	B-	P	
600	xylosma	*Xylosma congesta*	7, 11	16	12	12	17	15	A-	B+	P	
601	desert willow	*x Chitalpa tashkentensis*	2.5, 2.5, 2, 2, 1, 1, 1, 1, 3	12	6	6	6	6	B	B	P	
602	desert willow	*x Chitalpa tashkentensis*	3	15	8	6	8	6	B+	B+	P	

TABLE 9 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE PRESERVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form
603	western redbud	*Cercis occidentalis*	1, 1, 1, 1, 1, 1, 1, 2, 2, 2, 2.5, 2.8	11	5	5	5	5	A	A-	P	
604	western redbud	*Cercis occidentalis*	1, 1, 1, 1, 1, 1, 1, 1, 1, 1.5, 1.5, 1.5, 1.5, 2	10	9	4	5	4	A	A-	P	
605	western redbud	*Cercis occidentalis*	.5, .5, 1, 1, 1, 2, 2.2	12	6	4	5	4	A	A-	P	
606	Chinese elm	*Ulmus parvifolia*	5, 4.4, 7.3, 7.6, 5.5, 4.4, 6.4, 7.8, 7.5	18	6	15	15	10	A	C	P	
607	red river gum	*Eucalyptus camaldulensis*	.5, .5, 1	12	4	5	0	3	A	B	P	
608	red river gum	*Eucalyptus camaldulensis*	.5, 1, 1, 1.5, 1	14	4	5	3	0	A	B	P	
609	red river gum	*Eucalyptus camaldulensis*	2, 2, 3.5, 4, 4.2	17	10	8	10	8	A	B	P	

As listed, a total of 197 non-protected trees and hedge-form trees will be preserved.

TABLE 10 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY PALMS AND OTHER TREE-LIKE MONOCOTS TO BE PRESERVED

Tree ID No.	Common Name	Botanical Name	Brown Trunk Ht. (Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)
554	sago palm	*Cycas revoluta*	2	6	4	4	4	4	A	A	P

As listed, one palm tree will be preserved in the onsite landscape to remain.

TABLE 11 - PROTECTED TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Reason for Removal	Replacement Ratio
9	western sycamore	*Platanus racemosa*	17.7	35	21	25	13	25	B+	B-	P	Parking lot reconfiguration	4:1
127	western sycamore	*Platanus racemosa*	22.3	40	15	12	7	8	A-	B-	P	Grading / new building(s)	4:1
128	western sycamore	*Platanus racemosa*	21.3	40	14	6	6	14	A-	B-	P	Grading / new building(s)	4:1
143	coast live oak	*Quercus agrifolia*	4.2	16	16	16	0	0	B-	C	NO	Grading / new building(s)	4:1
152	coast live oak	*Quercus agrifolia*	3, .5, .5, .5, .5, .25, .25, .25, .25, .25, .25	8	5	3	4	4	B	B-	NO	Grading / new building(s)	4:1
153	coast live oak	*Quercus agrifolia*	3, 6.9	25	15	10	8	10	A-	B	P	Grading / new building(s)	4:1

TABLE 11 - PROTECTED TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Reason for Removal	Replacement Ratio
157	coast live oak	*Quercus agrifolia*	6	8	5	2	4	5	C	C-	P	Grading / new building(s)	4:1
293	coast live oak	*Quercus agrifolia*	23	25	0	27	26	24	B	B-	P	Grading / new building(s)	4:1
295	coast live oak	*Quercus agrifolia*	6, 17	40	17	21	12	18	B+	B	P	Grading / new building(s)	4:1
296	coast live oak	*Quercus agrifolia*	19.6	40	15	18	19	8	B+	B	P	Grading / new building(s)	4:1
302	coast live oak	*Quercus agrifolia*	9.6	20	27	0	0	0	A-	B-	P	Grading / new building(s)	4:1
305	coast live oak	*Quercus agrifolia*	17.5	30	20	16	0	7	A-	B	P	Grading / new building(s)	4:1
317	coast live oak	*Quercus agrifolia*	8.7	18	6	10	7	8	B	B-	P	Grading / new building(s)	4:1
318	coast live oak	*Quercus agrifolia*	7, 12.5	25	18	15	10	0	A-	B	P	Grading / new building(s)	4:1
322	coast live oak	*Quercus agrifolia*	17	35	15	23	7	15	B	C	P	Grading / new building(s)	4:1
324	coast live oak	*Quercus agrifolia*	4.7	15	6	4	12	10	B+	B+	NO	Grading / new building(s)	4:1
326	coast live oak	*Quercus agrifolia*	24.2	40	21	23	13	15	A-	B	P	Grading / new building(s)	4:1

TABLE 11 - PROTECTED TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Reason for Removal	Replacement Ratio
332	coast live oak	*Quercus agrifolia*	6.2, 12.6	30	0	17	22	17	B	B	P	Grading / new building(s)	4:1
333	coast live oak	*Quercus agrifolia*	15	30	3	17	15	12	B	B	P	Grading / new building(s)	4:1
334	coast live oak	*Quercus agrifolia*	10.4, 12.3	32	20	24	13	0	B	B	P	Grading / new building(s)	4:1
342	coast live oak	*Quercus agrifolia*	7.5	28	0	0	0	27	B	B-	P	Grading / new building(s)	4:1
344	coast live oak	*Quercus agrifolia*	4.9	18	22	0	0	0	B	B-	NO	Grading / new building(s)	4:1
345	coast live oak	*Quercus agrifolia*	7.1, 10.6	30	10	5	8	21	B-	B-	P	Grading / new building(s)	4:1
346	coast live oak	*Quercus agrifolia*	10.6	30	15	12	3	6	B	B-	P	Grading / new building(s)	4:1
347	coast live oak	*Quercus agrifolia*	9.2	25	0	0	14	8	B	B	P	Grading / new building(s)	4:1
348	coast live oak	*Quercus agrifolia*	9.7	25	0	11	13	12	B	B	P	Grading / new building(s)	4:1
350	coast live oak	*Quercus agrifolia*	8	22	11	5	15	13	B	B	P	Grading / new building(s)	4:1

TABLE 11 - PROTECTED TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Reason for Removal	Replacement Ratio
351	coast live oak	*Quercus agrifolia*	5.7	18	22	22	0	0	B	B	NO	Grading / new building(s)	4:1
352	coast live oak	*Quercus agrifolia*	10	35	25	25	0	0	B+	B-	P	Grading / new building(s)	4:1
353	coast live oak	*Quercus agrifolia*	13.4	32	18	8	0	0	A-	B	P	Grading / new building(s)	4:1
354	coast live oak	*Quercus agrifolia*	10.8	28	21	0	0	15	A-	B-	P	Grading / new building(s)	4:1
355	coast live oak	*Quercus agrifolia*	10.6	25	20	7	0	8	B+	B	P	Grading / new building(s)	4:1
356	coast live oak	*Quercus agrifolia*	9.5	25	30	0	0	0	B	B-	P	Grading / new building(s)	4:1
358	coast live oak	*Quercus agrifolia*	10.8	30	25	8	3	13	B-	C+	P	Grading / new building(s)	4:1
402	coast live oak	*Quercus agrifolia*	19	25	22	24	14	12	B	B	P	Grading / new building(s)	4:1
403	coast live oak	*Quercus agrifolia*	18.8	24	21	15	28	14	B	B	P	Grading / new building(s)	4:1
404	coast live oak	*Quercus agrifolia*	17	24	18	18	17	7	B	B	P	Grading / new building(s)	4:1
405	toyon	*Heteromeles arbutifolia*	1.5, 1, .5, .5, 1, .5	8	2	5	5	6	A	B+	P	Grading / new building(s)	4:1

TABLE 11 - PROTECTED TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Reason for Removal	Replacement Ratio
408	coast live oak	*Quercus agrifolia*	21.3	25	21	21	25	25	B	B-	P	Grading / new building(s)	4:1

As listed, 39 Protected trees are proposed for removal due to grading and new building construction.

In **Table 12**, replacement ratio is not included, as there is no defined ratio for replacement of non-protected trees in the area of Los Angeles.

TABLE 12 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
1	American sweetgum	*Liquidambar styraciflua*	15.3	30	12	13	10	4	B+	B	P		Parking lot reconfiguration
2	American sweetgum	*Liquidambar styraciflua*	11	32	5	8	12	6	C-	C-	P		Parking lot reconfiguration
3	American sweetgum	*Liquidambar styraciflua*	10.5	25	8	6	3	5	B-	B-	P		Parking lot reconfiguration
4	American sweetgum	*Liquidambar styraciflua*	5.7	15	8	0	3	5	C	C	P		Parking lot reconfiguration
5	Canary Island pine	*Pinus canariensis*	26.5	50	13	14	14	14	A	B	P		Parking lot reconfiguration

TABLE 12 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
6	Canary Island pine	*Pinus canariensis*	34.2	60	17	17	13	13	A	B	P		Parking lot reconfiguration
7	Canary Island pine	*Pinus canariensis*	34.1	60	16	10	18	17	B+	B	P		Parking lot reconfiguration
8	Canary Island pine	*Pinus canariensis*	23	60	10	16	15	5	B	B	P		Parking lot reconfiguration
10	Canary Island pine	*Pinus canariensis*	20.7	70	11	11	10	6	A-	B	P		Parking lot reconfiguration
11	Canary Island pine	*Pinus canariensis*	22	70	15	8	10	15	A-	B	P		Parking lot reconfiguration
12	Canary Island pine	*Pinus canariensis*	23.8	70	12	12	10	13	A-	B	P		Parking lot reconfiguration
13	Canary Island pine	*Pinus canariensis*	25	70	10	10	10	6	A-	B	P		Parking lot reconfiguration
14	Canary Island pine	*Pinus canariensis*	25.5	70	6	13	12	12	A-	B	P		Parking lot reconfiguration
15	Canary Island pine	*Pinus canariensis*	20.7	70	10	10	12	10	A-	B	P		Parking lot reconfiguration
16	Japanese maple	*Acer palmatum*	2.3, 5.8, 3, 3.8	16	12	25	12	14	A-	B-	P		Parking lot reconfiguration
17	Canary Island pine	*Pinus canariensis*	23	70	10	10	12	6	A-	B	P		Parking lot reconfiguration

TABLE 12 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
18	Brisbane box	*Lophostemon confertus*	8.8, 7	30	3	13	12	11	A	B-	P		Parking lot reconfiguration
19	Brisbane box	*Lophostemon confertus*	6.2, 7.7	18	7	5	13	25	A-	B	P		New grading around existing building
20	Brisbane box	*Lophostemon confertus*	13.6	25	5	12	13	18	A-	B	P		New grading around existing building
21	Brisbane box	*Lophostemon confertus*	9.9	30	10	8	10	10	A-	B	P		New grading around existing building
22	Brisbane box	*Lophostemon confertus*	11	28	8	10	14	15	A-	B-	P		New grading around existing building
23	Brisbane box	*Lophostemon confertus*	12.7	25	5	10	13	11	A-	B	P		New grading around existing building
24	Brisbane box	*Lophostemon confertus*	13.9	22	5	16	13	10	B+	B	P		New grading around existing building
25	Brisbane box	*Lophostemon confertus*	11.5	25	4	8	10	12	A-	B-	P		Grading / new building
26	Brisbane box	*Lophostemon confertus*	10	25	6	8	10	8	A-	B-	P		Grading / new building
27	Brisbane box	*Lophostemon confertus*	9	25	6	9	12	8	A-	B-	P		Grading / new building
28	Brisbane box	*Lophostemon confertus*	9.1	25	6	7	12	7	A-	B-	P		Grading / new building
29	Brisbane box	*Lophostemon confertus*	10.7	25	8	8	12	12	A-	B-	P		Grading / new building

TABLE 12 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
30	Brisbane box	*Lophostemon confertus*	12.4	25	6	10	12	10	A-	B-	P		Grading / new building
31	Brisbane box	*Lophostemon confertus*	12.1	25	8	17	13	7	A-	B-	P		Grading / new building
32	Canary Island pine	*Pinus canariensis*	30.7	70	13	13	13	13	B	B	P		Parking lot reconfiguration
33	Canary Island pine	*Pinus canariensis*	21.9	70	10	5	10	10	B	B	P		Parking lot reconfiguration
34	Canary Island pine	*Pinus canariensis*	22	70	6	8	14	14	B	B	P		Parking lot reconfiguration
35	Canary Island pine	*Pinus canariensis*	27.2	70	18	13	6	8	B	B	P		Parking lot reconfiguration
36	carrotwood	*Cupaniopsis anacardioides*	3	18	7	6	5	8	A	A-	P		Parking lot reconfiguration
37	Canary Island pine	*Pinus canariensis*	34.4	70	18	15	15	15	B	B	P		Parking lot reconfiguration
38	carrotwood	*Cupaniopsis anacardioides*	8.6	24	12	8	15	15	A	B	P		Parking lot reconfiguration
39	purple-leaf plum	*Prunus cerasifera*	6.1	18	13	8	11	11	A	B+	P		Parking lot reconfiguration
40	Canary Island pine	*Pinus canariensis*	26.5	70	17	12	12	15	B	B	P		Parking lot reconfiguration
41	Canary Island pine	*Pinus canariensis*	20.3	70	10	13	10	3	B	B	P		Parking lot reconfiguration

TABLE 12 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
42	rusty leaf fig	*Ficus rubiginosa*	21	30	18	19	15	16	A	B+	P		Front entrance reconfiguration
43	rusty leaf fig	*Ficus rubiginosa*	20	30	18	12	16	15	A	B+	P		Front entrance reconfiguration
44	rusty leaf fig	*Ficus rubiginosa*	21.3	30	18	22	16	10	A	B+	P		Front entrance reconfiguration
45	rusty leaf fig	*Ficus rubiginosa*	27.3	30	20	17	18	20	A	B+	P		Front entrance reconfiguration
46	paperbark	*Melaleuca quinquenervia*	5.6	20	8	11	3	0	A-	A-	P		Grading / new building
47	paperbark	*Melaleuca quinquenervia*	7.5	24	5	10	7	3	A	A-	P		Grading / new building
48	kurrajong	*Brachychiton populneus*	6	15	5	7	8	3	B+	B	P		Grading / new building
49	kurrajong	*Brachychiton populneus*	7.5	12	3	2	8	3	B	C	P		Grading / new building
50	kurrajong	*Brachychiton populneus*	8.1	15	5	5	7	6	B+	B	P		Grading / new building
51	kurrajong	*Brachychiton populneus*	10.1	18	10	6	8	7	B+	B+	P		Grading / new building
52	strawberry tree	*Arbutus 'Marina'*	10.5	21	14	12	8	8	B	B	P		Grading / new building
53	umbrella tree	*Heptapleurum actinophyllum*	16.5	18	6	4	10	12	A-	B	P		Grading / new building

TABLE 12 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
54	paperbark	*Melaleuca quinquenervia*	16	35	5	7	3	6	A	B	P		Grading / new building
55	paperbark	*Melaleuca quinquenervia*	12.4	30	5	6	0	3	A	B	P		Grading / new building
56	paperbark	*Melaleuca quinquenervia*	14	30	5	5	5	5	A	B	P		Grading / new building
57	paperbark	*Melaleuca quinquenervia*	9	25	6	3	5	7	A	B	P		Grading / new building
58	paperbark	*Melaleuca quinquenervia*	15, 15.4	30	6	6	6	10	A	B	P		Grading / new building
59	Australian brush cherry	*Syzygium australe*	1, 1	10	3	3	3	3	A	B+	P		Grading / new building
60	Australian brush cherry	*Syzygium australe*	1.5, 1	10	3	4	3	3	A	B+	P		Grading / new building
61	Australian brush cherry	*Syzygium australe*	1, 1.5	10	3	3	3	3	A	B+	P		Grading / new building
62	Australian brush cherry	*Syzygium australe*	1, 1	10	3	3	3	3	A	B+	P		Grading / new building
63	strawberry tree	*Arbutus 'Marina'*	3.3	15	7	3	4	7	A	B	P		New basecamp area
64	strawberry tree	*Arbutus 'Marina'*	2.7	16	7	3	6	5	A	A-	P		New basecamp area
65	paperbark	*Melaleuca quinquenervia*	17	30	10	6	10	10	A-	B+	P		Grading / new building

TABLE 12 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
66	paperbark	*Melaleuca quinquenervia*	15.4	30	12	7	7	10	A-	B	P		Grading / new building
67	paperbark	*Melaleuca quinquenervia*	15.8	30	10	6	7	8	A-	B+	P		Grading / new building
68	paperbark	*Melaleuca quinquenervia*	20.5	30	7	7	7	7	A-	B+	P		Grading / new building
69	weeping fig	*Ficus benjamina*	12.2	20	13	12	12	12	A	B	P		Road/access realignment
70	weeping fig	*Ficus benjamina*	12	20	12	12	12	12	B+	B	P		Road/access realignment
71	strawberry tree	*Arbutus 'Marina'*	2.6, 3.6, 2.5	12	6	6	5	6	A	A-	P		Road/access realignment
72	strawberry tree	*Arbutus 'Marina'*	2.6	10	6	5	4	4	A	B	P		Road/access realignment
81	Canary Island pine	*Pinus canariensis*	28.4	55	12	15	16	12	B+	B	P		Front entrance reconfiguration
82	Canary Island pine	*Pinus canariensis*	18.5	50	11	7	9	11	A-	B	P		Front entrance reconfiguration
83	kurrajong	*Brachychiton populneus*	11.3	18	9	11	8	7	B	B	P		Front entrance reconfiguration
84	kurrajong	*Brachychiton populneus*	13.1	20	5	6	10	8	B-	B	P		Front entrance reconfiguration

TABLE 12 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
85	American sweetgum	*Liquidambar styraciflua*	11.3	30	8	12	8	6	A	B-	P		Front entrance reconfiguration
86	American sweetgum	*Liquidambar styraciflua*	11.4	30	10	4	10	8	A	B-	P		Front entrance reconfiguration
87	Canary Island pine	*Pinus canariensis*	28.8	55	12	12	15	13	A-	B	P		Front entrance reconfiguration
88	Canary Island pine	*Pinus canariensis*	28	60	14	9	9	9	A-	B	P		Front entrance reconfiguration
89	Canary Island pine	*Pinus canariensis*	24.3	55	8	7	12	14	A-	B	P		Front entrance reconfiguration
90	Japanese maple	*Acer palmatum*	2, 3, 1.5, 3.1, 3.5, 5	14	8	10	8	5	A-	B-	P		Front entrance reconfiguration
91	American sweetgum	*Liquidambar styraciflua*	7	30	8	6	8	10	B	B	P		Front entrance reconfiguration
92	American sweetgum	*Liquidambar styraciflua*	8.7	28	10	6	8	10	B+	B-	P		Front entrance reconfiguration
93	American sweetgum	*Liquidambar styraciflua*	9	20	5	3	10	10	B	B-	P		Front entrance reconfiguration
94	crape myrtle	*Lagerstroemia indica*	2, 2, 2.7, 3, 2.3, 2.5	16	8	6	9	8	B	B	P		Front entrance reconfiguration

TABLE 12 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
95	crape myrtle	*Lagerstroemia indica*	1, 1, 1.2, 1.2, 1.2, 1.3	10	6	5	3	7	B	B	P		Front entrance reconfiguration
96	purple-leaf plum	*Prunus cerasifera*	4.2, 4.1, 5.3	15	2	6	7	3	B	C	P		Grading / new building
97	strawberry tree	*Arbutus 'Marina'*	2.2	10	4	3	3	5	C	C	P		Road/access realignment
98	strawberry tree	*Arbutus 'Marina'*	3.2	12	5	6	5	6	A	B	P		Road/access realignment
123	Brisbane box	*Lophostemon confertus*	4.7, 7	20	10	7	3	4	B	B-	P		Grading / new building(s)
124	Brisbane box	*Lophostemon confertus*	11.7	25	21	5	0	11	A-	B	P		Grading / new building(s)
125	Brisbane box	*Lophostemon confertus*	9.6	25	15	8	5	13	A-	B	P		Grading / new building(s)
126	California pepper	*Schinus molle*	14.5, 34.6, 12.2	28	15	15	17	18	B	C+	P		Grading / new building(s)
129	Japanese maple	*Acer palmatum*	2	10	4	5	6	4	B	B	P		Grading / new building(s)
131	Shamel ash	*Fraxinus uhdei*	32.4	42	23	21	24	24	A	B	P		Grading / new building(s)

TABLE 12 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
132	Shamel ash	*Fraxinus uhdei*	33.5	44	17	15	15	15	A-	B	P		Grading / new building(s)
133	Shamel ash	*Fraxinus uhdei*	38	55	15	15	15	15	A-	B	P		Grading / new building(s)
134	blackwood acacia	*Acacia melanoxylon*	4.5	22	12	2	3	12	A	B-	P		Grading / new building(s)
135	blackwood acacia	*Acacia melanoxylon*	3.8	20	17	0	0	0	B+	B-	P		Grading / new building(s)
136	blackwood acacia	*Acacia melanoxylon*	4.8	22	10	5	5	6	B	B-	P		Grading / new building(s)
137	blackwood acacia	*Acacia melanoxylon*	11	30	3	2	15	22	B	B-	P		Grading / new building(s)
138	blackwood acacia	*Acacia melanoxylon*	10	30	2	0	20	20	B	B-	P		Grading / new building(s)
139	blackwood acacia	*Acacia melanoxylon*	9.8	28	3	8	23	7	B	B-	P		Grading / new building(s)
140	Shamel ash	*Fraxinus uhdei*	32	55	12	10	15	15	A-	B	P		Grading / new building(s)
142	weeping boer-bean	*Schotia brachypetala*	12	25	26	15	8	15	B+	B	P		Grading / new building(s)
144	weeping boer-bean	*Schotia brachypetala*	7.1, 5.2, 4.8	16	18	20	6	15	A	B-	P		Grading / new building(s)

TABLE 12 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
145	Texas privet	*Ligustrum japonicum 'texanum'*	2, 2.8, 3, 2.5, 3	18	6	8	8	6	A	B+	P		Grading / new building(s)
146	weeping bottlebrush	*Callistemon viminalis*	1.2, 1.2, 2.5, 2	8	3	4	8	4	B+	C	P		Grading / new building(s)
147	Shamel ash	*Fraxinus uhdei*	24.4, 24, 20.2, 19	50	17	14	18	15	B+	B	P		Grading / new building(s)
148	weeping bottlebrush	*Callistemon viminalis*	1, 1.2, 1.2, 2, 1.5	12	5	5	6	4	B+	B	P		Grading / new building(s)
149	carob	*Ceratonia siliqua*	23.2	25	8	17	16	18	B+	B-	P		Grading / new building(s)
150	silk oak	*Grevillea robusta*	29.5	60	14	11	11	11	B-	C+	P		Grading / new building(s)
151	red river gum	*Eucalyptus camaldulensis*	32	50	12	15	12	14	B	B	P		Grading / new building(s)
154	Texas privet	*Ligustrum japonicum 'texanum'*	7.6, 7.4	20	10	8	8	5	B-	B-	P		Grading / new building(s)
155	blackwood acacia	*Acacia melanoxylon*	2	12	3	3	3	3	A	A	P		Grading / new building(s)
156	blackwood acacia	*Acacia melanoxylon*	14.3, 1.5	32	5	12	8	5	A-	B	P		Grading / new building(s)

TABLE 12 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
158	Texas privet	*Ligustrum japonicum 'texanum'*	8.3, 7.3	28	9	7	16	13	B+	B-	P		Grading / new building(s)
159	Texas privet	*Ligustrum japonicum 'texanum'*	9.4	28	3	8	16	5	B	B-	P		Grading / new building(s)
160	red river gum	*Eucalyptus camaldulensis*	21.3	50	7	15	15	8	B	B	P		Grading / new building(s)
161	Texas privet	*Ligustrum japonicum 'texanum'*	4.8, 9.3, 5.7, 5.5, 6.9	28	6	8	8	8	B	C	P		Grading / new building(s)
162	holly leaf cherry	*Prunus ilicifolia*	9, 7.4	24	18	15	7	15	A	B-	P		Grading / new building(s)
163	holly leaf cherry	*Prunus ilicifolia*	5	16	2	2	15	10	A	B	P		Grading / new building(s)
164	Shamel ash	*Fraxinus uhdei*	18.7	35	14	23	25	15	B-	B	P		Grading / new building(s)
165	blackwood acacia	*Acacia melanoxylon*	10.4	25	15	0	0	0	B-	C	P		Grading / new building(s)
166	weeping fig	*Ficus benjamina*	3, 5.4, 3.2, 5.5, 2, 2	12	5	5	5	5	A	B	P		Grading / new building(s)

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Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
167	weeping fig	*Ficus benjamina*	1.2, 1.8, 1, 1, 1, 1, 1	10	4	4	4	4	A	B	P		Grading / new building(s)
168	paperbark	*Melaleuca quinquenervia*	17.2, 13, 13.3	32	7	6	7	8	A-	B	P		Grading / new building(s)
169	Carolina cherry	*Prunus caroliniana*	5.8	18	7	3	7	6	A-	B	P		Grading / new building(s)
170	fern pine	*Afrocarpus falcatus*	17.7	30	10	10	15	15	A	B+	P		Grading / new building(s)
171	Carolina cherry	*Prunus caroliniana*	5	8	4	4	4	4	A	B-	P		Grading / new building(s)
172	sweetshade	*Hymenosporum flavum*	13.9	25	9	15	14	10	B	C+	P		Grading / new building(s)
173	paperbark	*Melaleuca quinquenervia*	15.8, 10	40	5	6	7	8	A	B	P		Grading / new building(s)
174	Brisbane box	*Lophostemon confertus*	15	34	13	6	12	14	B	B	P		Grading / new building(s)
175	xylosma	*Xylosma congesta*	1, 1.2, 2.2, 2, 1, 1	8	5	1	6	7	A	B	P		Grading / new building(s)
176	strawberry tree	*Arbutus 'Marina'*	9.5	20	10	6	10	10	A-	B	P		Grading / new building(s)

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177	American sweetgum	*Liquidambar styraciflua*	13	25	12	8	12	15	B	B	P		Grading / new building(s)
178	paperbark	*Melaleuca quinquenervia*	16	32	10	4	10	10	B+	B	P		Grading / new building(s)
179	paperbark	*Melaleuca quinquenervia*	12.8	30	4	7	6	3	B	B	P		Grading / new building(s)
180	Australian willow	*Geijera parviflora*	7.7, 7.5	20	7	14	12	12	B	B-	P		Grading / new building(s)
181	Chinese elm	*Ulmus parvifolia*	21	40	28	30	25	25	B-	B-	P		Grading / new building(s)
182	white birch	*Betula pendula*	4.2	22	6	6	9	8	B	B	P		Grading / new building(s)
183	Indian laurel fig	*Ficus microcarpa*	12, 21	40	12	20	12	13	A-	B	P		Grading / new building(s)
184	crape myrtle	*Lagerstroemia indica*	5.3	20	12	10	12	13	B	B	P		Grading / new building(s)
185	Chinese elm	*Ulmus parvifolia*	18.5	35	10	15	32	25	B	B	P		Grading / new building(s)
186	Brisbane box	*Lophostemon confertus*	15.3	30	10	15	12	8	A-	B	P		Grading / new building(s)
187	fern pine	*Afrocarpus falcatus*	26.3	50	13	13	13	11	B	C	P		Grading / new building(s)
188	paperbark	*Melaleuca quinquenervia*	11.9	32	8	6	8	11	B	B	P		Grading / new building(s)

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189	Chinese elm	*Ulmus parvifolia*	17.6	30	20	25	20	20	B	C+	P		Grading / new building(s)
190	American elm	*Ulmus americana*	22.3	30	8	10	14	12	B	C-	P		Grading / new building(s)
191	sycamore hybrid	*Platanus x*	20.8	45	21	16	21	18	B+	B	P		Grading / new building(s)
192	ginkgo	*Ginkgo biloba*	11.4	22	12	10	10	12	B	B	P		Grading / new building(s)
193	guava	*Psidium guajava*	2.2, 4, 3.1, 2.7, 2.6	10	6	3	4	5	B-	B-	P		Grading / new building(s)
194	crape myrtle	*Lagerstroemia indica*	6.2	16	8	10	10	9	B	B	P		Grading / new building(s)
195	white birch	*Betula pendula*	12.1	26	12	10	7	18	B	B	P		Grading / new building(s)
196	Moreton Bay fig	*Ficus macrophylla*	43.8	33	10	11	15	12	A-	B-	P		Grading / new building(s)
197	American sweetgum	*Liquidambar styraciflua*	12.7	34	12	10	8	8	B	B-	P		Grading / new building(s)
198	American sweetgum	*Liquidambar styraciflua*	7.8	22	12	5	5	10	B	B-	P		Grading / new building(s)
199	American sweetgum	*Liquidambar styraciflua*	7.7	24	12	6	7	8	B	B-	P		Grading / new building(s)

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200	paperbark	*Melaleuca quinquenervia*	16	35	6	7	6	7	A-	B+	P		Grading / new building(s)
201	paperbark	*Melaleuca quinquenervia*	20.1	34	6	11	7	7	A-	B	P		Grading / new building(s)
202	Indian laurel fig	*Ficus microcarpa*	2, 2.5, 2, 2	14	2	3	4	2	A	B	P		Grading / new building(s)
203	Shamel ash	*Fraxinus uhdei*	48.8	55	28	28	18	17	A-	B	P		Grading / new building(s)
204	Indian laurel fig	*Ficus microcarpa*	16.4	20	15	10	18	22	A	B	P		Grading / new building(s)
205	Indian laurel fig	*Ficus microcarpa*	1, 1, 1, 1, 1	6	3	5	4	4	A-	B-	P		Grading / new building(s)
206	Indian laurel fig	*Ficus microcarpa*	1.5	12	0	0	10	4	B	B-	P		Grading / new building(s)
207	Indian laurel fig	*Ficus microcarpa*	4.7, 4.9, 5.3, 5.4, 3.3	28	7	12	14	11	A	B	P		Grading / new building(s)
208	Indian laurel fig	*Ficus microcarpa*	7.5, 5.7	25	7	13	11	10	A-	B	P		Grading / new building(s)
209	Indian laurel fig	*Ficus microcarpa*	5	20	8	7	15	8	A-	B	P		Grading / new building(s)

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210	Indian laurel fig	*Ficus microcarpa*	12	30	8	18	17	13	A	B	P		Grading / new building(s)
211	American sweetgum	*Liquidambar styraciflua*	3.8	18	7	8	9	6	B-	B-	P		Grading / new building(s)
212	xylosma	*Xylosma congesta*	1.2, 1.5	8	3	5	5	8	B+	B	P		Grading / new building(s)
213	xylosma	*Xylosma congesta*	1.8	9	5	3	5	10	B+	B	P		Grading / new building(s)
214	xylosma	*Xylosma congesta*	1, 1.2, 1.8, 1	9	5	7	8	8	B+	B	P		Grading / new building(s)
215	crape myrtle	*Lagerstroemia indica*	3.1	18	12	4	5	4	B	B	P		Grading / new building(s)
216	Indian laurel fig	*Ficus microcarpa*	10	25	17	18	15	18	B	B	P		Grading / new building(s)
217	Fremont cottonwood	*Populus fremontii*	18.6	44	7	17	14	14	B	B-	P		Grading / new building(s)
218	Aleppo pine	*Pinus halepensis*	16.5	20	13	14	15	6	B	C-	P		Grading / new building(s)
219	Arizona cypress	*Hesperocyparis arizonica*	2.1, 3.2	10	6	0	7	12	A-	B-	P		Grading / new building(s)
220	xylosma	*Xylosma congesta*	1, 1.5, 2	14	6	8	7	8	B	B	P		Grading / new building(s)
221	fern pine	*Afrocarpus falcatus*	6.1	20	6	10	13	8	B	B	P		Grading / new building(s)

TABLE 12 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
222	Fremont cottonwood	*Populus fremontii*	20.8	45	10	8	12	14	B	B-	P		Grading / new building(s)
223	Fremont cottonwood	*Populus fremontii*	24.4	40	10	13	25	10	B	B-	P		Grading / new building(s)
224	Fremont cottonwood	*Populus fremontii*	1, 1, .5	10	3	4	4	5	A	A	P		Grading / new building(s)
225	Italian cypress	*Cupressus sempervirens*	10.2	42	5	5	5	5	A	B+	P		Grading / new building(s)
226	white birch	*Betula pendula*	6.4	20	6	3	10	15	B	B	P		Grading / new building(s)
227	silk oak	*Grevillea robusta*	22.2	38	12	14	17	10	B-	B-	P		Grading / new building(s)
228	Chinese elm	*Ulmus parvifolia*	20	32	30	24	30	25	A-	B+	P		Grading / new building(s)
229	glossy leaf privet	*Ligustrum lucidum*	3.4, 4, 4.1, 6	18	7	7	4	6	A-	B+	P		Grading / new building(s)
230	strawberry tree	*Arbutus 'Marina'*	7.6	20	10	18	14	8	A	B	P		Grading / new building(s)
231	silk oak	*Grevillea robusta*	33.2	46	12	18	13	12	C+	C+	P		Grading / new building(s)
232	Carolina cherry	*Prunus caroliniana*	4.2	15	8	6	3	4	A	B	P		Grading / new building(s)
233	Carolina cherry	*Prunus caroliniana*	5	15	6	5	3	5	A	B	P		Grading / new building(s)

TABLE 12 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
234	American sweetgum	*Liquidambar styraciflua*	13.1	30	10	12	8	12	B	B-	P		Grading / new building(s)
235	Carolina cherry	*Prunus caroliniana*	5.8	16	3	5	7	5	A	B	P		Grading / new building(s)
236	Carolina cherry	*Prunus caroliniana*	5.3	15	3	5	7	5	A	B	P		Grading / new building(s)
237	Carolina cherry	*Prunus caroliniana*	3, 3.4	14	5	5	3	1	A	B	P		Grading / new building(s)
238	Carolina cherry	*Prunus caroliniana*	4.1	12	4	4	3	1	A	B	P		Grading / new building(s)
239	Carolina cherry	*Prunus caroliniana*	5	15	3	5	5	1	A	B	P		Grading / new building(s)
240	Carolina cherry	*Prunus caroliniana*	4	14	4	5	4	1	A	B	P		Grading / new building(s)
241	camphor	*Cinnamomum camphora*	13.8	32	22	10	18	21	B	B	P		Grading / new building(s)
242	carrotwood	*Cupaniopsis anacardioides*	22	30	13	13	13	13	A-	B-	P		Grading / new building(s)
243	kurrajong	*Brachychiton populneus*	13.8	25	15	12	2	15	A	B	P		Grading / new building(s)
244	kurrajong	*Brachychiton populneus*	13.6	30	6	3	13	18	A	B	P		Grading / new building(s)
245	carrotwood	*Cupaniopsis anacardioides*	18	30	15	12	12	12	A	B+	P		Grading / new building(s)

TABLE 12 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
246	jacaranda	*Jacaranda mimosifolia*	12.1, 13.1	32	12	15	27	21	A	B	P		Grading / new building(s)
247	jacaranda	*Jacaranda mimosifolia*	10.8, 16.2	30	15	8	14	22	A-	B	P		Grading / new building(s)
248	carrotwood	*Cupaniopsis anacardioides*	15.2	28	13	12	10	10	A	B	P		Grading / new building(s)
249	kurrajong	*Brachychiton populneus*	9	18	5	3	3	4	B-	C	P		Grading / new building(s)
250	kurrajong	*Brachychiton populneus*	16.8	25	7	3	12	12	B+	B-	P		Grading / new building(s)
251	kurrajong	*Brachychiton populneus*	4.2, 6.3, 6.5	14	7	7	11	7	A-	B	P		Grading / new building(s)
252	jacaranda	*Jacaranda mimosifolia*	19.2	22	12	10	20	20	B	B-	P		Grading / new building(s)
253	purple-leaf plum	*Prunus cerasifera*	2.1	14	4	4	4	4	A	A-	P		Grading / new building(s)
254	paperbark	*Melaleuca quinquenervia*	15.2	35	6	2	3	5	A	B	P		Grading / new building(s)
255	paperbark	*Melaleuca quinquenervia*	20	35	7	4	6	5	A	B	P		Grading / new building(s)
256	paperbark	*Melaleuca quinquenervia*	6.5, 8.6, 6	20	3	6	7	10	A-	B	P		Grading / new building(s)

TABLE 12 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
257	paperbark	*Melaleuca quinquenervia*	15.4, 8.3, 12.2	35	7	9	13	17	A	B	P		Grading / new building(s)
258	paperbark	*Melaleuca quinquenervia*	5, 9.8, 8	30	10	5	5	8	A	B	P		Grading / new building(s)
259	paperbark	*Melaleuca quinquenervia*	12, 16	30	8	6	8	7	A	B	P		Grading / new building(s)
260	paperbark	*Melaleuca quinquenervia*	15, 14.4	28	7	7	5	7	A	B	P		Grading / new building(s)
261	carrotwood	*Cupaniopsis anacardioides*	9.8	18	14	12	10	9	A-	B+	P		Grading / new building(s)
262	paperbark	*Melaleuca quinquenervia*	16	25	10	10	8	9	A	B	P		Grading / new building(s)
263	paperbark	*Melaleuca quinquenervia*	9.2, 10.6	20	6	6	6	8	A	B	P		Grading / new building(s)
264	purple-leaf plum	*Prunus cerasifera*	2.6	12	4	4	4	4	A	B-	P		Grading / new building(s)
278	South African coral tree	*Erythrina caffra*	17, 19, 19	25	10	13	10	7	B-	C-	P		Grading / new building(s)
279	South African coral tree	*Erythrina caffra*	15.7, 14.5, 16, 16	22	10	8	12	9	B-	C-	P		Grading / new building(s)
280	South African coral tree	*Erythrina caffra*	13.3, 11.7,	22	12	2	11	12	B-	C-	P		Grading / new building(s)

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Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
			17.4, 21.4										
281	South African coral tree	*Erythrina caffra*	17, 16.5, 21.5, 16.5	25	7	10	10	12	B-	C-	P		Grading / new building(s)
282	South African coral tree	*Erythrina caffra*	17, 15.7, 16, 17, 13.6, 11, 12.2, 13.5, 19	25	17	12	15	12	B-	C-	P		Grading / new building(s)
283	African sumac	*Searsia lancea*	2.5, 6.1	16	8	8	7	5	A	B+	P		Grading / new building(s)
284	African sumac	*Searsia lancea*	9	16	0	16	0	0	A-	B-	P		Grading / new building(s)
285	Indian laurel fig	*Ficus microcarpa*	16	25	0	15	0	0	A-	B-	P		Grading / new building(s)
286	Indian laurel fig	*Ficus microcarpa*	13.6, 12.5, 13.8	30	15	15	11	8	A-	B	P		Grading / new building(s)
287	Texas privet	*Ligustrum japonicum 'texanum'*	6	20	2	4	10	8	A	B-	P		Grading / new building(s)

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Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
288	Texas privet	*Ligustrum japonicum 'texanum'*	2.3, 3, 4	16	0	5	7	7	A	C	P		Grading / new building(s)
289	Texas privet	*Ligustrum japonicum 'texanum'*	2.8, 3.8, 3.3	20	5	8	10	8	A	B-	P		Grading / new building(s)
290	Texas privet	*Ligustrum japonicum 'texanum'*	5.7, 5.7, 6.5	20	6	6	10	10	A	B-	P		Grading / new building(s)
291	red ironbark	*Eucalyptus sideroxylon*	19.8	45	18	16	22	18	B+	B	P		Grading / new building(s)
292	red ironbark	*Eucalyptus sideroxylon*	8.3	25	2	7	12	20	B+	B-	P		Grading / new building(s)
294	holly oak	*Quercus ilex*	9.7	40	6	16	16	14	B	B	P		Grading / new building(s)
297	Texas privet	*Ligustrum japonicum 'texanum'*	3.5, 4.7	16	7	11	7	10	A-	B	P		Grading / new building(s)
298	Texas privet	*Ligustrum japonicum 'texanum'*	3.5, 5.7	20	4	6	4	6	B	B	P		Grading / new building(s)
299	Texas privet	*Ligustrum japonicum 'texanum'*	4, 5.3	22	12	0	18	7	B	B	P		Grading / new building(s)
300	Texas privet	*Ligustrum japonicum 'texanum'*	2.2, 3.6	16	7	10	18	2	B	B	P		Grading / new building(s)

TABLE 12 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
301	Texas privet	*Ligustrum japonicum 'texanum'*	3, 6.8, 7.6	28	4	8	6	8	B+	B	P		Grading / new building(s)
303	Texas privet	*Ligustrum japonicum 'texanum'*	4	15	7	7	0	0	B+	B	P		Grading / new building(s)
304	holly oak	*Quercus ilex*	6.7, 7.8, 8	30	12	14	13	13	A-	B	P		Grading / new building(s)
306	holly oak	*Quercus ilex*	6.1	28	7	10	5	6	B	B	P		Grading / new building(s)
307	Texas privet	*Ligustrum japonicum 'texanum'*	5.6	14	6	6	6	6	B	B-	P		Grading / new building(s)
308	Texas privet	*Ligustrum japonicum 'texanum'*	6	12	2	0	3	3	B	B-	P		Grading / new building(s)
309	Texas privet	*Ligustrum japonicum 'texanum'*	4	12	0	2	2	4	B	B-	P		Grading / new building(s)
310	Texas privet	*Ligustrum japonicum 'texanum'*	4.9, 3, 5.2	20	10	7	18	13	B	B	P		Grading / new building(s)
311	Texas privet	*Ligustrum japonicum 'texanum'*	3.1, 3.4, 4.2, 4.4	20	15	13	13	7	B	B	P		Grading / new building(s)

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Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
312	Texas privet	*Ligustrum japonicum 'texanum'*	3, 3.2, 3.4	22	0	0	3	3	B	B-	P		Grading / new building(s)
313	blackwood acacia	*Acacia melanoxylon*	13.2	30	7	15	0	0	C	C	P		Grading / new building(s)
314	Tasmanian blue gum	*Eucalyptus globulus*	26.5	50	14	18	17	13	B	B	P		Grading / new building(s)
315	Brisbane box	*Lophostemon confertus*	6.7	18	15	0	0	0	B	C+	P		Grading / new building(s)
316	olive	*Olea europaea*	5.4, 14.2	30	8	10	12	13	B+	B	P		Grading / new building(s)
319	olive	*Olea europaea*	10, 11.4	30	15	13	15	18	A-	B	P		Grading / new building(s)
320	olive	*Olea europaea*	2.9, 3.7, 5.9, 6, 4.4	25	15	7	5	14	B	C+	P		Grading / new building(s)
321	olive	*Olea europaea*	4.4, 5.4, 6.5, 6.5, 8.6, 8.8	25	12	12	22	18	B	B	P		Grading / new building(s)
323	Shamel ash	*Fraxinus uhdei*	17	40	5	14	24	23	B	B	P		Grading / new building(s)

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325	Texas privet	*Ligustrum japonicum 'texanum'*	2.3, 2.6, 2.3, 2.5, 3.2, 3.3, 3.3, 4.2	15	8	7	10	12	B+	B-	P		Grading / new building(s)
327	holly oak	*Quercus ilex*	6.2	18	14	10	7	10	A	B+	P		Grading / new building(s)
328	Texas privet	*Ligustrum japonicum 'texanum'*	2.1, 2.6, 3.7, 4.2, 4.7, 5	20	10	8	7	12	B+	B	P		Grading / new building(s)
329	blackwood acacia	*Acacia melanoxylon*	5.9	15	3	5	12	8	A	B	P		Grading / new building(s)
330	blackwood acacia	*Acacia melanoxylon*	10	12	0	5	4	0	D	D	P		Grading / new building(s)
331	loquat	*Eriobotrya japonica*	2.1, 3	12	7	5	7	8	B	B-	P		Grading / new building(s)
335	coast live oak	*Quercus agrifolia*	2.5	14	0	5	0	0	A	B	NO		Grading / new building(s)
336	coast live oak	*Quercus agrifolia*	3	16	11	3	10	10	A	B	NO		Grading / new building(s)

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337	Shamel ash	*Fraxinus uhdei*	27.5	55	18	22	25	18	B	B+	P		Grading / new building(s)
338	Shamel ash	*Fraxinus uhdei*	13.7	40	12	13	18	13	B	B	P		Grading / new building(s)
339	Texas privet	*Ligustrum japonicum 'texanum'*	2.8, 3.2, 3.5, 5, 5.5	25	3	12	12	8	B	B-	P		Grading / new building(s)
340	carob	*Ceratonia siliqua*	22	35	22	23	18	23	A	B	P		Grading / new building(s)
341	holly oak	*Quercus ilex*	14.3	40	8	10	17	18	B	B	P		Grading / new building(s)
343	holly oak	*Quercus ilex*	2, 2.2	14	0	12	8	0	A-	B	P		Grading / new building(s)
349	coast live oak	*Quercus agrifolia*	2.4	8	8	7	0	3	B	B	NO		Grading / new building(s)
357	coast live oak	*Quercus agrifolia*	3.7	16	12	6	4	12	A-	B	NO		Grading / new building(s)
359	paperbark	*Melaleuca quinquenervia*	5.3	20	7	10	3	3	A-	B+	P		Grading / new building(s)
360	paperbark	*Melaleuca quinquenervia*	5.8	18	7	8	2	4	A-	B+	P		Grading / new building(s)
361	paperbark	*Melaleuca quinquenervia*	5.5	22	7	6	2	5	A-	B+	P		Grading / new building(s)

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362	paperbark	*Melaleuca quinquenervia*	6	25	7	5	2	6	A-	B+	P		Grading / new building(s)
363	Chinese pistache	*Pistacia chinensis*	3.4	16	6	6	6	6	B	B	P		Grading / new building(s)
406	strawberry tree	*Arbutus 'Marina'*	5.7	15	10	8	4	4	A-	B	P		Grading / new building(s)
407	Catalina cherry	*Prunus ilicifolia subsp. lyonii*	3.8, 6.4	15	4	4	8	8	B	C	P		Grading / new building(s)
409	western redbud	*Cercis occidentalis*	1, 1, 1, 1, 1, 1, 1, .5, .5, .5, .5	10	5	6	6	6	A	A	P		Grading / new building(s)
410	Catalina cherry	*Prunus ilicifolia subsp. lyonii*	5, 5.2	15	5	8	8	10	A-	B	P		Grading / new building(s)
411	Aleppo pine	*Pinus halepensis*	20.4	35	17	12	10	12	A-	B	P		Access/road realignment
412	Brisbane box	*Lophostemon confertus*	5.1	24	6	5	3	5	A-	B-	P		Access/road realignment
413	Brisbane box	*Lophostemon confertus*	6.4	24	8	6	6	4	A	B	P		Access/road realignment
416	paperbark	*Melaleuca quinquenervia*	9, 10.2, 15.3	30	6	7	10	4	A-	B+	P		Grading / new building(s)

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417	paperbark	*Melaleuca quinquenervia*	12, 9	30	5	5	5	5	B+	B+	P		Grading / new building(s)
418	paperbark	*Melaleuca quinquenervia*	7.7, 8.7	20	6	6	7	5	A-	B+	P		Grading / new building(s)
419	paperbark	*Melaleuca quinquenervia*	9, 10, 15.2, 14, 12	35	9	8	7	6	A-	B+	P		Grading / new building(s)
420	paperbark	*Melaleuca quinquenervia*	14, 15.5	32	6	4	2	3	A-	B+	P		Grading / new building(s)
421	paperbark	*Melaleuca quinquenervia*	9	25	8	12	3	7	B+	B-	P		Grading / new building(s)
422	paperbark	*Melaleuca quinquenervia*	8.8	35	8	8	8	8	B+	B	P		Grading / new building(s)
423	paperbark	*Melaleuca quinquenervia*	12.7, 13	30	7	16	8	17	B+	B	P		Grading / new building(s)
500	Arizona ash	*Fraxinus velutina*	13	20	15	12	18	18	B	B	P		Access/road realignment
501	paperbark	*Melaleuca quinquenervia*	13.7	30	7	7	9	8	A	B+	P		Access/road realignment
502	paperbark	*Melaleuca quinquenervia*	9.4, 13.7	28	6	6	7	5	A-	B+	P		Access/road realignment
503	Victorian box	*Pittosporum undulatum*	7.8, 9.3	22	17	14	14	12	A-	B	P		Access/road realignment

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504	crape myrtle	*Lagerstroemia indica*	7.6	18	10	10	10	10	A	A-	P		Access/road realignment
505	crape myrtle	*Lagerstroemia indica*	6.3	16	6	8	6	8	A	A-	P		Access/road realignment
512	fern pine	*Afrocarpus falcatus*	8.5, 5.8, 6	20	10	10	10	8	A	B	P		Access/road realignment
513	California ash	*Fraxinus dipetala*	10.7	22	16	12	16	18	B	B-	P		Access/road realignment
514	California ash	*Fraxinus dipetala*	18.3	35	18	15	16	18	A-	B	P		Access/road realignment
515	California ash	*Fraxinus dipetala*	19	28	18	18	18	18	A-	B	P		Access/road realignment
516	Callery pear	*Pyrus calleryana*	9.2	16	14	12	12	12	B	B	P		Access/road realignment
517	Callery pear	*Pyrus calleryana*	9.5	18	13	12	12	13	B	B	P		Access/road realignment
518	Callery pear	*Pyrus calleryana*	9.3	18	10	10	10	8	B	B	P		Access/road realignment
519	California ash	*Fraxinus dipetala*	11.5	25	10	14	17	14	A-	B	P		Access/road realignment
520	California ash	*Fraxinus dipetala*	14.5	25	10	15	15	15	A-	B	P		Access/road realignment
521	California pepper	*Schinus molle*	7.3	14	10	10	6	6	A	B	P		Access/road realignment

TABLE 12 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
522	Brisbane box	*Lophostemon confertus*	4.5, 3.3, 3.2	18	10	12	7	6	B+	B	P		Access/road realignment
523	California ash	*Fraxinus dipetala*	20.3	30	13	22	20	17	B+	B	P		Access/road realignment
524	California ash	*Fraxinus dipetala*	26.6	30	18	18	18	18	A-	B	P		Access/road realignment
525	California ash	*Fraxinus dipetala*	11.5	20	13	15	18	17	B	B	P		Access/road realignment
526	California ash	*Fraxinus dipetala*	17.7	25	13	18	22	16	A-	B	P		Access/road realignment
527	California ash	*Fraxinus dipetala*	14	25	13	12	18	16	B-	B-	P		Access/road realignment
528	California pepper	*Schinus molle*	6.4	14	7	5	7	7	B	B-	P		Access/road realignment
529	Callery pear	*Pyrus calleryana*	9.9	18	13	12	12	11	B	B	P		Access/road realignment
530	Callery pear	*Pyrus calleryana*	7.3	15	8	8	8	12	B	B	P		Access/road realignment
531	California ash	*Fraxinus dipetala*	14.7	25	13	18	27	17	B+	B	P		Access/road realignment
532	California ash	*Fraxinus dipetala*	10	22	13	10	13	13	B+	B	P		Access/road realignment

TABLE 12 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
533	California ash	*Fraxinus dipetala*	17.3	30	18	15	16	18	A-	B	P		Access/road realignment
534	Callery pear	*Pyrus calleryana*	6.5	13	3	3	5	0	B	B	P		Access/road realignment
535	California ash	*Fraxinus dipetala*	15.5	25	16	15	18	15	B	B	P		Access/road realignment
536	California pepper	*Schinus molle*	14.8	22	15	12	12	15	B+	B	P		Access/road realignment
537	Callery pear	*Pyrus calleryana*	7.6	15	10	8	8	10	B	B	P		Access/road realignment
538	California ash	*Fraxinus dipetala*	11.6	25	10	12	12	15	B+	B	P		Access/road realignment
539	California ash	*Fraxinus dipetala*	14.4	20	12	16	13	10	B	B-	P		Access/road realignment
540	California ash	*Fraxinus dipetala*	9	20	4	8	10	12	B	B-	P		Access/road realignment
541	Callery pear	*Pyrus calleryana*	1.5, 1.5	8	5	5	5	5	A	A-	P		Access/road realignment
542	Callery pear	*Pyrus calleryana*	13.1	20	15	15	15	15	A-	B+	P		Access/road realignment
543	Callery pear	*Pyrus calleryana*	6.5	15	6	6	8	7	A	B	P		Access/road realignment
544	Callery pear	*Pyrus calleryana*	1	10	3	3	3	3	A	A-	P		Access/road realignment

TABLE 12 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY TREES TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	DBH (In.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Hedge Form	Reason for Removal
545	California ash	*Fraxinus dipetala*	12.9	22	10	17	13	8	B	B	P		Access/road realignment
546	California ash	*Fraxinus dipetala*	10.6	25	3	6	8	14	B-	B-	P		Access/road realignment
547	Shamel ash	*Fraxinus uhdei*	17.2	25	12	12	13	15	B+	B-	P		Access/road realignment
548	Shamel ash	*Fraxinus uhdei*	16	25	13	13	13	10	B+	B	P		Access/road realignment
549	Callery pear	*Pyrus calleryana*	8.5	16	7	6	4	6	B	B-	P		Access/road realignment

As listed, 341 non-protected trees, in both tree-form and hedge-form, are proposed for removal due to grading, new building construction, and access, driveways, parking lot, and interior roadway realignments.

TABLE 13 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY PALMS AND OTHER TREE-LIKE MONOCOTS TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	Brown Trunk Height (Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Reason For Removal
130	Canary Island date palm	*Phoenix canariensis*	12, 12	25	15	17	10	17	B+	B+	P	Grading / New Building(S)
141	Canary Island date palm	*Phoenix canariensis*	13	22	15	18	15	15	A	B	P	Grading / New Building(S)
379	giant bird of paradise	*Strelitzia nicolai*	2, 2, 3, 3, 2, 4, 4, 5.5	10	4	6	5	6	A	B+	P	Grading / New Building(S)
380	queen palm	*Syagrus romanzoffiana*	12	18	10	6	12	12	A	B+	P	Grading / New Building(S)
381	queen palm	*Syagrus romanzoffiana*	13	20	10	6	10	6	A	B+	P	Grading / New Building(S)
382	queen palm	*Syagrus romanzoffiana*	11	18	10	6	12	6	A	B+	P	Grading / New Building(S)
383	giant bird of paradise	*Strelitzia nicolai*	1, 1, 2, 2, 2, 4, 6	11	3	5	5	5	A	B+	P	Grading / New Building(S)
384	giant bird of paradise	*Strelitzia nicolai*	1, 1, 1, 3, 4	10	3	4	4	2	A	B+	P	Grading / New Building(S)
385	king palm	*Archontophoenix cunninghamiana*	10	15	3	3	3	3	B-	B-	P	Grading / New Building(S)
386	giant bird of paradise	*Strelitzia nicolai*	1, 1, 1, 1, 2, 3, 3, 3, 3, 6	10	5	5	5	5	A	B+	P	Grading / New Building(S)
387	queen palm	*Syagrus romanzoffiana*	10	16	8	8	8	8	A	B+	P	Grading / New Building(S)

TABLE 13 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY PALMS AND OTHER TREE-LIKE MONOCOTS TO BE REMOVED

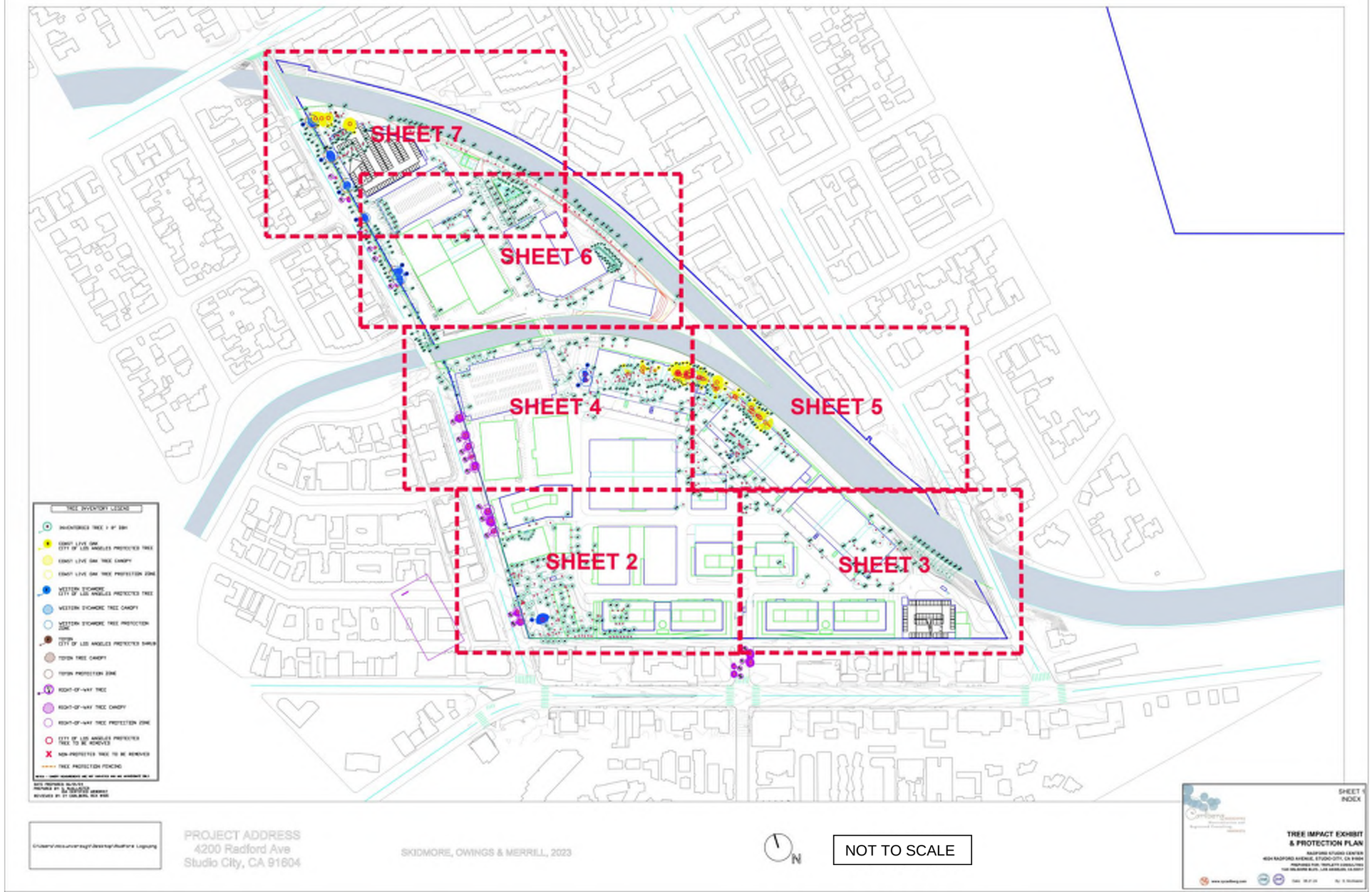
Tree ID No.	Common Name	Botanical Name	Brown Trunk Height (Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Reason For Removal
388	queen palm	*Syagrus romanzoffiana*	10	15	8	10	10	8	A	B+	P	Grading / New Building(S)
389	giant bird of paradise	*Strelitzia nicolai*	1, 1, 1, 2, 2, 2, 7, 8	14	3	6	6	5	A	B+	P	Grading / New Building(S)
390	giant bird of paradise	*Strelitzia nicolai*	1, 1, 1, 2, 3, 4, 4, 7, 7	14	7	5	6	3	A	B+	P	Grading / New Building(S)
391	king palm	*Archontophoenix cunninghamiana*	12	16	7	7	7	7	B	B-	P	Grading / New Building(S)
392	giant bird of paradise	*Strelitzia nicolai*	1, 1, 1, 1, 1, 1, 6, 6	12	5	3	5	5	A	B+	P	Grading / New Building(S)
393	giant bird of paradise	*Strelitzia nicolai*	1, 1, 1, 1, 5, 6	12	4	3	2	6	A	B+	P	Grading / New Building(S)
394	pygmy date palm	*Phoenix roebelenii*	5, 5, 5	8	6	6	3	4	A	A-	P	Grading / New Building(S)
395	queen palm	*Syagrus romanzoffiana*	12	16	10	10	4	10	B+	B+	P	Grading / New Building(S)
396	pygmy date palm	*Phoenix roebelenii*	5	8	5	5	5	5	A	A-	P	Grading / New Building(S)
397	giant bird of paradise	*Strelitzia nicolai*	1, 1, 1, 1, 1, 2, 4, 6	10	6	6	6	4	A	B+	P	Grading / New Building(S)
398	giant bird of paradise	*Strelitzia nicolai*	1, 1, 1, 1, 2, 2, 2, 3, 3, 4, 5	12	6	6	3	6	A	B+	P	Grading / New Building(S)

TABLE 13 - NON-PROTECTED, ONSITE, PRIVATE PROPERTY PALMS AND OTHER TREE-LIKE MONOCOTS TO BE REMOVED

Tree ID No.	Common Name	Botanical Name	Brown Trunk Height (Ft.)	Height (Ft.)	Canopy N (Ft.)	Canopy E (FT.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (NO) or Planted (P) (Opinion)	Reason For Removal
399	king palm	*Archontophoenix cunninghamiana*	13	18	10	10	10	10	A	B	P	Grading / New Building(S)
400	king palm	*Archontophoenix cunninghamiana*	10	16	8	8	8	8	A	B	P	Grading / New Building(S)
401	pygmy date palm	*Phoenix roebelenii*	4, 4	8	4	5	4	6	A	A-	P	Grading / New Building(S)

As listed, 25 palms, cycads, and other tree-form monocots are proposed for removal due to grading and new building construction.

EXHIBIT D – TREE IMPACT EXHIBIT AND PROTECTION PLAN (1/10 SHEETS, this page 11” X 17”)



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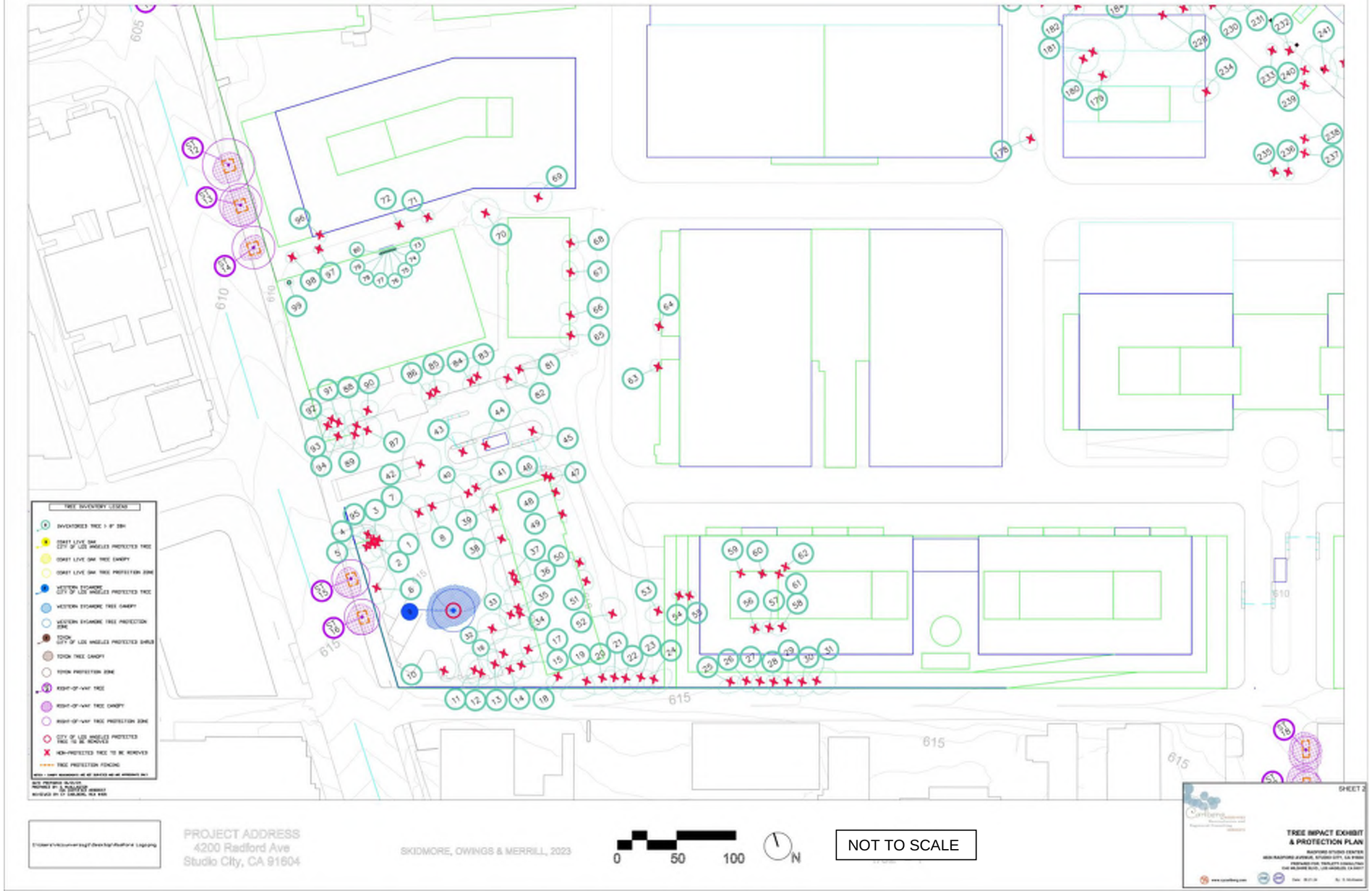

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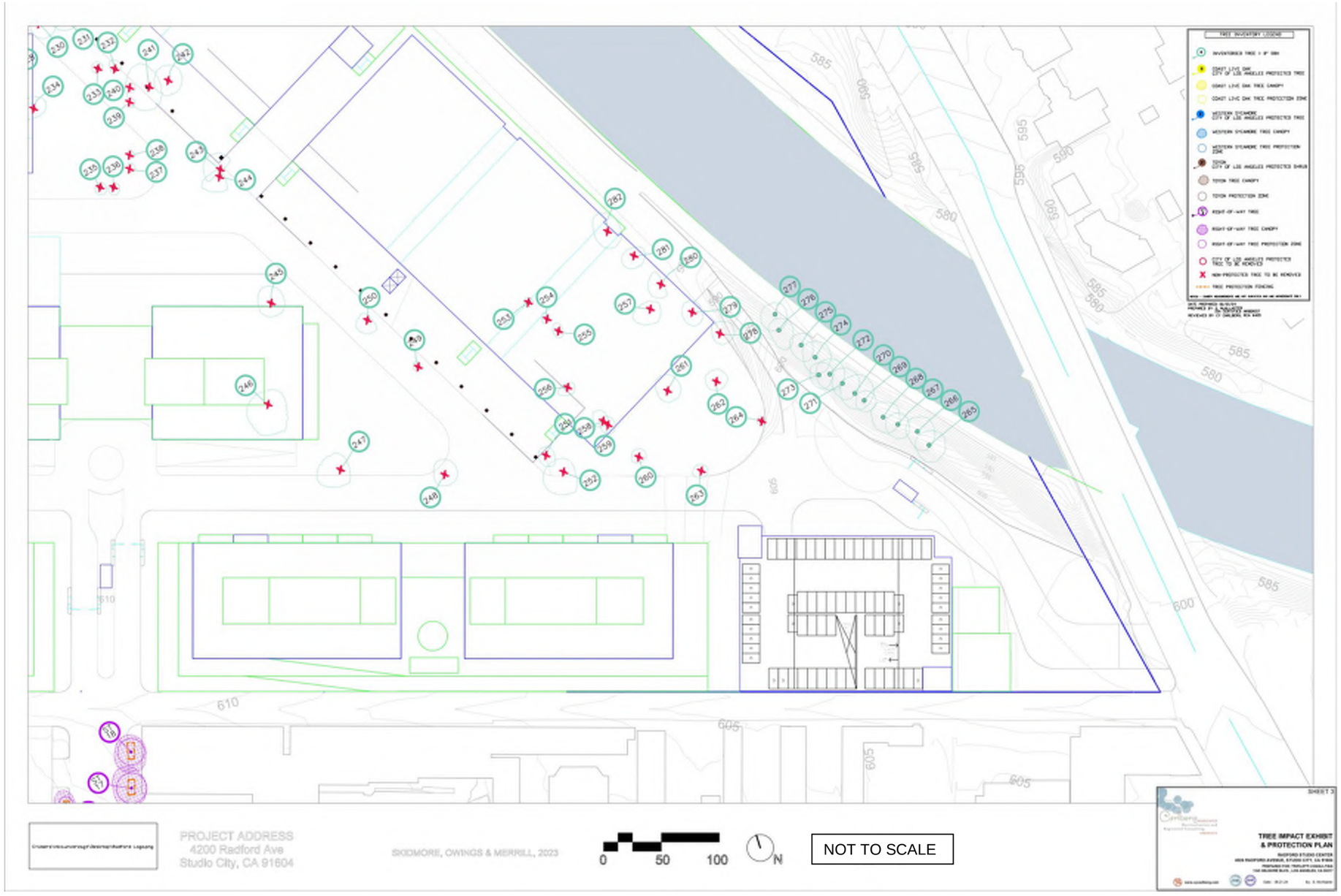

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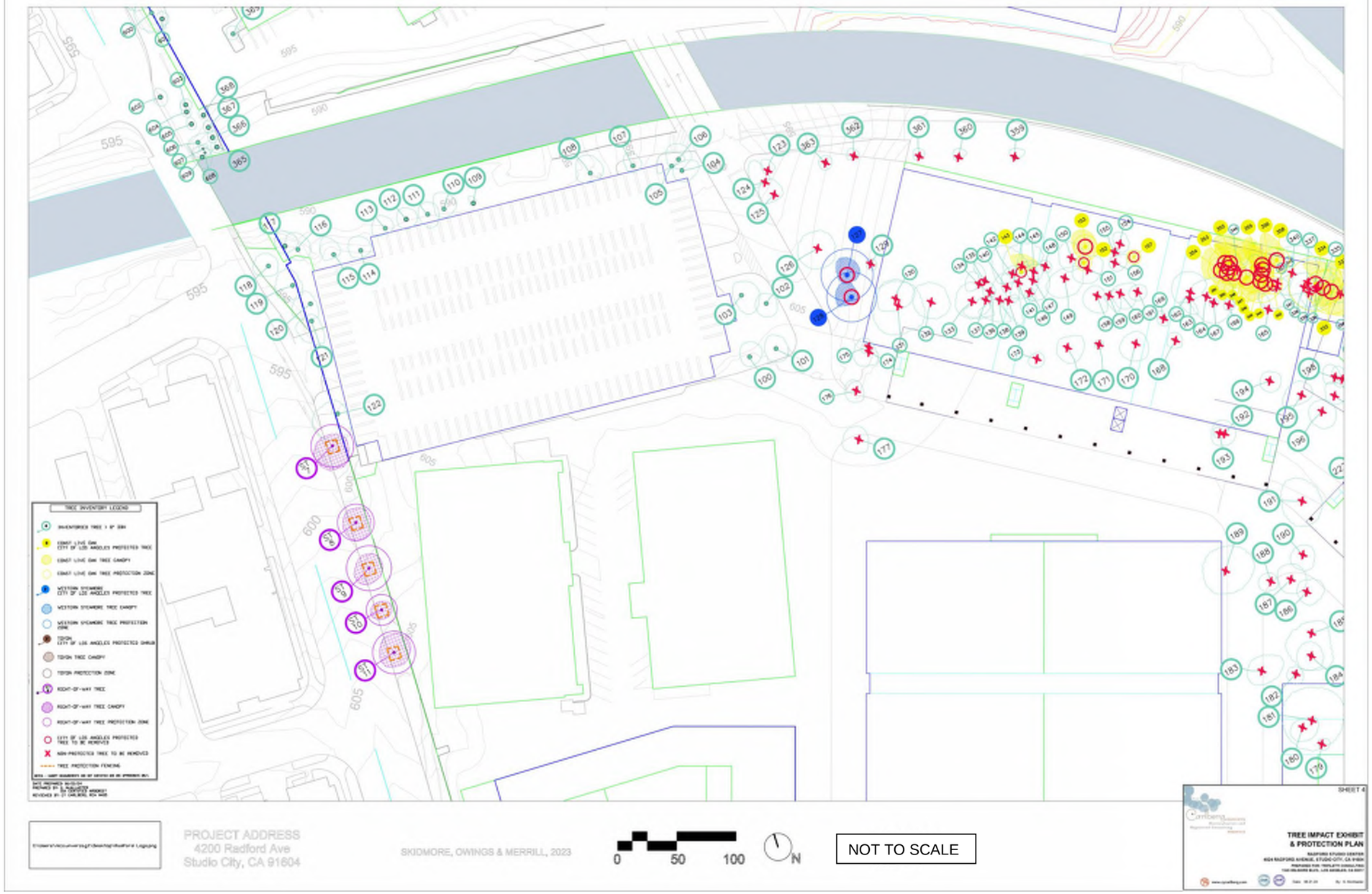
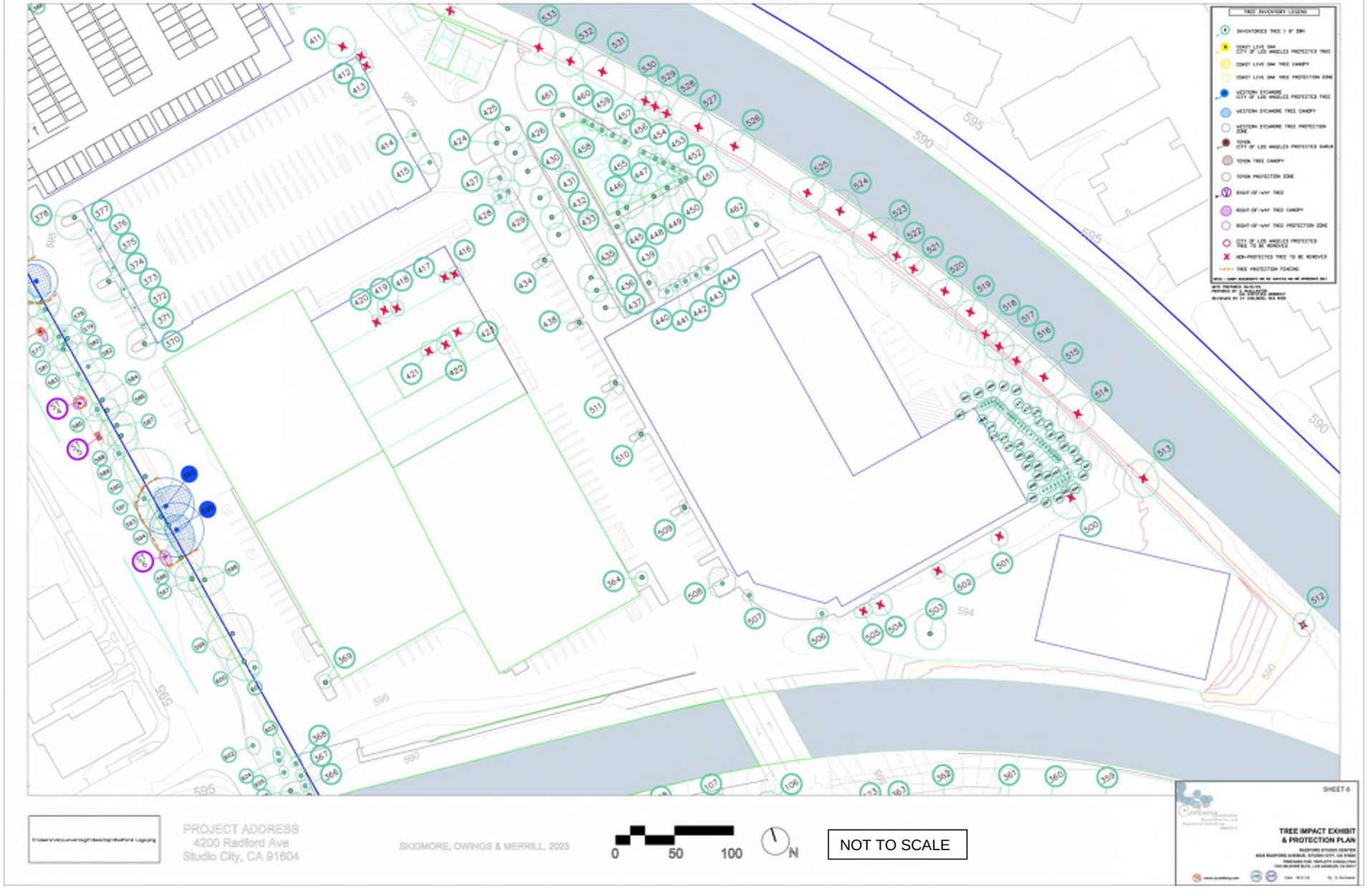


EXHIBIT D – TREE IMPACT EXHIBIT AND PROTECTION PLAN (5/10 SHEETS, this page 11” X 17”)

EXHIBIT D – TREE IMPACT EXHIBIT AND PROTECTION PLAN (6/10 SHEETS, this page 11” X 17”)



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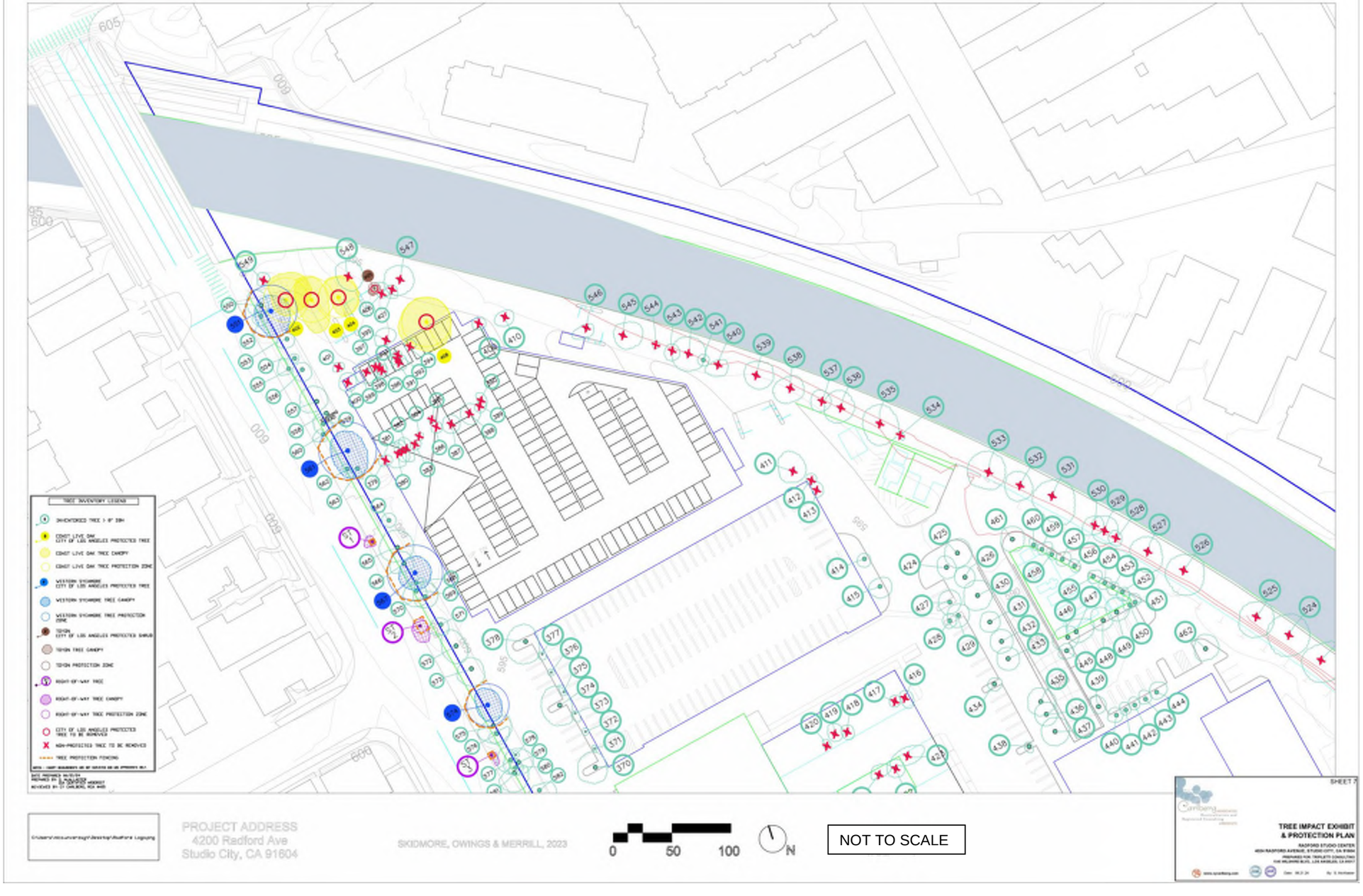

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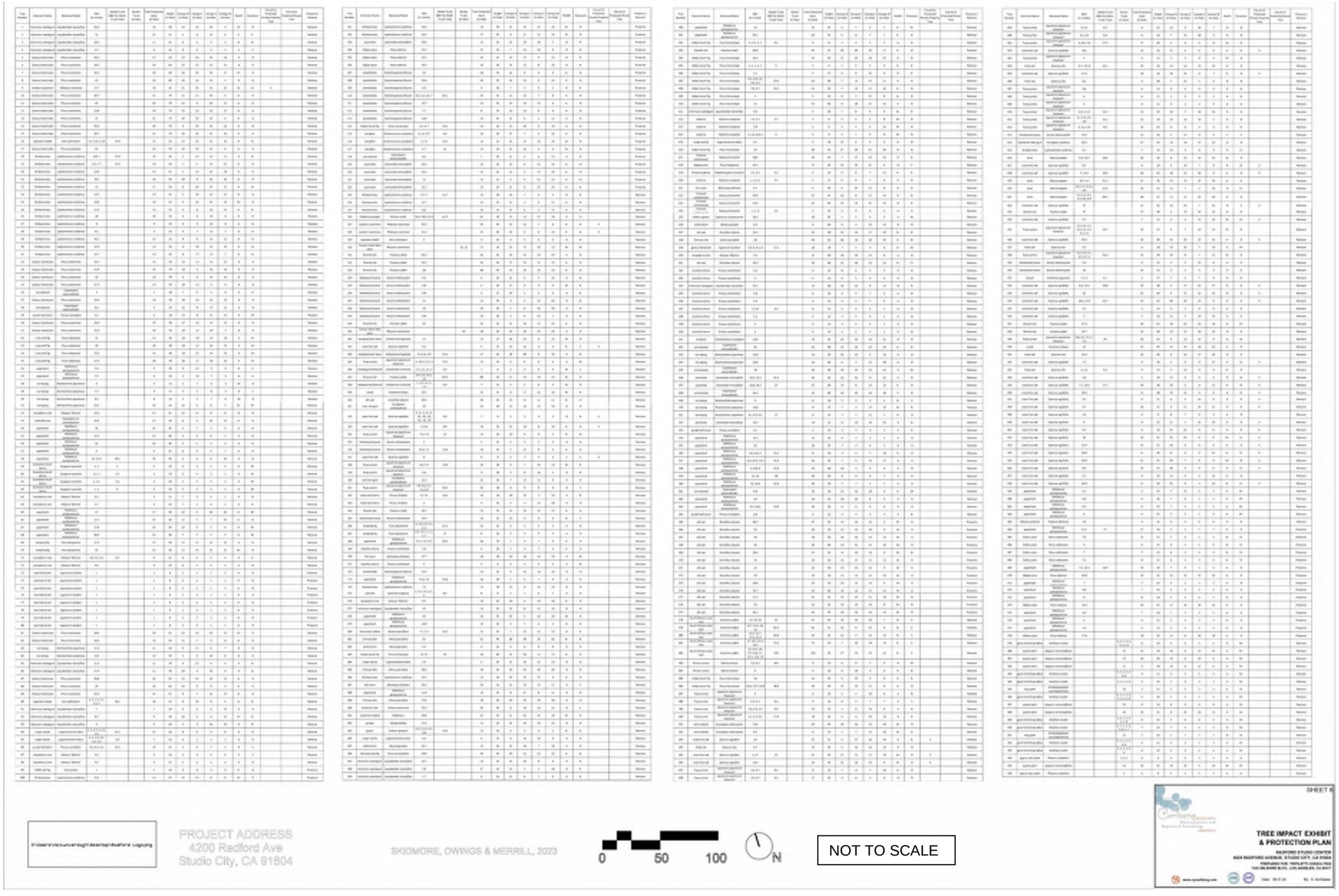

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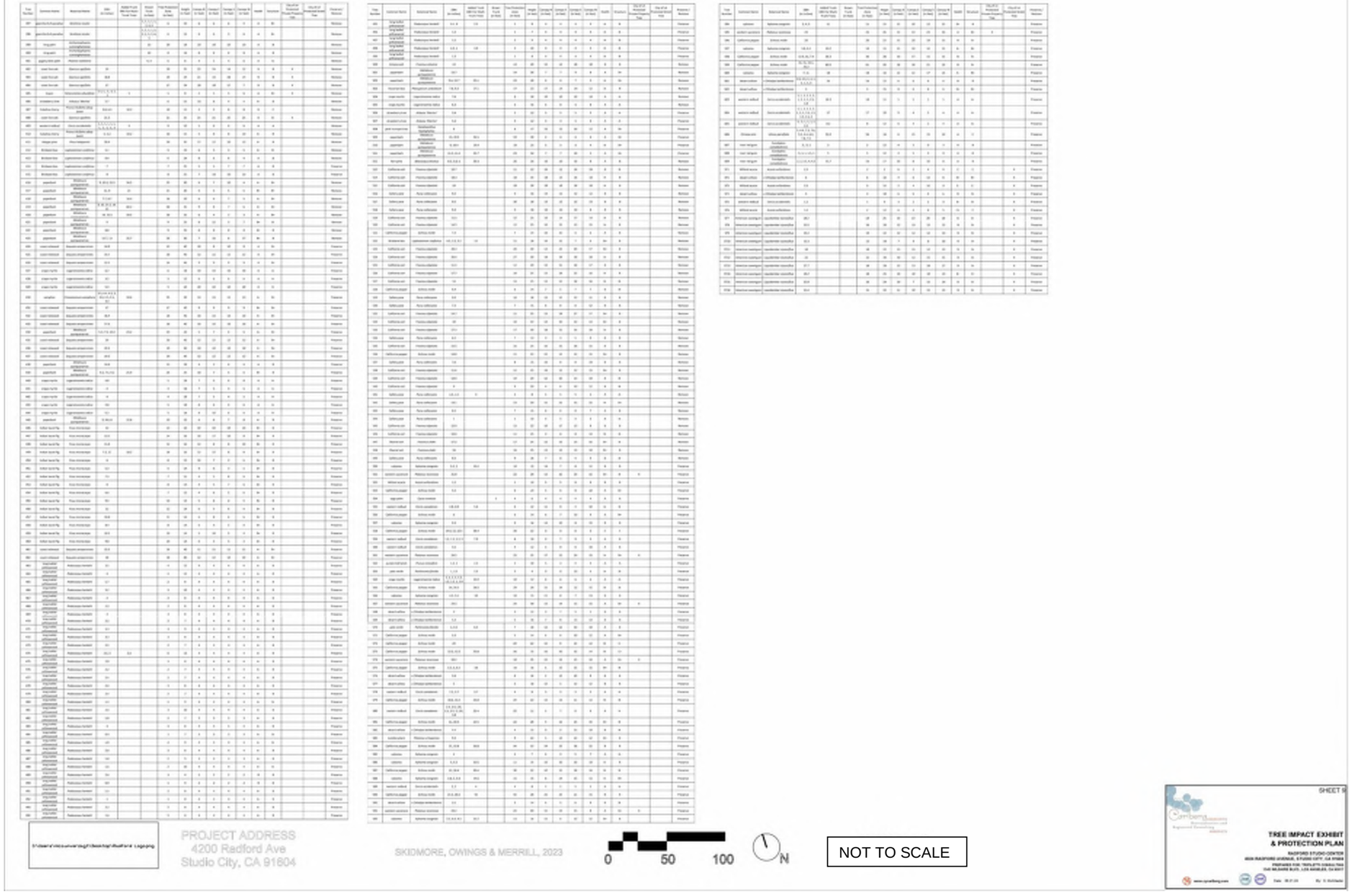


EXHIBIT D – TREE IMPACT EXHIBIT AND PROTECTION PLAN (10/10 SHEETS, this page 11" X 17")

City of Los Angeles Tree Protection:

Tree Protection Zone Definition and Notes

1. Unless otherwise defined by the City of Los Angeles Urban Forestry, the Tree Protection Zone (TPZ) is defined here as the distance from tree trunk that equates to 12 times the Diameter at Standard Height; e.g.,20" DSH X 12 = 240 inches (20 feet).
2. Tree roots are generally located in the top 12 - 36 inches of soil and can extend to a distance exceeding the trees height and/or width.
3. In general, and depending on the type of tree, large structural roots (defined here as those greater than 2 inches in diameter) usually extend about three to five feet from the trunk before they turn downward or branch-off into smaller roots.
4. If damaged, cut, scuffed, or torn, structural roots can become infected with root disease that may cause a column of decay or cambium death in the trunk and root collar.
5. Dieback related to cambium death may reach the lateral branches and top of the tree with time.
6. In addition to structural roots, trees usually have thousands of smaller feeder/absorptive roots in the upper layers of soil that absorb water and nutrients and provide for gas exchange. Absorbing roots of the tree can sustain damage during construction from lack of water, soil compaction or physical damage resulting from cutting.

Tree Protection Guidelines

The following guidelines are designed to minimize damage to the canopies and root systems of trees to remain in the project area (regardless of protected or non-protected status by ordinance or code restrictions).

1. Construction activity should be diverted from the Tree Protection Zone, as practical to the space.
2. A Project Arborist shall be retained by the Applicant / Developer to monitor the trees and inspect the tree protection measures during development activities. The Project Arborist shall be experienced in construction monitoring and shall be an ISA Certified Arborist and/or an ASCA Registered Consulting Arborist®.
3. Some encroachments into the Tree Protection Zone may be unavoidable. Encroachments may only be allowed by permit in some jurisdictions. It is incumbent on the Applicant to apply for and obtain the necessary tree removal and/or encroachment permits. Copies of the removal/encroachment permit shall be maintained onsite with a copy of this plan.
4. The Project Arborist shall monitor all work that must be performed in the Tree Protection Zone.
5. Protective chain-link fencing, at least five feet in height, with an access gate of minimal width, should be installed at the limits of the Tree Protection Zone (or as drawn on the Tree Protection Plan) and approved in place by the Project Arborist and city staff prior to the commencement of any demolition, grubbing, grading or construction. This pertains to both public (parkway trees, etc.) and private trees.
6. When chain link fencing cannot be placed to the limits of the Tree Protection Zone, the Project Arborist may require that orange snow fencing be placed at the limits of the Tree Protection Zone as a temporary protection measure until the encroachment work will be performed. This will be determined at a pre-demo/pre-construction job site meeting with the contractor and/or applicant.
7. The Tree Protection Zone should be sufficiently irrigated with clean potable water to keep the tree in good health and vigor before, during, and after construction. This may include occasional deep-watering treatments. Installation of layers of sandbags or other material to create a watering well, or berm, may be necessary. The Project Arborist will recommend this activity, if necessary.
8. No construction staging or disposal of construction materials or byproducts, including but not limited to, paint, plaster, or chemical solutions is allowed in the Tree Protection Zone.
9. The Tree Protection Zone should not be subjected to flooding or runoff incidental to the construction work.
10. Unless otherwise stated in the project's conditions of approval and/or the tree encroachment permit, all work conducted in the ground within the Tree Protection Zone should be accomplished with hand tools or other small equipment that is approved by the Project Arborist.
11. Trenches in the Tree Protection Zone should be tunneled, dug by hand, or completed with an air-spade to minimize damage to absorbing/feeder roots within the Tree Protection Zone. Information regarding air-spades is available from the Project Arborist.
12. Any required trenching should be routed in such a manner as to minimize root damage. Radial trenching (radial to the tree trunk) is preferred as it is less harmful than tangential trenching. Cutting of roots should be avoided (i.e. place pipes and cables below uncut roots). Wherever possible and in accordance with applicable code requirements, the same trench should be used for multiple utilities.
13. Natural" or pre-construction grade should be maintained in the Tree Protection Zone. At no time during or after construction should soil be in contact with the trunk of the tree above the basal flare.
14. In areas where the grade around the protected tree will be lowered, some root cutting may be unavoidable. Encroachment permits may be required for this work. Cuts should be clean and made at right angles to the roots. When practical, cut roots back to a branching lateral root. The Project Arborist shall monitor all root excavation and pruning.
15. When removing existing pavement, foundations, utilities, etc. in the Tree Protection Zone, avoid the use of heavy equipment, which will compact and damage the root system. The Project Arborist shall monitor all demolition activities in the Tree Protection Zones.
16. If the Project Arborist requires mulch in the Tree Protection Zone, the mulch materials and location will be shown on the plan or discussed during inspections.
17. Root damage and soil compaction may be mitigated in some cases by using plywood, mulch, or mulch and plywood in the Tree Protection Zone. The Project Arborist may require this action at any point during demolition and construction as the project progresses and will work with the contractor to implement the best management practices.
18. Canopy tie-backs - canopy ties may be recommended instead of pruning for temporary clearance. The Project Arborist may require this action at any point during demolition and construction as the project progresses and will work with the contractor to implement the best management practices.
19. Weather-proof, minimum 8 x 10 inches, signage shall be applied to the fencing on all sides that states:

Tree Protection Fencing

Do Not Remove Without Authorization From

The City of Los Angeles

Questions - call Project Arborist: Carlberg Associates

Christy Cuba (626) 428-5072 or Cy Carlberg (310) 451-4804

Pruning

1. Pruning may require a permit in some jurisdictions.
2. Pruning shall be monitored by the Project Arborist at intervals and durations as they see fit to maintain tree integrity.
3. Pruning of all trees should be in accordance with industry standards (International Society of Arboriculture or ANZI 133.1).
4. Pruning of oaks should be limited to the removal of dead wood and the correction of potentially hazardous conditions, as evaluated by the Project Arborist. Excessive pruning is harmful to oaks and many other trees. Removal or reduction of major structural limbs should be done only as required for actual building clearance or safety, and only at the recommendation of the Project Arborist. If limbs must be removed, cuts should be made perpendicular to the branch, to limit the size of the cut face. The branch bark collar should be preserved (i.e. no "flush cuts"), and cuts should be made in such a way as to prevent the tearing of bark from the tree.
5. Pruning of trees other than oaks should be limited to the removal or reduction of major structural limbs and should be done only as required for actual building clearance or safety, and only at the recommendation of the Project Arborist. If limbs must be removed, cuts should be made perpendicular to the branch, to limit the size of the cut face. The branch bark collar should be preserved (i.e. no "flush cuts"), and cuts should be made in such a way as to prevent the tearing of bark from the tree.

Inspections

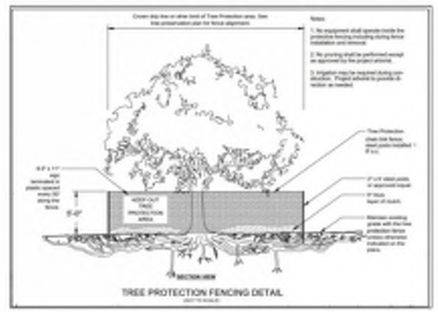
1. Inspection of Protective Fencing - The Project Arborist shall inspect the tree protection fencing prior to demolition, grubbing, grading, or construction. City staff may also inspect fencing to verify placement and approval of materials prior to the commencement of demolition, grading, or construction.
2. Pre-construction meeting - City staff may require an on-site pre-construction meeting with the contractor and or applicant to discuss tree protection with the site supervisor, grading equipment contractors, and demolition crew. The Project Arborist shall be present at that meeting.
3. Inspection during rough grading - City staff may require inspection to ensure protected trees will not be injured by compaction, cut or fill, drainage and trenching activities.
4. Special Activity in the Tree Protection Zone - The Project Arborist shall provide direct on-site supervision of work in the tree protection zone, as they deem appropriate, or as directed in the project's tree permit and/conditions of approval.
5. Periodic Inspections - City staff may require inspections verifying adherence to tree protection measures during the on-going construction process. Allow a minimum of 48-72 hours for scheduling inspections.
6. The Project Arborist shall report discrepancies or deficiencies in Tree Protection to the site superintendent / Applicant for corrective action. If corrective actions are not taken in a reasonable time frame, the Project Arborist may notify City staff for enforcement action.
7. Final inspection shall occur after all work is completed for the project, including landscape installments.
8. It is incumbent on the Applicant or Developer to contact the appropriate agencies for inspections and permits, pay necessary application & permit fees, etc.

Definitions

1. Basal flare or root crown means the tree trunk where it emerges from the root system and flares out to create the base of the tree.
2. Canopy means the area of a tree that consists primarily of branches and leaves.
3. Dripline means the outermost area of the tree canopy (leafy area of tree).
4. Certified Arborist means an individual who has demonstrated knowledge and competency through obtainment of the current International Society of Arboriculture Arborist Certification (Certified Arborist).
5. Registered Consulting Arborist® means an individual who has demonstrated knowledge and competency through obtainment of a 'Registration' number with the American Society of Consulting Arborists.
6. Tree Protection Zone means the distance from tree trunk that equates to 12 times the Diameter at Standard Height; e.g.,20" DSH X 12 = 240 inches (20 feet).
7. Public Trees are defined as trees that are located in a center median, in the parkway between the curb face and the property line or are in an easement. For work on these trees, including installation of Tree Protection Fencing, contact the appropriate the City Urban Forestry Division. A permit is generally required for fencing, pruning, or otherwise impacting parkway trees. Some Public Works Departments have their own Tree Protection Specifications.

Public Trees-Maintained by the City of Los Angeles

Trees that are located in the parkway between the curb face and the property line, and therefore are public trees. To have any work done on these trees, including installation of Tree Protection Fencing, contact the City of Los Angles Public Works Department.



PROJECT ADDRESS
4200 Radford Ave
Studio City, CA 91604

SKIDMORE, OWINGS & MERRILL, 2023

0 50 100 N

NOT TO SCALE

CONCLUSION AND RECOMMENDATIONS

Implementation of the Radford Studio Center project, including demolition, grading, and construction of the proposed parking structures, new driveway, circulation improvements, and building footprints will likely result in the following:

Project implementation could potentially result in the **removal** of the following **405 trees**:

- **39 onsite, private property, Protected species** that were planted or likely occur as volunteers in the landscape
  - 35 greater than 4” diameter coast live oaks (30 planted, 5 natural volunteers)
  - 3 greater than 4” diameter western sycamores (planted)
  - 1 greater than 4" diameter toyon (planted)
- **366 onsite, private property, non-protected palms and trees** of various genera and species, most of which were planted in the landscape
  - 25 palms or other monocot species (planted)
  - 313 greater than 4” diameter ‘tree’ form trees (planted)
  - 4 less than 4” diameter ‘tree’ form trees (natural volunteers) (all coast live oaks)
  - 24 less than 4” diameter ‘tree’ form trees (planted)

Project implementation would result in the **preservation** of the following **220 trees**:

- **16 street trees** (planted, no palms)
- **6 onsite, private property Protected species** that were likely planted in the landscape
  - 6 greater than 4” diameter western sycamores (planted)
- **198 onsite, private property, non-protected palms and trees** of various genera and species, which were likely all planted in the landscape
  - 2 greater than 4” diameter hedge or topiary form (planted)
  - 43 less than 4” diameter hedge or topiary form (planted)
  - 1 palm or other monocot species (planted)
  - 139 greater than 4” diameter ‘tree’ form trees (planted)
  - 13 less than 4” diameter ‘tree’ form trees (planted)

Removal of Protected private trees or street trees requires a Tree Removal Permit through the Department of Public Works, Urban Forestry Division, and replacement trees are required at a ratio that is consistent with the Tree Protection Ordinance. The current replacement ratio for permitted Protected tree removals is 4:1 and the replacement ratio for street tree removals is 2:1. The Tree Protection Ordinance does not regulate the removal of non-protected trees.

In our opinion, the majority of the onsite trees are not naturally occurring but were planted as the landscape evolved. If the City of Los Angeles Urban Forestry Division concurs with our opinion, removal of the planted sycamore and coast live oak trees may not require mitigation as outlined in the Tree Protection Ordinance.

Best Management Practices (BMPs) and recommendations for tree replacement (if required) and tree protection during the development process are as follows:

'Protected' and Street Tree Removals:

1. Removal of Protected trees will be mitigated in accordance with the City of Los Angeles Tree Preservation Ordinance.
2. If the onsite coast live oaks and western sycamores are all deemed Protected by the Urban Forestry Division, removal of 39 Protected trees will require replacement tree plantings in accordance with the ratios set forth in the Tree Preservation Ordinance at the time that the Tree Removal Permit application is approved. Under the current ratio of 4:1, 156 replacement trees would be required.
3. Replacements for Protected trees should consist of *Quercus agrifolia, Platanus racemosa, Juglans californica* var*. californica*, or *Umbellularia californica*. Replacements for Protected shrubs should consist of *Heteromeles arbutifolia* or *Sambucus mexicana*.
4. Replacement trees should be planted on-site in the natural or manufactured landscape areas of the lots, or in other locations as approved by the Urban Forestry Division.
5. No street trees are proposed for removal.
6. If Street tree removals become necessary, street trees that are in the public streets rights-of-way will be replaced in accordance with the ratios set forth in the Tree Preservation Ordinance at the time that the Tree Removal Permit application is approved. The current ratio is 2:1.
7. The City of Los Angeles' Urban Forestry Division generally requires 24-inch box trees to be planted for replacement of street trees or Protected trees.
8. Replacement trees should be planted in natural groupings, as well as individually, as space allows.
9. If needed, the project landscape architect will incorporate replacement trees into the landscape plans for the project. Color-coded replacement trees will be required on the landscape and irrigation plans and establishment irrigation will be provided for all replacement trees to the satisfaction of the Urban Forestry Division as outlined in the final Protected Tree Removal Permit.
10. The City of Los Angeles will make the final determination in the tree removal permit as to the final number of replacement trees required, the container sizes, and the species to be planted.
11. Replacements for the authorized removal of public street trees or 'protected' trees shall be guaranteed under a bond for a period of three years, or as necessary in accordance with the requirements of the Tree Preservation Ordinance at the time that tree removals are approved. The bond amount will be determined through negotiations between the applicant team and the Urban Forestry Division prior to issuance of a grading permit. The bond will be posted prior to issuance of a grading permit.
12. Replacement trees that are planted on private property will be protected by project Conditions, Covenants, and Restrictions (CC&Rs) or another legal instrument. The CC&Rs or other legal instrument will ensure access for reasonable monitoring, as required by the project's conditions of approval.
13. Where applicable, the Urban Forestry Division shall be notified at least ten (10) days prior to the date of the approved Protected tree removals. The applicant's Tree Expert (project arborist) shall be on-site for the duration of the tree removals to ensure that the proper trees are removed. A post-tree

APPENDIX C

BIOLOGICAL CONSTRAINTS REPORT

July 12, 2023

Zach Sokoloff
Hackman Capital Partners, LLC
4060 Ince Boulevard
Culver City, CA 90232

VIA EMAIL
zsokoloff@hackmancapital.com

Subject: Biological Constraints Analysis for the Radford Studio Center Project, Studio City, California

Dear Mr. Sokoloff:

This Letter Report presents the findings of a biological constraints analysis for the Radford Studio Center Project (Project) located in the community of Studio City in the City of Los Angeles, California. The purpose of the analysis was to document existing biological resources and determine potential biological constraints to proposed Project activities.

PROJECT LOCATION

The Project site is located at 4024 Radford Avenue in Studio City, California (Exhibit 1 in Attachment A). The site is generally bounded by Radford Avenue to the west, Ventura Boulevard to the south, Colfax Avenue to the east, and Tujunga Wash to the north and northeast.

The Project site is shown on the U.S. Geological Survey's Van Nuys 7.5-minute topographic quadrangle of the San Bernardino Meridian in Township 1 North, Range 14 West, Sections 19 and 30 (Exhibit 2). The Project site is generally flat with elevations on the site ranging from approximately 580 to 610 feet above mean sea level.

Surrounding land uses consist of a combination of residential and commercial development. No natural habitat areas are located adjacent to the Project site (Exhibit 3).

PROJECT DESCRIPTION

Proposed Project activities consist of various improvements to the existing studio facilities including additional soundstages for television production, additional office buildings, preservation of historic portions of the studio, and the creation of two new studio entrance gates. The entrance gates will include the re-establishment of an original entrance location off of Ventura Boulevard and a new entrance gate near the intersection of Radford Avenue and Moorpark Street at the northwestern corner of the Project site. An existing bridge in the middle of the Project site is proposed for expansion. The Project will also include connections to bicycle and pedestrian trails as part of the Los Angeles River Master Plan.

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METHODS

Psomas Biological Resources Manager Marc Blain and Senior Restoration Ecologist David Hughes conducted a general site assessment on June 2, 2023. Prior to the survey, Psomas conducted a literature search to identify special status plants, wildlife, and vegetation types known from the general vicinity of the survey area. This included a review of the USGS Sunland, San Fernando, Oat Mountain, Van Nuys, Burbank, Canoga Park, Topanga, Beverly Hills, and Hollywood 7.5-minute quadrangles in the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) (CDFW 2023) and the California Native Plant Society (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California (CNPS 2023). The results of the literature search are provided in Attachment B.

RESULTS

The Project site contains several television production studios and office buildings. The Los Angeles River and Tujunga Wash both pass through the Project site and their confluence occurs near the eastern boundary of the site. Soil types on the site include Cropley-Urban land complex, 0 to 5 percent slopes; Urban land-Tujunga-Typic Xerothents, sandy substratum complex, 0 to 2 percent slopes; Urban land-Grommet-Ballona complex, 0 to 5 percent slopes; and Urban land, frequently flooded, 0 to 5 percent slopes (Exhibit 4).

The following sections describe the existing vegetation and habitat conditions in the survey area and the potential for the area to support special status plant and wildlife species.

Vegetation

Vegetation on the Project site is the result of designed landscaping with no natural habitat areas. Landscaping consists of a mixture of native tree species such as coast live oak (*Quercus agrifolia*) along with various non-native tree species such as silk oak (*Grevillea robusta*) and sweetshade (*Hymenosporum flavum*) and common non-native shrub and herbaceous species. There is no riparian vegetation associated with the Los Angeles River or Tujunga Wash. Most of the site is developed with a small percentage of landscaped vegetation.

Special Status Vegetation Types

The Project site consists of a combination of developed conditions with small amounts of ornamental vegetation. Coast live oak trees are present on the site, but they appear to have been purposefully planted and occur in a few small areas on the site. Because they were planted by humans and do not appear to be a natural vegetation community and do not form a woodland canopy, these are considered herein as ornamental plantings. Because there are no natural vegetation areas on the Project site, no special status vegetation types are present that would be considered significant under the California Environmental Quality Act (CEQA).

Special Status Plant and Wildlife Species

Various plant or wildlife species in Southern California are considered to have special status due to declining populations, vulnerability to habitat change, or restricted distributions. Some of these special status species have been formally listed as Threatened or Endangered under the California and/or Federal Endangered Species Acts. The potential for the Project site to support special status plant or wildlife species is discussed below.

Plant Species

The literature search referenced above resulted in the identification of 62 plant species that are known to occur in the regional vicinity of the Project site, though 11 naturally occur well outside the elevational limits of the Project site. A list of these species known to occur in the regional vicinity of the Project site is provided in Attachment B. No habitat areas with the potential to support any of the species identified during the literature review occur on the Project site. Therefore, they are considered absent from the Project site.

Wildlife Species

Several special status wildlife species are known to occur in the regional vicinity of the Project site based on the results of the literature review provided in Attachment B. During the field survey, only common bird species including house finch (*Haemorhous mexicanus*), black phoebe (*Sayornis nigricans*), and mourning dove (*Zenaida macroura*) were observed. The site is also expected to contain other common urban wildlife species, but no habitat conditions are present on the Project site that have the potential to support any of the special status wildlife species listed in Attachment B.

Other Considerations

Protected Trees

The survey area is in Studio City which is a community within the City of Los Angeles. Therefore, tree species that are listed in the City of Los Angeles Tree Ordinance as protected species would require a permit prior to their removal. The City of Los Angeles requires a removal permit for the following species that have a trunk diameter of at least four inches: native oaks (*Quercus* spp.), western sycamore (*Platanus racemosa*), Southern California black walnut (*Juglans californica*), bay laurel (*Umbellularia californica*), toyon (*Heteromeles arbutifolia*), and blue elderberry (*Sambucus nigra* ssp. *caerulina*).

In addition to the tree species listed above, the City of Los Angeles typically requires that all other non-protected trees with a minimum trunk diameter of eight inches be identified as part of the overall environmental assessment for a project.

A separate Tree Inventory Report has already been developed for the Project site that identifies the various species present, their location, and their trunk size. This tree inventory report will provide the basis for determining tree impacts and their status pursuant to the Los Angeles Municipal Code.

Bats

Southern California contains a variety of habitats able to support the numerous bat species known to occur in the region. One critical element necessary to support bat populations is the presence of suitable day-roosting sites. Different bat species utilize a wide array of sites for day-roosting, both natural and artificial. Such sites include trees, bridges, buildings, and other man-made structures. Of the 46 species of bats known from North America, over half are known to use buildings as roosts at least for part of the year. Buildings offer bats a wide range of roost microhabitats, including spaces beneath floorboards, inside insulation, etc. Structures located on the exterior of buildings also provide suitable roosting habitat, including crevices between bricks and stones; between vents; behind windows, screens, and shutters; and spaces beneath shingles. Because roosting bats are protected in California, it is important to identify and appropriately manage occupied, day-roost structures as this is when bats are most vulnerable. Bats enter a state of torpor during the day to minimize their metabolic rate, but this state leaves bats unable to quickly

respond to any environmental changes (e.g., roost demolition). Furthermore, bats rear their young during the spring and summer months and the pups are not able to fly or otherwise evacuate the roosts for weeks.

Wildlife Movement

The survey area is surrounded by residential and commercial development. The only potential pathways for wildlife movement consist of the concrete lined channels that pass through the Project site. Project construction will not obstruct movement through these channels. Therefore, the Project is not expected to have an effect on wildlife movement through the area.

Migratory Bird Treaty Act

Though the total amount of vegetated areas on the Project site is low, the site contains vegetation with the potential to support nesting birds. Due to recent interpretations of the Migratory Bird Treaty Act (MBTA) and the expectations of many local and State agencies, it is recommended that measures to avoid disturbance of nesting birds be implemented. The nesting season is generally recognized as lasting from February 1 through September 15.

Nesting Raptors

Raptors have potential to nest in the large trees in the survey area and immediate vicinity. State regulations prohibit activities that "take, possess or destroy" any raptor nest or egg (California Fish and Game Code §3503, §3503.5, and §3513). The nesting season for raptors is generally recognized as lasting from January 15 through August 1.

Jurisdictional Resources

Streambeds and other drainage features are generally under the jurisdiction of the U.S. Army Corps of Engineers, Los Angeles Regional Water Quality Control Board, and the California Department of Fish and Wildlife. Two drainage features pass through the Project site, the Los Angeles River and Tujunga Wash, and their confluence is located in the eastern part of the Project site. These are natural drainage features that have been converted to concrete-lined storm drains.

A separate Jurisdictional Delineation Report has been prepared which discusses the jurisdictional basis and extent of these drainage features. Consultation with the regulatory agencies is recommended to determine if proposed Project activities require permits.

Critical Habitat

The survey area is located outside of any Critical Habitat areas for Threatened or Endangered species, as designated by the U.S. Fish and Wildlife Service.

BIOLOGICAL CONSTRAINTS AND RECOMMENDATIONS

The following is a summary of potential biological constraints to the proposed project and list of recommendations to ensure that the project is consistent with regulations protecting biological resources.

1. To protect migratory birds in compliance with the MBTA, any vegetation removal should occur between September 16 and January 31 to avoid the potential to impact active nests. If clearing

occurs between February 1 and September 15, a qualified Biologist should perform a pre-construction survey to detect any active nests that would present a constraint to project activities.

2. To protect active raptor nests, any vegetation removal should occur between August 2 and January 14. Any vegetation removal that needs to occur during this period should have a pre-construction survey conducted by a qualified Biologist to identify any active nests that would present a constraint to project activities.

3. A tree removal permit is required from the City of Los Angeles if any protected tree species greater than four inches in trunk diameter or any non-protected tree species greater than eight inches in trunk diameter are proposed for removal.

4. Consultation with staff from the U.S. Army Corps of Engineers, Los Angeles Regional Water Quality Control Board, and the California Department of Fish and Wildlife should be initiated once Project construction plans are nearly finalized. The Los Angeles River and Tujunga Wash are under the jurisdiction of these three agencies, though consultation is needed to determine if the proposed construction activities would require a permit.

5. Measures to avoid roosting bats should be implemented as part of project planning. Measures may include seasonal avoidance, surveys to identify potentially occupied spaces, installation of exclusionary devices once absence is confirmed, and monitoring to confirm avoidance.

Psomas appreciates the opportunity to assist on this project. If you have any comments or questions, please call David Hughes at (626) 204-6530.

Sincerely,
PSOMAS

Marc T. Blain
Biological Resources Manager

David T. Hughes
Senior Restoration Ecologist

Attachments: A – Exhibits 1 through 4
B – Literature Review Results

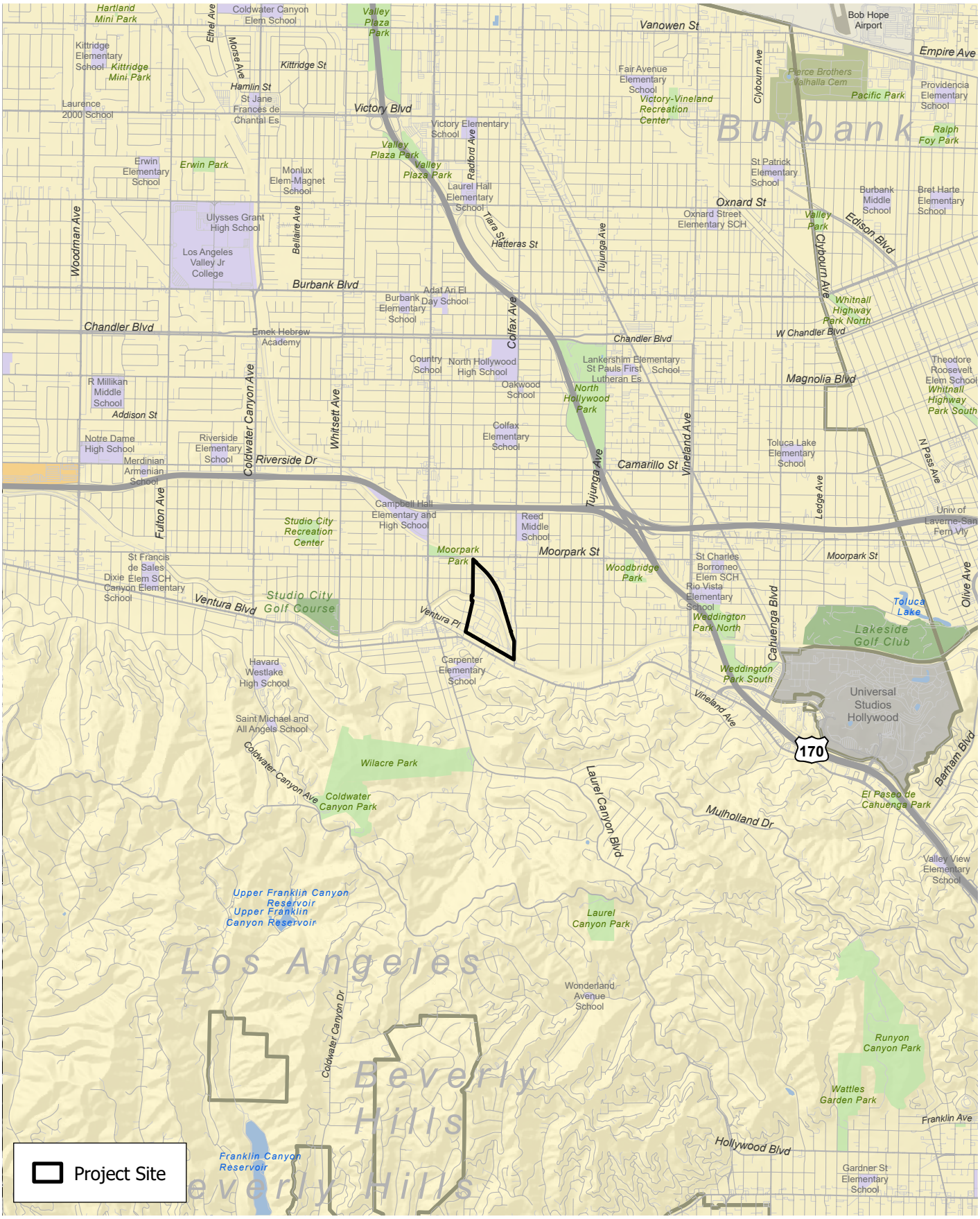
REFERENCES

California Department of Fish and Wildlife (CDFW). 2023. California Natural Diversity Database. Records of Occurrence for Sunland, San Fernando, Oat Mountain, Van Nuys, Burbank, Canoga Park, Topanga, Beverly Hills, and Hollywood 7.5-minute quadrangle maps. Sacramento, CA: CDFW, Natural Heritage Division.

California Native Plant Society (CNPS). 2023. Electronic Inventory of Rare and Endangered Vascular Plants of California. Records of Occurrence Sunland, San Fernando, Oat Mountain, Van Nuys, Burbank, Canoga Park, Topanga, Beverly Hills, and Hollywood 7.5-minute quadrangle maps. Sacramento, CA: CNPS. http://www.rareplants.cnps.org/.

ATTACHMENT A

EXHIBITS 1 THROUGH 4



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Local Vicinity

Exhibit 1

Biological Constraints Report for the Radford Studio Center Project

PSOMAS

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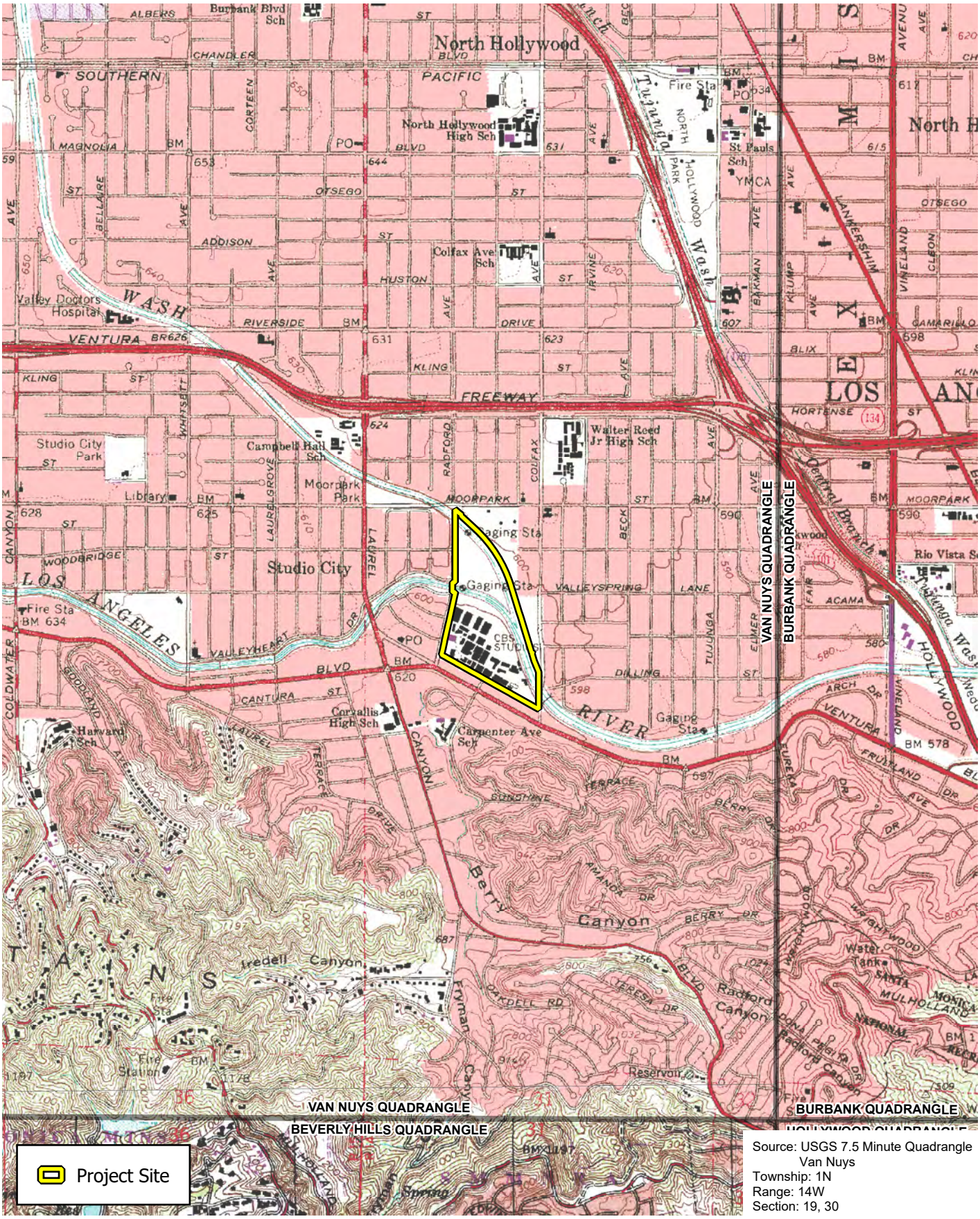

Source: USGS 7.5 Minute Quadrangle
Van Nuys
Township: 1N
Range: 14W
Section: 19, 30

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USGS 7.5-Minute Digital Quadrangle

Exhibit 2

Biological Constraints Report for the Radford Studio Center Project

N
W E
S

2,000 1,000 0 2,000 Feet

PSOMAS

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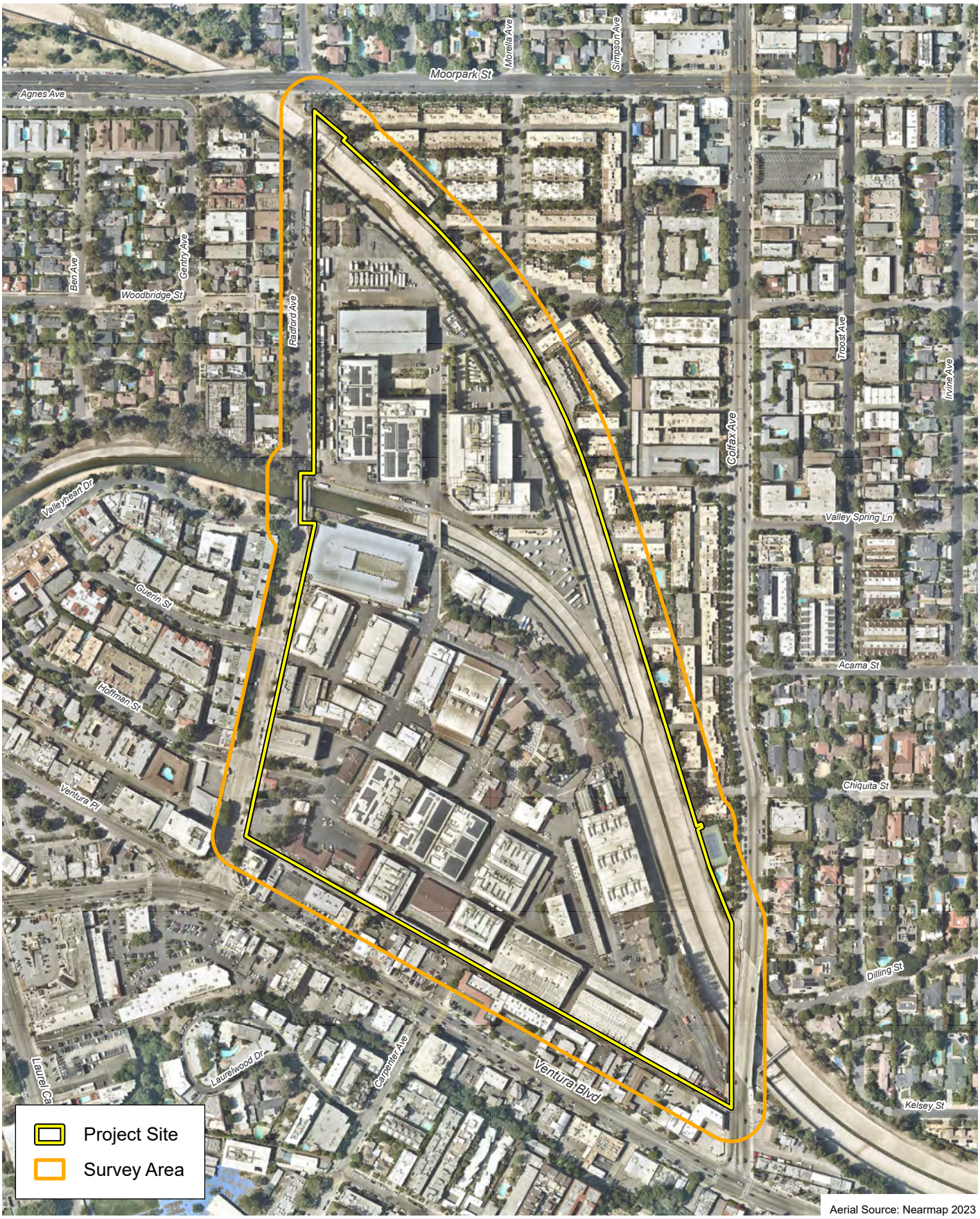

Aerial Source: Nearmap 2023

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Project Site

Exhibit 3

Biological Constraints Report for the Radford Studio Center Project

N W E S

400 200 0 400 Feet

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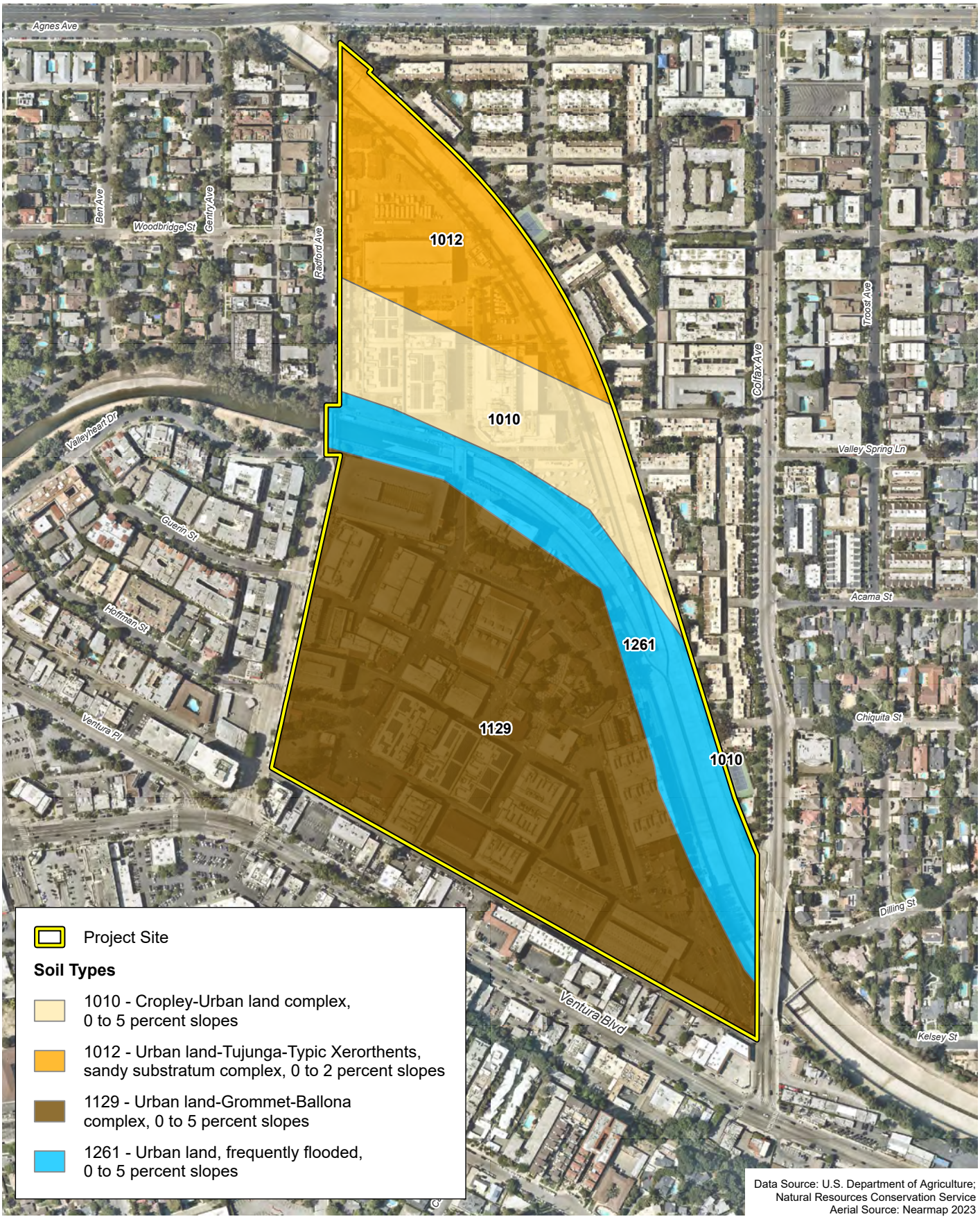

D:\Projects\3CUL\030100\PRO\LARiver\LARiver.aprx\Soils Map

Soil Map

Exhibit 4

Biological Constraints Report for the Radford Studio Center Project

N W E S

400 200 0 400

Feet

PSOMAS

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ATTACHMENT B

LITERATURE REVIEW RESULTS

ScientificName	CommonName	Lifeform	CRPR	CESA	FESA	Habitat
Arenaria paludicola	marsh sandwort	perennial stoloniferous herb	1B.1	CE	FE	Marshes and swamps (brackish, freshwater)
Astragalus brauntonii	Braunton's milk-vetch	perennial herb	1B.1	None	FE	Chaparral, Coastal scrub, Valley and foothill grassland
Astragalus pycnostachyus var. lanosissimus	Ventura Marsh milk-vetch	perennial herb	1B.1	CE	FE	Coastal dunes, Coastal scrub, Marshes and swamps (edges, coastal salt, brackish)
Astragalus tener var. titi	coastal dunes milk-vetch	annual herb	1B.1	CE	FE	Coastal bluff scrub (sandy), Coastal dunes, Coastal prairie (mesic)
Atriplex coulteri	Coulter's saltbush	perennial herb	1B.2	None	None	Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland
Atriplex pacifica	south coast saltscale	annual herb	1B.2	None	None	Coastal bluff scrub, Coastal dunes, Coastal scrub, Playas
Atriplex parishii	Parish's brittlescale	annual herb	1B.1	None	None	Chenopod scrub, Playas, Vernal pools
Atriplex serenana var. davidsonii	Davidson's saltscale	annual herb	1B.2	None	None	Coastal bluff scrub, Coastal scrub
Berberis nevinii	Nevin's barberry	perennial evergreen shrub	1B.1	CE	FE	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub
Calandrinia breweri	Brewer's calandrinia	annual herb	4.2	None	None	Chaparral, Coastal scrub
Calochortus catalinae	Catalina mariposa lily	perennial bulbiferous herb	4.2	None	None	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland
Calochortus clavatus var. gracilis	slender mariposa-lily	perennial bulbiferous herb	1B.2	None	None	Chaparral, Coastal scrub, Valley and foothill grassland
Calochortus plummerae	Plummer's mariposa-lily	perennial bulbiferous herb	4.2	None	None	
Calystegia felix	lucky morning-glory	annual rhizomatous herb	1B.1	None	None	Meadows and seeps (sometimes alkaline), Riparian scrub (alluvial)
Calystegia peirsonii	Peirson's morning-glory	perennial rhizomatous herb	4.2	None	None	
Camissoniopsis lewisii	Lewis' evening-primrose	annual herb	3	None	None	Cismontane woodland, Coastal bluff scrub, Coastal dunes, Coastal scrub, Valley and foothill grassland
Canbya candida	white pygmy-poppy	annual herb	4.2	None	None	Joshua tree "woodland", Mojavean desert scrub, Pinyon and juniper woodland
Centromadia parryi ssp. australis	southern tarplant	annual herb	1B.1	None	None	Marshes and swamps (margins), Valley and foothill grassland (vernally mesic), Vernal pools
Cercocarpus betuloides var. blancheae	island mountain-mahogany	perennial evergreen shrub	4.3	None	None	Chaparral, Closed-cone coniferous forest
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	annual herb (hemiparasitic)	1B.2	CE	FE	Coastal dunes, Marshes and swamps (coastal salt)
Chorizanthe parryi var. fernandina	San Fernando Valley spineflower	annual herb	1B.1	CE	None	Coastal scrub (sandy), Valley and foothill grassland
Convolvulus simulans	small-flowered morning-glory	annual herb	4.2	None	None	Chaparral (openings), Coastal scrub, Valley and foothill grassland
Deinandra minthornii	Santa Susana tarplant	perennial deciduous shrub	1B.2	CR	None	Chaparral, Coastal scrub
Dichondra occidentalis	western dichondra	perennial rhizomatous herb	4.2	None	None	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland
Diplacus johnstonii	Johnston's monkeyflower	annual herb	4.3	None	None	Lower montane coniferous forest (disturbed areas, gravelly, roadsides, rocky, scree)
Dithyrea maritima	beach spectaclepod	perennial rhizomatous herb	1B.1	CT	None	Coastal dunes, Coastal scrub (sandy)
Dodecahema leptoceras	slender-horned spineflower	annual herb	1B.1	CE	FE	Chaparral, Cismontane woodland, Coastal scrub (alluvial fans)
Dudleya blochmaniae ssp. blochmaniae	Blochman's dudleya	perennial herb	1B.1	None	None	Chaparral, Coastal bluff scrub, Coastal scrub, Valley and foothill grassland
Dudleya cymosa ssp. ovatifolia	Santa Monica dudleya	perennial herb	1B.1	None	FT	Chaparral, Coastal scrub
Dudleya densiflora	San Gabriel Mountains dudleya	perennial herb	1B.1	None	None	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Riparian woodland
Dudleya multicaulis	many-stemmed dudleya	perennial herb	1B.2	None	None	Chaparral, Coastal scrub, Valley and foothill grassland
Galium cliftonsmithii	Santa Barbara bedstraw	perennial herb	4.3	None	None	Cismontane woodland
Harpagonella palmeri	Palmer's grapplinghook	annual herb	4.2	None	None	Chaparral, Coastal scrub, Valley and foothill grassland
Helianthus nuttallii ssp. parishii	Los Angeles sunflower	perennial rhizomatous herb	1A	None	None	Marshes and swamps (freshwater, coastal salt)
Heuchera caespitosa	urn-flowered alumroot	perennial rhizomatous herb	4.3	None	None	
Horkelia cuneata var. puberula	mesa horkelia	perennial herb	1B.1	None	None	Chaparral (maritime), Cismontane woodland, Coastal scrub
Hulsea vestita ssp. gabrielensis	San Gabriel Mountains sunflower	perennial herb	4.3	None	None	Lower montane coniferous forest, Upper montane coniferous forest
Imperata brevifolia	California satintail	perennial rhizomatous herb	2B.1	None	None	Chaparral, Coastal scrub, Meadows and seeps (often alkali), Mojavean desert scrub, Riparian scrub
Juglans californica	Southern California black walnut	perennial deciduous tree	4.2	None	None	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland
Juncus acutus ssp. leopoldii	southwestern spiny rush	perennial rhizomatous herb	4.2	None	None	Coastal
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	annual herb	1B.1	None	None	Marshes and swamps (coastal salt), Playas, Vernal pools
Lepechinia fragrans	fragrant pitcher sage	perennial shrub	4.2	None	None	Chaparral
Lepidium virginicum var. robinsonii	Robinson's pepper-grass	annual herb	4.3	None	None	Chaparral, Coastal scrub
Lilium humboldtii ssp. ocellatum	ocellated Humboldt lily	perennial bulbiferous herb	4.2	None	None	Chaparral, Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Riparian woodland
Lupinus paynei	Payne's bush lupine	perennial shrub	1B.1	None	None	Coastal scrub, Riparian scrub, Valley and foothill grassland
Malacothamnus davidsonii	Davidson's bush-mallow	perennial deciduous shrub	1B.2	None	None	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland
Monardella hypoleuca ssp. hypoleuca	white-veined monardella	perennial herb	1B.3	None	None	Chaparral, Cismontane woodland
Mucronea californica	California spineflower	annual herb	4.2	None	None	Chaparral, Cismontane woodland, Coastal dunes, Coastal scrub, Valley and foothill grassland
Nama stenocarpa	mud nama	annual/perennial herb	2B.2	None	None	Marshes and swamps (lake margins, riverbanks)
Nasturtium gambelii	Gambel's water cress	perennial rhizomatous herb	1B.1	CT	FE	Marshes and swamps (brackish, freshwater)
Navarretia prostrata	prostrate vernal pool navarretia	annual herb	1B.2	None	None	Coastal scrub, Meadows and seeps, Valley and foothill grassland (alkaline), Vernal pools
Orcuttia californica	California Orcutt grass	annual herb	1B.1	CE	FE	Vernal pools
Pelazoneuron puberulum var. sonorense	Sonoran maiden fern	perennial rhizomatous herb	2B.2	None	None	Meadows and seeps (seeps, streams)
Phacelia hubbyi	Hubby's phacelia	annual herb	4.2	None	None	Chaparral, Coastal scrub, Valley and foothill grassland
Pseudognaphalium leucocephalum	white rabbit-tobacco	perennial herb	2B.2	None	None	Chaparral, Cismontane woodland, Coastal scrub, Riparian woodland
Quercus dumosa	Nuttall's scrub oak	perennial evergreen shrub	1B.1	None	None	Chaparral, Closed-cone coniferous forest, Coastal scrub

ScientificName	CommonName	Lifeform	CRPR	CESA	FESA	Habitat
Quercus durata var. gabrielensis	San Gabriel oak	perennial evergreen shrub	4.2	None	None	Chaparral, Cismontane woodland
Sagittaria sanfordii	Sanford's arrowhead	perennial rhizomatous herb (emerg	1B.2	None	None	Marshes and swamps (shallow freshwater)
Sidalcea neomexicana	salt spring checkerbloom	perennial herb	2B.2	None	None	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas
Spermolepis lateriflora	western bristly scaleseed	annual herb	2A	None	None	Sonoran desert scrub
Symphyotrichum defoliatum	San Bernardino aster	perennial rhizomatous herb	1B.2	None	None	
Symphyotrichum greatae	Greata's aster	perennial rhizomatous herb	1B.3	None	None	

LEGEND:

California Rare Plant Rank (CRPR)

Radford Studios

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE **RareFind**

Query Summary:
Quad IS (Oat Mountain (3411835) OR San Fernando (3411834) OR Sunland (3411833) OR Canoga Park (3411825) OR Van Nuys (3411824) OR Burbank (3411823) OR Topanga (3411815) OR Beverly Hills (3411814) OR Hollywood (3411813))
AND Taxonomic Group IS (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects)

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CNDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
Anaxyrus californicus	arroyo toad	Amphibians	AAABB01230	139	1	Endangered	None	G2G3	S2	null	CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered	Desert wash, Riparian scrub, Riparian woodland, South coast flowing waters, South coast standing waters
Rana muscosa	southern mountain yellow-legged frog	Amphibians	AAABH01330	186	3	Endangered	Endangered	G1	S1	null	CDFW_WL-Watch List, IUCN_EN-Endangered, USFS_S-Sensitive	Aquatic
Spea hammondii	western spadefoot	Amphibians	AAABF02020	1428	7	None	None	G2G3	S3S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened	Cismontane woodland, Coastal scrub, Valley & foothill grassland, Vernal pool, Wetland
Taricha torosa	Coast Range newt	Amphibians	AAAAF02032	88	2	None	None	G4	S4	null	CDFW_SSC-Species of Special Concern	null
Socalchemmis gertschi	Gertsch's socalchemmis spider	Arachnids	ILARAU7010	3	2	None	None	G1	S1	null	null	Coastal scrub
Agelaius tricolor	tricolored blackbird	Birds	ABPBXB0020	955	1	None	Threatened	G1G2	S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, USFWS_BCC-Birds of Conservation Concern	Freshwater marsh, Marsh & swamp, Swamp, Wetland
Aimophila ruficeps canescens	southern California rufous-	Birds	ABPBX91091	235	1	None	None	G5T3	S3	null	CDFW_WL-Watch List	Chaparral, Coastal scrub

	crowned sparrow											
Athene cunicularia	burrowing owl	Birds	ABNSB10010	2011	1	None	None	G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Coastal prairie, Coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Valley & foothill grassland
Buteo swainsoni	Swainson's hawk	Birds	ABNKC19070	2561	6	None	Threatened	G5	S4	null	BLM_S-Sensitive, IUCN_LC-Least Concern	Great Basin grassland, Riparian forest, Riparian woodland, Valley & foothill grassland
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	ABNRB02022	165	1	Threatened	Endangered	G5T2T3	S1	null	BLM_S-Sensitive, USFS_S-Sensitive	Riparian forest
Coturnicops noveboracensis	yellow rail	Birds	ABNME01010	45	1	None	None	G4	S1S2	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive, USFWS_BCC-Birds of Conservation Concern	Freshwater marsh, Meadow & seep
Empidonax traillii extimus	southwestern willow flycatcher	Birds	ABPAE33043	70	1	Endangered	Endangered	G5T2	S3	null	null	Riparian woodland
Polioptila californica californica	coastal California gnatcatcher	Birds	ABPBJ08081	1087	13	Threatened	None	G4G5T3Q	S2	null	CDFW_SSC-Species of Special Concern	Coastal bluff scrub, Coastal scrub
Riparia riparia	bank swallow	Birds	ABPAU08010	299	1	None	Threatened	G5	S3	null	BLM_S-Sensitive, IUCN_LC-Least Concern	Riparian scrub, Riparian woodland
Vireo bellii pusillus	least Bell's vireo	Birds	ABPBW01114	505	12	Endangered	Endangered	G5T2	S3	null	null	Riparian forest, Riparian scrub, Riparian woodland
Catostomus santaanae	Santa Ana sucker	Fish	AFCJC02190	28	2	Threatened	None	G1	S1	null	AFS_TH-Threatened, IUCN_EN-Endangered	Aquatic, South coast flowing waters
Gila orcuttii	arroyo chub	Fish	AFCJB13120	49	1	None	None	G2	S2	null	AFS_VU-Vulnerable, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable,	Aquatic, South coast flowing waters

											USFS_S-Sensitive	
Oncorhynchus mykiss irideus pop. 10	steelhead - southern California DPS	Fish	AFCHA0209J	19	1	Endangered	Candidate Endangered	G5T1Q	S1	null	AFS_EN-Endangered	Aquatic, South coast flowing waters
Rhinichthys osculus ssp. 8	Santa Ana speckled dace	Fish	AFCJB3705K	13	1	None	None	G5T1	S1	null	AFS_TH-Threatened, CDFW_SSC-Species of Special Concern, USFS_S-Sensitive	Aquatic, South coast flowing waters
Aglaothorax longipennis	Santa Monica shieldback katydid	Insects	IIORT32020	1	1	None	None	G1G2	S1S2	null	IUCN_CR-Critically Endangered	Chaparral
Bombus crotchii	Crotch bumble bee	Insects	IIHYM24480	437	17	None	Candidate Endangered	G2	S2	null	IUCN_EN-Endangered	null
Cicindela hirticollis gravida	sandy beach tiger beetle	Insects	IICOL02101	34	1	None	None	G5T2	S2	null	null	Coastal dunes
Coelus globosus	globose dune beetle	Insects	IICOL4A010	50	2	None	None	G1G2	S1S2	null	IUCN_VU-Vulnerable	Coastal dunes
Danaus plexippus plexippus pop. 1	monarch - California overwintering population	Insects	IILEPP2012	391	11	Candidate	None	G4T1T2Q	S2	null	IUCN_EN-Endangered, USFS_S-Sensitive	Closed-cone coniferous forest
Eugnosta busckana	Busck's gallmoth	Insects	IILEM2X090	15	3	None	None	G1G3	S2S3	null	null	Coastal dunes, Coastal scrub
Antrozous pallidus	pallid bat	Mammals	AMACC10010	420	4	None	None	G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive	Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland
Corynorhinus townsendii	Townsend's big-eared bat	Mammals	AMACC08010	635	1	None	None	G4	S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive	Broadleaved upland forest, Chaparral, Chenopod scrub, Great Basin grassland, Great Basin scrub, Joshua tree woodland, Lower montane coniferous forest, Meadow & seep, Mojavean desert scrub, Riparian forest, Riparian woodland, Sonoran desert scrub, Sonoran thorn woodland, Upper montane coniferous forest, Valley & foothill grassland
Eumops perotis californicus	western mastiff bat	Mammals	AMACD02011	296	9	None	None	G4G5T4	S3S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern	Chaparral, Cismontane woodland, Coastal scrub, Valley & foothill grassland
Lasionycteris noctivagans	silver-haired bat	Mammals	AMACC02010	139	2	None	None	G3G4	S3S4	null	IUCN_LC-Least Concern	Lower montane coniferous forest, Oldgrowth, Riparian forest
Lasiurus	hoary bat	Mammals	AMACC05032	238	9	None	None	G3G4	S4	null	IUCN_LC-	Broadleaved upland forest, Cismontane woodland, Lower

cinereus											Least Concern	montane coniferous forest, North coast coniferous forest
Lasiurus xanthinus	western yellow bat	Mammals	AMACC05070	58	1	None	None	G4G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Desert wash
Lepus californicus bennettii	San Diego black-tailed jackrabbit	Mammals	AMAEB03051	103	1	None	None	G5T3T4	S3S4	null	null	Coastal scrub
Macrotus californicus	California leaf-nosed bat	Mammals	AMACB01010	46	1	None	None	G3G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Riparian scrub, Sonoran desert scrub
Microtus californicus stephensi	south coast marsh vole	Mammals	AMAFF11035	7	1	None	None	G5T2T3	S2	null	CDFW_SSC-Species of Special Concern	null
Neotoma lepida intermedia	San Diego desert woodrat	Mammals	AMAFF08041	132	4	None	None	G5T3T4	S3S4	null	CDFW_SSC-Species of Special Concern	Coastal scrub
Nyctinomops macrotis	big free-tailed bat	Mammals	AMACD04020	32	2	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	null
Onychomys torridus ramona	southern grasshopper mouse	Mammals	AMAFF06022	28	1	None	None	G5T3	S3	null	CDFW_SSC-Species of Special Concern	Chenopod scrub
Perognathus longimembris brevinasus	Los Angeles pocket mouse	Mammals	AMAFD01041	70	1	None	None	G5T2	S1S2	null	CDFW_SSC-Species of Special Concern	Coastal scrub
Taxidea taxus	American badger	Mammals	AMAJF04010	594	1	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Alkali marsh, Alkali playa, Alpine, Alpine dwarf scrub, Bog & fen, Brackish marsh, Broadleaved upland forest, Chaparral, Chenopod scrub, Cismontane woodland, Closed-cone coniferous forest, Coastal bluff scrub, Coastal dunes, Coastal prairie, Coastal scrub, Desert dunes, Desert wash, Freshwater marsh, Great Basin grassland, Great Basin scrub, Interior dunes, Ione formation, Joshua tree woodland, Limestone, Lower montane coniferous forest, Marsh & swamp, Meadow & seep, Mojavean desert scrub, Montane dwarf scrub, North coast coniferous forest, Oldgrowth, Pavement plain, Redwood, Riparian forest, Riparian scrub, Riparian woodland, Salt marsh, Sonoran desert scrub, Sonoran thorn woodland, Ultramafic, Upper montane coniferous forest, Upper Sonoran scrub, Valley & foothill grassland
Glyptostoma gabrielense	San Gabriel chestnut	Mollusks	IMGASB1010	24	1	None	None	G2	S3	null	null	null
Gonidea angulata	western ridged mussel	Mollusks	IMBIV19010	157	2	None	None	G3	S2	null	IUCN_VU-Vulnerable	Aquatic
Helminthoglypta traskii pacoimensis	Pacoima shoulderband	Mollusks	IMGASC2472	2	1	None	None	G1G2T1	S1	null	null	null

Anniella spp.	California legless lizard	Reptiles	ARACC01070	127	24	None	None	G3G4	S3S4	null	CDFW_SSC-Species of Special Concern	null
Anniella stebbinsi	Southern California legless lizard	Reptiles	ARACC01060	426	11	None	None	G3	S3	null	CDFW_SSC-Species of Special Concern, USFS_S-Sensitive	Broadleaved upland forest, Chaparral, Coastal dunes, Coastal scrub
Arizona elegans occidentalis	California glossy snake	Reptiles	ARADB01017	260	2	None	None	G5T2	S2	null	CDFW_SSC-Species of Special Concern	null
Aspidoscelis tigris stejnegeri	coastal whiptail	Reptiles	ARACJ02143	148	6	None	None	G5T5	S3	null	CDFW_SSC-Species of Special Concern	null
Diadophis punctatus modestus	San Bernardino ringneck snake	Reptiles	ARADB10015	14	1	None	None	G5T2T3	S2?	null	USFS_S-Sensitive	null
Emys marmorata	western pond turtle	Reptiles	ARAAD02030	1424	7	None	None	G3G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive	Aquatic, Artificial flowing waters, Klamath/North coast flowing waters, Klamath/North coast standing waters, Marsh & swamp, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland
Phrynosoma blainvillii	coast horned lizard	Reptiles	ARACF12100	784	17	None	None	G4	S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Chaparral, Cismontane woodland, Coastal bluff scrub, Coastal scrub, Desert wash, Pinon & juniper woodlands, Riparian scrub, Riparian woodland, Valley & foothill grassland
Thamnophis hammondii	two-striped gartersnake	Reptiles	ARADB36160	184	6	None	None	G4	S3S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive	Marsh & swamp, Riparian scrub, Riparian woodland, Wetland