# Appendix D: Biological Resources Supporting Information

D.1 - Biological Resources Assessment

# **FIRSTCARBON**SOLUTIONS<sup>™</sup>

Biological Resources Assessment Barber Yard Specific Plan Project City of Chico, Butte County, California

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# **SECTION 1: INTRODUCTION**

This Biological Resources Assessment (BRA) has been prepared by FirstCarbon Solutions (FCS) for the proposed Barber Yard Specific Plan (proposed project or BYSP). The purpose of the BRA is to (1) document existing and potentially occurring biological resources in the Study Area (which consists of the BYSP Area and the Southern Study Area); (2) analyze potential project-related impacts on regulated biological resources; (3) summarize relevant local, regional, State, and federal laws and regulations; and (4) recommend appropriate and feasible measures to mitigate potential impacts on biological resources to less than significant levels.

# **1.1 - Project Location**

The Study Area is in the southern portion of the City of Chico (City), in Butte County (County), California (Exhibit 1 and Exhibit 2). The Study Area is located on the *Chico, California* United States Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map. The Study Area consists of the BYSP Area and the Southern Study Area. The BYSP Area is approximately 133 acres, and the Southern Study Area is approximately 21.5 acres, for a cumulative total of approximately 154.5 acres.

Eight Assessor Parcel Numbers (APNs) comprise the BYSP Area: 039-400-016 (partial), 039-400-024, 039-400-025, 039-400-026, 039-400-050, 039-400-051, 039-400-052, and 039-400-053. The BYSP Area is bounded by the Union Pacific Railroad (UPRR) to the west, a portion of Butte County that is unincorporated to the south, Chestnut Street and Normal Avenue to the northeast, Estes Road to the east, and various individual properties to the north. Agricultural and rural residential areas lie to the south and west across the UPRR.

As noted above, the approximately 21.5-acre Southern Study Area is located directly south of the BYSP Area, in unincorporated Butte County, on APN 039-410-025 (Exhibit 2). A storm drain alignment is proposed to connect the BYSP Area and stormwater basin to a new outfall at the southern tip of APN 039-410-039 at Comanche Creek (Exhibit 2). For the purposes of this document, these areas together constitute the Southern Study Area of approximately 21.5 acres. The BRA looked at an area larger than the 16-acre southern area quoted in the BYSP to ensure coverage of potential indirect bio impacts that occur outside the immediate project footprint.

The Southern Study Area is bounded by a Pacific Gas and Electric Company (PG&E) parcel to the north, rural residential and agricultural land uses to the east, agricultural land and Comanche Creek to the south, and the UPRR as well as more rural residential and agricultural land uses to the west. The Southern Study Area is largely cleared and undeveloped within areas of a former almond orchard, as detailed further below.

# **1.2 - Project Description**

The proposed project is the full buildout of a Specific Plan for the BYSP Area that would provide for a mixed-use community accommodating a diverse range of housing opportunities with a mix of commercial, recreational, and office uses (Exhibit 3).

The overall construction timeline for the proposed project is expected to occur over 17 years, between 2024 and 2041. However, due to market fluctuations over time as well as other factors, it is impossible to predict with precision the exact timing for buildout.

The proposed project's draft preliminary development schedule does not include construction "phases;" however, for the purposes of conservative analysis, and based on information available at the time of preparation of this Draft EIR, it is anticipated that any necessary demolition and/or soil hauling would occur within the first 2 years of development (between 2024 and 2025) and the majority of construction would occur within the first 10 years of development. It is also assumed that the Social Hub would be constructed in the first year of development. Due to the proposed project's differing timelines of development by location, mitigation measures in this BRA are recommended by location.



Source: Census 2000 Data, The California Spatial Information Library (CaSIL).

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# Exhibit 1 Regional Location Map

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> CITY OF CHICO BARBER YARD SPECIFIC PLAN BIOLOGICAL RESOURCE ASSESSMENT



Source: Google Earth Aerial Imagery. Butte County Association of Governments; and NorthStar, 02/2023.



# Exhibit 2 Project Site Map

17230003 • 03/2023 | 2\_project\_site.mxd

CITY OF CHICO BARBER YARD SPECIFIC PLAN BIOLOGICAL RESOURCE ASSESSMENT



Source: Urban Design Associates, 07/2022.



Exhibit 3 **Conceptual Site Plan** 

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CITY OF CHICO BARBER YARD SPECIFIC PLAN BIOLOGICAL RESOURCES ASSESSMENT

A total of approximately 210,000 square feet of commercial space is envisioned upon buildout. Within the BYSP Area today there are three existing buildings proposed for adaptive reuse, including the Engineering Building (approximately 17,200 square feet), the Shop (approximately 2,800 square feet), and the Warehouse (approximately 130,000 square feet). Together, these structures represent approximately 150,000 square feet of future commercial uses, including plans for a "Social Hub" that would be centered around the Engineering Building. In addition to the approximately 150,000 square feet of existing buildings slated for adaptive reuse, the proposed project involves approximately 60,000 square feet of additional new commercial uses, with a combination of mixeduse buildings that could incorporate residential uses above retail as well as freestanding retail buildings. There are also three accessory buildings present on-site: an approximately 800-squarefoot storage building located near the BYSP Area entrance on the south side of West 16th Street and an approximately 600-square-foot storage building located between the Engineering Building and Shop. These buildings are proposed for demolition. A former on-site apiary building was destroyed in a fire in 2004, but a single brick wall of the structure is still evident today. This feature is proposed to be maintained as part of a park space.

At full buildout, the proposed project would include a maximum of 1,250 dwelling units. The proposed project would support residential density ranges from 4 to 35 units per gross acre. Housing types would include market rate for-rent and for-sale units, non-deed-restricted accessory dwelling units, and potentially deed-restricted affordable units.<sup>1</sup> The types of housing products envisioned include single-family detached, pocket neighborhoods, bungalow courts, duplexes, townhouses, garden apartments, and apartments over commercial/retail uses, as detailed more fully in the BYSP.

In addition, to be located within the approximately 21.5-acre Southern Study Area (Exhibit 2), a combination water quality retention/detention basin (stormwater basin), an access drive from Estes Road, and an associated storm drain alignment would be constructed to connect the BYSP Area and stormwater basin to a new outfall to Comanche Creek.<sup>2</sup> At this time, two potential storm drain alignment and outfall location options are being considered, as shown on Exhibit 2, and both alignment options are evaluated in this BRA for purposes of conservative analysis, although only one would ultimately be developed. Alignment Option 1 would travel directly southeast from the stormwater basin to Comanche Creek within APN 039-410-039. Alignment Option 2 would traverse eastward from the stormwater basin to Estes Road, where it would then turn south to Comanche Creek.

<sup>&</sup>lt;sup>1</sup> The specific affordable housing obligations to be imposed on development under the BYSP would be set forth in the Barber Yard Development Agreement between the BYSP property owner and the City, which would be considered and approved by the City Council concurrent with the City Council's adoption of the Specific Plan.

<sup>&</sup>lt;sup>2</sup> There is no existing access to or from the decommissioned UPRR spur parcel between the BYSP Area and the Southern Study Area. Temporary access across the parcel would be required for construction of the stormwater basin and would reduce construction traffic on the southern portion of Estes Road.

# **SECTION 2: REGULATORY SETTING**

# 2.1 - Federal

## 2.1.1 - Endangered Species Act of 1973

The United States Fish and Wildlife Service (USFWS) has jurisdiction over species listed as threatened or endangered under the federal Endangered Species Act of 1973. Section 9 of the Endangered Species Act protects listed species from "take," which is broadly defined as actions taken to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." The Endangered Species Act protects threatened and endangered plants and animals and their critical habitats. Candidate species are those proposed for listing; these species are usually treated by resource agencies as if they were actually listed during the environmental review process. Procedures for addressing impacts to federally listed species follow two principal pathways, both of which require consultation with the USFWS, which administers the Endangered Species Act for all terrestrial species. The first pathway is the Section 10(a) incidental take permit, which applies to situations where a non-federal government entity must resolve potential adverse impacts to species protected under the Endangered Species Act. The second pathway is Section 7 consultation, which applies to projects directly undertaken by a federal agency or private projects requiring a federal permit or approval.

# 2.1.2 - Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the law and regulations or otherwise by permit. All migratory birds and their nests are protected from take and other impacts under the MBTA (16 United States Code [USC] § 703, *et seq*.).

# 2.1.3 - Bald and Golden Eagle Protection Act

The golden eagle (*Aquila chrysaetos*) and bald eagle (*Haliaeetus leucocephalus*) are afforded additional protection under the Eagle Protection Act, amended in 1973 (16 USC § 669, *et seq*.) and the Bald and Golden Eagle Protection Act (16 USC § 668–668d).

### 2.1.4 - Clean Water Act

#### Section 404

The agencies are in receipt of the U.S. Supreme Court's May 25, 2023 decision in the case of *Sackett v. Environmental Protection Agency*. In light of this decision, the agencies will interpret the phrase "waters of the United States" consistent with the Supreme Court's decision in the *Sackett* case. In *Sackett*, the Supreme Court adopted the Rapanos plurality's test for adjacent wetlands: only those wetlands with a continuous surface connection to other regulated waters, such that the two are indistinguishable.

The United States Army Corps of Engineers (USACE) administers Section 404 of the federal Clean Water Act (CWA), which regulates the discharge of dredge and fill material into waters of the United States. The term "waters of the United States" is defined in USACE regulations at 33 Code of Federal Regulations Part 328.3(a) as:

- 1. Waters which are:
  - a. 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;
  - b. The territorial seas; or
  - c. Interstate waters;
- Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;
- 3. Tributaries of waters identified in paragraphs (a)(1) or (2) of this section that are relatively permanent, standing or continuously flowing bodies of water;
- 4. Wetlands adjacent to the following waters:
  - a. Waters identified in paragraph (a)(1) of this section; or
  - Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3) of this section and with a continuous surface connection to those waters;
- 5. Intrastate lakes and ponds not identified in paragraphs (a)(1) through (4) of this section that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3) of this section.

The following are not "waters of the United States":

- 1. Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;
- 2. Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the United States Environmental Protection Agency (EPA);
- 3. Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;
- 4. 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;

- 6. 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;
- 7. 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 waters of the United States; and
- 8. Swales and erosional features (*e.g.,* gullies, small washes) characterized by low volume, infrequent, or short duration flow.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the EPA and/or USACE.

"Wetland" refers to areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and seasonal wetlands. Wetlands are considered jurisdictional if they fall under one of the categories of waters of the United States defined above. The USACE jurisdiction typically extends up to the ordinary high water mark (OHWM).

In general, a USACE permit must be obtained before placing fill in wetlands or other waters of the United States. The type of permit depends on the impacted acreage, the purpose of the proposed fill, and other factors.

### Section 401

Section 401 of the CWA states that "any applicant for a federal permit for activities that involve a discharge to waters of the State, shall provide the federal permitting agency a certification from the State in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the federal Clean Water Act." Therefore, before the USACE will issue a Section 404 permit, applicants must apply for and receive a Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB).

### 2.2 -

# 2.2.1 - CEQA Guidelines

The California Environmental Quality Act (CEQA) requires public agencies to evaluate potential impacts to special-status species and their habitat. The following CEQA Guidelines Appendix G checklist questions serve as thresholds of significance when evaluating the potential impacts of a project on biological resources. Impacts are considered significant if a project would:

• Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as being a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or USFWS.

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS.
- Have a substantial adverse effect on federally and State-protected wetlands as defined by Section 404 of the CWA (including but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- 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.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan.

# 2.2.2 - California Endangered Species Act

The State of California enacted the California Endangered Species Act (CESA) in 1984. CESA pertains to State-listed endangered and threatened species. CESA requires lead agencies to consult with the CDFW when preparing CEQA documents to ensure that the lead agency actions do not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available (Fish and Game Code [FGC] § 2080). CESA directs agencies to consult with the CDFW on projects or actions that could affect listed species, directs the CDFW to determine whether jeopardy would occur, and allows the CDFW to identify "reasonable and prudent alternatives" to the project consistent with conserving the species. CESA allows the CDFW to authorize exceptions to the State's prohibition against take of a listed species if the "take" of a listed species is incidental to carrying out an otherwise lawful project that has been approved under CEQA (FGC § 2081).

### 2.2.3 - California Fish and Game Code

Under CESA, the CDFW has the responsibility for maintaining a list of endangered and threatened species (FGC § 2070). Fish and Game Code Sections 2050 through 2098 outline the protection provided to California's rare, endangered, and threatened species. Fish and Game Code Section 2080 prohibits the taking of plants and animals listed under the CESA. Fish and Game Code Section 2081 establishes an incidental take permit program for State-listed species. The CDFW maintains a list of "candidate species," which it formally notices as being under review for addition to the list of endangered or threatened species.

In addition, the Native Plant Protection Act of 1977 (NPPA) (FGC § 1900, *et seq*.) prohibits the taking, possessing, or sale within the State of any plants with a State designation of rare, threatened, or endangered (as defined by the CDFW). An exception to this prohibition in the NPPA allows landowners, under specified circumstances, to take listed plant species, provided that the owners first notify the CDFW and give the agency at least 10 days to come and retrieve (and presumably replant) the plants before they are plowed under or otherwise destroyed. Fish and Game Code Section 1913 exempts from "take" prohibition "the removal of endangered or rare native plants from

a canal, lateral ditch, building site, or road, or other right-of-way." Project impacts to these species are not considered significant unless the species are known to have a high potential to occur within the area of disturbance associated with construction of the project.

In addition to formal listing under the Endangered Species Act and CESA, some species receive additional consideration by the CDFW and local lead agencies during the CEQA process. Species that may be considered for review are those listed as a "Species of Special Concern." The CDFW maintains lists of "Species of Special Concern" that serve as species "watch lists." Species with this status may have limited distributions or limited populations and/or the extent of their habitats has been reduced substantially, such that their populations may be threatened. Thus, their populations are monitored, and they may receive special attention during environmental review. While they do not have statutory protection under the Endangered Species Act or CESA, they may be considered rare under CEQA and specific protection measures may be warranted. In addition to Species of Special Concern, the CDFW Special Animals List identifies animals that are tracked by the California Natural Diversity Database (CNDDB) and may be potentially vulnerable but warrant no federal interest and no legal protection.

Sensitive species that would qualify for listing but are not currently listed are afforded protection under CEQA. CEQA Guidelines Section 15065 (Mandatory Findings of Significance) requires that a substantial reduction in numbers of a rare or endangered species be considered a significant effect. CEQA Guidelines Section 15380 (Rare or Endangered Species) provides for the assessment of unlisted species as rare or endangered under CEQA if the species can be shown to meet the criteria for listing. As discussed further below, certain ranks of unlisted plant species on the California Native Plant Society (CNPS) List typically require evaluation under CEQA.

Fish and Game Code Sections 3500 to 5500 outline protection for fully protected species of mammals, birds, reptiles, amphibians, and fish. Species that are fully protected by these sections may not be taken or possessed at any time. The CDFW cannot issue permits or licenses that authorize the take of any fully protected species, except under certain circumstances such as scientific research and live capture and relocation of such species pursuant to a permit for the protection of livestock.

Under Fish and Game Code Section 3503.5, it is unlawful to take, possess, or destroy any birds in the orders of *Falconiformes* or *Strigiformes* (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto. To comply with the requirements of CESA, an agency reviewing a project within its jurisdiction must determine whether any State-listed endangered or threatened species may be present in the subject project site and vicinity and determine whether the project will have a potentially significant impact on such species. In addition, the CDFW encourages informal consultation on any project that may impact a candidate species.

Project-related impacts to species on the CESA endangered or threatened list would be considered significant. State-listed species are fully protected under the mandates of CESA. "Take" of protected species incidental to otherwise lawful management activities may be authorized under Fish and

Game Code Section 206.591. Authorization from the CDFW would be in the form of an Incidental Take Permit.

Fish and Game Code Section 1602 requires any entity to notify the CDFW before beginning any activity that "may substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of any river, stream, or lake" or "deposit debris, waste, or other materials that could pass into any river, stream, or lake." "River, stream, or lake" includes waters that are episodic and perennial and ephemeral streams, desert washes, and watercourses with a subsurface flow. A Lake or Streambed Alteration Agreement will be required if the CDFW determines that project activities may substantially adversely affect fish or wildlife resources through alterations to a covered body of water. CDFW jurisdiction typically extends to the edge or "drip line" of the riparian habitat or top of bank. Additionally, the CDFW may assert jurisdiction over native riparian habitat adjacent to aquatic features, including native trees over 4 inches DBH. If an existing fish or wildlife resource may be substantially adversely affected by the activity, the CDFW may propose reasonable measures that will allow protection of those resources. If the applicant agrees to these measures, the applicant may enter into an agreement with the CDFW identifying the covered activities, impacts to the CDFW jurisdictional features, and compensatory mitigation.

# 2.2.4 - California Porter-Cologne Water Quality Control Act

The RWQCB regulates actions that would involve "discharging waste, or proposing to discharge waste, within any region that could affect the water of the State" (Water Code § 13260(a)), pursuant to provisions of the Porter-Cologne Water Quality Act. "Waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the State" (Water Code § 13050(e)).

In 2019, the California State Water Resources Control Board (State Water Board) published the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (Procedures) to guide wetland/waters of the State determinations and the permitting process.<sup>4</sup>

As described below, waters of the State include some, but not all, features that are defined as wetlands, as well as other features, including the ocean, lakes, and rivers. The State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State defines a wetland as follows: An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

Under California State law, waters of the State means "any surface water or groundwater, including saline waters, within the boundaries of the State." As such, water quality laws apply to both surface water and groundwater. After the United States Supreme Court decision in Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers (531 USC 159), the Office of Chief Counsel of the State Water Board released a legal memorandum confirming the State's jurisdiction over isolated

<sup>&</sup>lt;sup>4</sup> California State Water Resources Control Board (State Water Board). 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. April 2, 2019.

wetlands. The memorandum stated that under the California Porter-Cologne Water Quality Control Act, discharges to wetlands and other waters of the State are subject to State regulation, and this includes isolated wetlands. In general, the State Water Board regulates discharges to isolated waters in much the same way as it does for waters of the United States, using Porter-Cologne rather than CWA authority.

# 2.2.5 - California Native Plant Society

The CNPS maintains a rank of plant species that are native to California and that have low population numbers, limited distribution, or are otherwise threatened with extinction. This information is published in the Inventory of Rare and Endangered Vascular Plants of California. Following are the definitions of the CNPS ranks:

- Rank 1A: Plants presumed extirpated in California and either rare or extinct elsewhere
- Rank 1B: Plants rare, threatened, or endangered in California and elsewhere
- Rank 2A: Plants presumed extirpated in California but common elsewhere
- Rank 2B: Plants rare, threatened, or endangered in California but more common elsewhere
- Rank 3: Plants about which more information is needed
- Rank 4: Watch List: Plants of limited distribution

Potential impacts to populations of CNPS ranked plants receive consideration under CEQA review. All plants appearing on the CNPS List ranked 1 or 2 are considered to meet the CEQA Guidelines Section 15380 criteria. Rank 3 and 4 plants do not automatically meet this definition. Rank 4 plants do not clearly meet CEQA standards and thresholds for impact considerations. Nevertheless, some level of CEQA review is justified for California Rare Plant Rank (CRPR) 4 taxa, and under some circumstances, a full impact analysis is warranted. Taxa that can be shown to meet the criteria for endangered, rare, or threatened status under CEQA Section 15380(d) or that can be shown to be regionally rare or unique as defined in CEQA Section 15125(c) must be fully analyzed in a CEQA document. Some circumstances, such as local rarity, having occurrences peripheral to the taxon's distribution, or having occurrences on unusual substrates or rare and declining habitats, provide justification for treating some CRPR 4 taxa occurrences as regionally rare or unique.

One limitation to fully analyzing impacts on CRPR 4 taxa is the difficulty in obtaining current data on the number and condition of the occurrences.<sup>5</sup>

# 2.3 - Regional and Local

#### 2.3.1 -

The Chico 2030 General Plan establishes the following goals, policies, and actions relevant to biological resources:

#### Goal OS-1 Protect and conserve native species and habitats.

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Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-IN)/1723/17230003/BRA/17230003 Barber Yard BRA.docx

<sup>&</sup>lt;sup>5</sup> California Native Plant Society (CNPS). 2020. Considerations for Including CRPR 4 Plant Taxa in CEQA Biological Resource Impact Analysis. Sacramento, CA. April 5, 2024.

- **Policy OS-1.1** (Native Habitats and Species): Preserve native species and habitat through land use planning, cooperation, and collaboration.
- Action OS-1.1.1 (Development/Preservation Balance): Direct development to appropriate locations consistent with the Land Use Diagram, and protect and preserve areas designated Open Space and areas that contain sensitive habitat and species.
- Action OS-1.1.2 (Regional Conservation Planning): Actively participate in regional conservation planning efforts, in particular the Butte County Habitat Conservation Plan process, sponsored by the Butte County Association of Governments, which seeks the preservation of habitat areas needed for the ongoing viability of native species.
- Action OS-1.1.3 (Sustainable Community Strategy): In support of AB 32, work with the Butte County Association of Governments to implement the Sustainable Community Strategy (SB 375), which directs smart-growth development to urbanized areas.
- Action OS-1.1.4 (Community Collaboration): Consult with conservation groups to identify sites and projects for fundraising and volunteer participation in public education, enhancement, maintenance, and protection of natural resources within the City's Sphere of Influence.
- Action OS-1.1.5 (Control Invasive Species): Prioritize efforts to remove non-native species within Bidwell Park and other City greenways, and condition new development adjacent to Bidwell Park and greenways to protect native species and habitat from the introduction of invasive species.
- Policy OS-1.2 (Regulatory Compliance): Protect special-status plant and animal species, including their habitats, in compliance with all applicable State, federal and other laws and regulations.
- Action OS-1.2.1 (State and Federal Guidelines): Ensure that project-related biological impacts are considered and mitigated, and require applicants to obtain all necessary local, State, and federal permits for projects that may affect special-status species or their habitat.
- Policy OS-2.5 (Creeks and Riparian Corridors) Preserve and enhance Chico's creeks and riparian corridors as open space for their aesthetic, drainage, habitat, flood control, and water quality values.
- Action OS-2.5.1 (Setbacks from Creeks): Consistent with the City's Municipal Code, require a minimum 25-foot setback from the top of creek banks to development and associated above ground infrastructure as a part of project review, and seek to acquire an additional 75 feet. In addition, require a larger setback where necessary to mitigate environmental impacts.

# Policy OS-2.6 (Oak Woodlands) Protect oak woodlands as open space for sensitive species and habitat.

## 2.3.2 - City of Chico Municipal Code

Municipal Code Chapter 16.66 sets forth the City's Tree Preservation Regulations. Trees that are protected by these regulations include (1) any woody plant with a single stem of 18 inches or more in diameter; (2) all oaks, sycamores, Oregon ash, and big leaf maples with a 12-inch-diameter at breast height; or (3) blue oaks, canyon live oaks, interior live oaks, California buckeye, madrone, toyon, redbud, California bay, and Pacific dogwood with 6-inch-diameter at breast height. Additionally, these provisions apply to any trees required to be preserved as part of a project subject to a discretionary approval. Permits are required for the removal of any trees subject to the chapter and the applicant must either offset the loss via on-site replanting of replacement trees or payment of an in lieu fee to the City.

# **SECTION 3: METHODS**

### **3.1** - Literature Review

Literature review was conducted to analyze existing documentation regarding biological resources and habitat conditions within the project site and is summarized below.

### 3.1.1 - Existing Documentation

As part of the literature review, an FCS Biologist compiled and analyzed existing environmental documentation for the project site and the additional relevant areas in its vicinity. This included a nine-quadrangle search, as further described in Section 3.1.2 below. This documentation included literature pertaining to the habitat requirements of special-status species with the potential to occur in the project site and project vicinity; and federal register listings, protocols, and species data provided by the USFWS, CDFW, and CNPS. Additionally, the following documentation was reviewed, and relevant information was included in this BRA, accordingly:

- Diamond Match Specific Plan Environmental Setting Report<sup>7</sup>
- Natural Environment Study for the Butte County Area Governments Transit Facility Property Acquisition Project<sup>8</sup>
- Arborist Survey Report<sup>9</sup>

### 3.1.2 - Topographic Maps and Aerial Photographs

An FCS Biologist reviewed current USGS 7.5-minute topographic quadrangle map(s) and aerial photographs as a preliminary analysis of the existing conditions within the project site and immediate vicinity.<sup>10</sup> Information obtained from the topographic maps included elevation, general watershed information, and potential drainage feature locations using Google Earth in conjunction with the EPA Watershed Assessment, Tracking, and Environmental Results System (WATERS).<sup>11</sup> Aerial photographs provided a perspective of the current site conditions relative to land use, plant community locations, and potential locations of wildlife movement corridors with the project site and immediate vicinity.

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<sup>&</sup>lt;sup>7</sup> EIP Associates. 1996. Diamond Match Specific Plan Environmental Setting Report. Accessed October 23, 2024.

<sup>&</sup>lt;sup>8</sup> NorthStar Environmental. 2012. Natural Environment Study. Accessed October 23, 2024.

<sup>&</sup>lt;sup>9</sup> Adema Environmental. 2024. Arborist Survey Report Baber Yard Area. Accessed October 23, 2024

<sup>&</sup>lt;sup>10</sup> United States Geological Survey (USGS). 2023. National Geospatial Program. Website: https://www.usgs.gov/core-sciencesystems/national-geospatial-program/us-topo-maps-america?qt-science\_support\_page\_related\_con=4#qtscience\_support\_page\_related\_con. Accessed October 23, 2024.

<sup>&</sup>lt;sup>11</sup> United States Environmental Protection Agency (EPA). 2023. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system. Accessed October 23, 2024.

#### 3.1.3 - Soil Surveys

The United States Department of Agriculture (USDA) has published soil surveys that describe the soil series (i.e., group of soils with similar profiles) occurring within a particular area.<sup>12</sup> These profiles include major horizons with similar thickness, arrangement, and other important characteristics. These series are further subdivided into soil mapping units that provide specific information regarding soil characteristics. Many special-status plant species have a limited distribution based exclusively on soil type. Therefore, pertinent USDA soil survey maps were reviewed to determine the existing soil mapping units within the project site and to inform whether the soil conditions on-site are potentially suitable for any special-status plant species. However, Natural Resources Conservation Service (NRCS) soil maps utilize an approximately 1.4-acre minimum mapping unit, and line placement may not be accurate on a large (i.e., parcel-level) scale.

#### 3.1.4 - Special-status Species Database Search

An FCS Biologist compiled a list of threatened, endangered, and otherwise special-status species previously recorded within the project site and project vicinity based on a search of the USFWS Information for Planning and Consultation (IPaC) database,<sup>13</sup> the California Natural Diversity Database (CNDDB), and the CNPS Electronic Inventory (CNPSEI) of Rare and Endangered Vascular Plants of California for the *Chico, California* USGS 7.5-minute Topographic Quadrangle Map and the eight surrounding quadrangles.<sup>14,15</sup> The CNDDB Biogeographic Information and Observation System (BIOS 6) was used to determine the distance between the known occurrences of special-status species and the Study Area.<sup>16</sup>

#### 3.1.5 - Trees

Prior to conducting the reconnaissance-level field survey, an FCS Biologist reviewed applicable City ordinances pertaining to tree preservation and protection and ascertained whether tree replacement measures or permits for the removal of regulated trees would be required. An Arborist Survey Report was initially conducted in April of 2023 and subsequently updated to reflect the entire project site in March 2024 by McMillan Tree Service and Adema Environmental (Appendix D) (Arborist Survey Report). The Arborist Survey Report was conducted by a qualified Arborist to determine the quantity and types of trees within the project site and vicinity, the Southern Study Area and immediate vicinity and to propose recommendations for the identified trees to the extent they are proposed to be removed.

<sup>&</sup>lt;sup>12</sup> Natural Resources Conservation Service (NRCS). 2023. Web Soil Survey (WSS). United States Department of Agriculture (USDA). Website: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed October 23, 2024.

<sup>&</sup>lt;sup>13</sup> United States Fish and Wildlife Service (USFWS). 2023. Information for Planning and Consultation (IPaC). Website: https://ecos.fws.gov/ipac/. Accessed October 23, 2024.

<sup>&</sup>lt;sup>14</sup> California Department of Fish and Wildlife (CDFW). 2023. California Natural Diversity Database (CNDDB) RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed October 23, 2024.

<sup>&</sup>lt;sup>15</sup> California Native Plant Society (CNPS). 2022. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/. Accessed October 23, 2024.

<sup>&</sup>lt;sup>16</sup> California Department of Fish and Wildlife (CDFW). 2023. Biogeographic Information and Observation System (BIOS 6). Website: https://map.dfg.ca.gov/bios/. Accessed October 23, 2024.

# 3.1.6 - Jurisdictional Waters and Wetlands

Prior to conducting the reconnaissance-level survey, an FCS Biologist reviewed EPA WATERS and aerial photography to identify potential natural drainage features and water bodies.<sup>17</sup> In general, all surface drainage features identified as blue-line streams on USGS maps and linear patches of vegetation are expected to exhibit evidence of flows and considered potentially subject to State and federal regulatory authority as waters of the United States and/or State. A preliminary assessment was conducted within the Study Area to determine the location of any existing drainages and water bodies and limits of project-related grading or other ground-disturbing activities to aid in determining whether a formal delineation of waters of the United States or State would be necessary.

# 3.2 - Field Survey

FCS Biologists familiar with the biological resources of the region conducted general wildlife, habitat, vegetation community and aquatic resource surveys on January 19 and February 17, 2023. The objective of the field surveys was to ascertain general site conditions and wildlife use and to identify whether existing vegetation communities provide suitable habitat for special-status plant or wildlife species. Potentially sensitive areas identified during the literature review were ground-truthed during the field surveys for mapping accuracy. Special attention was paid to sensitive habitats and areas potentially supporting special-status floral and faunal species.

Wildlife species detected during the reconnaissance-level surveys by sight, calls, tracks, scat, or other signs were recorded. Notations were made regarding suitable habitat for those special-status species determined to have the potential to occur within the Study Area.<sup>18</sup>

# 3.2.1 - Vegetation

Common plant species observed during the reconnaissance-level surveys were identified by visual characteristics and morphology in the field and recorded. Uncommon plants were identified with the use of taxonomical guides, including Jepson eFlora and Calflora.<sup>19,20</sup> Taxonomic nomenclature used in this study follows The Jepson Manual: Vascular Plants of California.<sup>21</sup> Vegetation types and boundaries were noted on aerial photos, verified through field observation, and digitized using ESRI ArcGIS software<sup>®</sup> ArcMap 10.0. By incorporating collected field data and interpreting aerial photography, a map of habitat types, land cover types, and other biological resources within the Study Area was prepared (Exhibit 5). Vegetation community and land cover types used to help classify habitat types are based on the Manual of California Vegetation (MCV) where applicable.

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<sup>&</sup>lt;sup>17</sup> United States Environmental Protection Agency (EPA). 2023. Watershed Assessment, Tracking and Environmental Results System (WATERS). Website: https://www.epa.gov/waterdata/waters-watershed-assessment-tracking-environmental-results-system. Accessed October 23, 2024.

<sup>&</sup>lt;sup>18</sup> California Department of Fish and Wildlife (CDFW). 2023. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed October 23, 2024.

<sup>&</sup>lt;sup>19</sup> Jepson Flora Project (eds.) 2020. Jepson eFlora, https://ucjeps.berkeley.edu/eflora/. Accessed April 5, 2024.

<sup>&</sup>lt;sup>20</sup> Calflora. 2020. Calflora: Information on California plants for education, research, and conservation. Website: http://www.calflora.org/. Accessed October 23, 2024.

 <sup>&</sup>lt;sup>21</sup> Baldwin, B. et al. 2012. The Jepson Manual: Vascular Plants of California. Berkeley: University of California Press. County of San Bernardino (Bernardino). 2007 (amended 2015).

As noted above, sensitive natural communities are vegetation communities or special wildlife habitats that are rare or occur in limited distributions or provide specific habitat requirements for special-status plant or wildlife species. The CDFW maintains a list of natural communities which attempts to classify vegetation types found within the State of California and rank them based on rarity. Communities ranked S1-S3 are considered sensitive natural communities.<sup>22</sup> Riparian vegetation communities are generally considered sensitive regardless of species composition.

#### 3.2.2 - Wildlife

Wildlife species detected during the reconnaissance-level surveys by sight, calls, tracks, scat, or other signs were recorded. Notations were made regarding suitable habitat for those special-status species determined to have the potential to occur within the Study Area.<sup>23</sup> Appropriate field guides were used to assist in species identification during surveys, such as Peterson, Reid, and Stebbins.<sup>24,25,26</sup> Online resources such as eBird and California Herps were also consulted as necessary.<sup>27,28</sup>

### 3.2.3 - Wildlife Movement Corridors and Nursery Sites

As explained above, wildlife movement corridors link areas of suitable wildlife habitat that are otherwise separated by natural and anthropogenic dispersal barriers, including rugged terrain, changes in vegetation, development, or human disturbance. Urbanization and the resulting fragmentation of open space areas create isolated "islands" of wildlife habitat, forming separated populations. Corridors act as an effective link between populations. Wildlife nursery sites include nesting birds and maternity bat roosts, aquatic breeding habitat, and special-status and non-specialstatus wildlife breeding or nesting colonies.

To account for potential impacts to wildlife movement corridors, FCS Biologists reviewed maps and habitat connectivity data from the California Essential Connectivity Project available through the CDFW Biogeographic Information and Observation System.<sup>29</sup> Additionally, aerial imagery for the local area was referenced to assess if local core habitat areas were present within or connected to the Study Area. This assessment was refined based on observations of on-site physical and/or biological conditions, including topographic and vegetative factors that can facilitate wildlife movement, as well as on-site and off-site barriers to connectivity.

<sup>&</sup>lt;sup>22</sup> California Department of Fish and Wildlife (CDFW). 2023. Sensitive Natural Communities List, Sacramento: California Department of Fish and Wildlife. https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities. Accessed October 23, 2024.

<sup>&</sup>lt;sup>23</sup> California Department of Fish and Wildlife (CDFW). 2023. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed October 23, 2024.

<sup>&</sup>lt;sup>24</sup> Peterson, T.R. 2010. A Field Guide to Birds of Western North America, 4<sup>th</sup> Edition. Boston: Houghton Mifflin Harcourt.

<sup>&</sup>lt;sup>25</sup> Reid, F. 2006. A Field Guide to Mammals of North America, 4th Edition. Boston: Houghton Mifflin Harcourt.

<sup>&</sup>lt;sup>26</sup> Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians. Third Edition. Boston: Houghton Mifflin Harcourt.

<sup>&</sup>lt;sup>27</sup> eBird. 2020. Online bird occurrence database. Website: http://ebird.org/content/ebird/. Accessed October 23, 2024.

<sup>&</sup>lt;sup>28</sup> California Herps. 2020. A Guide to the Amphibians and Reptiles of California. Website: http://www.californiaherps.com/. Accessed October 23, 2024.

<sup>&</sup>lt;sup>29</sup> California Department of Fish (CDFW) and Wildlife and California Department of Transportation (Caltrans). 2022. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. California Department of Fish and Wildlife, Sacramento, CA. Website: https://www.wildlife.ca.gov/Conservation/Planning/Connectivity/CEHC. Accessed October 23, 2024.

# **SECTION 4: RESULTS**

This section summarizes the results of the literature search, database review, and field surveys. Sensitive biological resources including special-status species and the impact analysis are addressed separately in Section 5 and 6 of this BRA.

# 4.1 - Environmental Setting

The Study Area is generally located on the southern boundary of the City of Chico, where commercial and residential use intersperses with active agricultural and fallow areas. The Study Area is surrounded by residential and industrial uses and associated roadways to the north and east and open agricultural fields to the south and west.

# 4.2 - Topography and Hydrology

The Study Area lies at approximately 194 feet above sea level in elevation. The Study Area and vicinity are generally flat, which is typical for the developed areas within the City of Chico. The Study Area drains to the southwest into Comanche Creek, which flows through the southern corner of the Study Area.

### 4.3 - Soils

The USDA NRCS indicates that the soils on the Study Area consist entirely of Chico loam (445). This soil type and its primary characteristics are summarized in Table 1 and depicted on Exhibit 4.

Soil Name	Symbol	Slope	Description	BYSP Area Acreage (approx.)	Southern Study Area Improvement Acreage (approx.)
Chico loam	445	0–2%	Loamy alluvium derived from igneous, metamorphic and sedimentary rock. Well drained, nonsaline soil with no flooding or ponding frequency.	133.3	21.5

Table 1: Soil	Types	Present	within	Study	Area
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Source: United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). 2021. Official Soil Series Descriptions. Website: https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Accessed April 5, 2024.



Source: Google Earth Aerial Imagery. Butte County Association of Governments; and NorthStar, 02/2023. USDA Web Soil Survey, Butte County.



Exhibit 4 Soils Map

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CITY OF CHICO BARBER YARD SPECIFIC PLAN BIOLOGICAL RESOURCE ASSESSMENT
## 4.4 - Vegetation Communities and Land Cover Types

The following section describes the vegetation communities and land cover types present within the Study Area. The vegetation communities and land cover types are bifurcated between the BYSP Area and the Southern Study Area. The location and extent of each vegetation community is shown on Exhibit 5.

## 4.4.1 - BYSP Area

## Ruderal/Disturbed (BYSP Area)–Approximately 68.4 Acres

The central portion of the BYSP Area can be best described as ruderal/disturbed habitat. Ruderal/disturbed habitat is classified as areas that have been physically disturbed by previous legal human activity, and which are no longer recognizable as a native or naturalized vegetation association, but which continue to retain a soil substrate. Vegetation, if present, is typically composed of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance. Vegetation that was observed within the BYSP Area consist of yellow star thistle (*Centaurea solstitialis*), panicled willow herb (*Epilobium brachycarpum*), turkey mullein (*Croton setigerus*), milk thistle (*Silybum marianum*), wild oat (*Avena fatua*), curly dock (*Rumex crispus*), black mustard (*Brassica nigra*), Johnson grass (*Sorghum halepense*), field bindweed (*Convolvulus arvensis*), bull thistle (*Cirsium vulgare*), chicory (*Cichorium intybus*), redstem filaree (*Erodium cicutarium*), ripgut brome (*Bromus diandrus*), and burr clover (*Medicago polymorpha*), among others. One small elderberry shrub with a diameter at breast height (DBH) of 6 inches (ELD #1) was identified within a remnant manufactured ditch, as depicted in the Arborist Survey Report (Appendix D). This shrub is discussed in further detail in Section 6.1 in relation to potential habitat for the valley elderberry longhorn beetle.

Examples of disturbed land include areas that have been graded or repeatedly cleared for fuel management purposes, as well as areas that have experienced repeated use that prevents natural revegetation (i.e., dirt parking lots, trails that have been present for several decades), recently graded firebreaks, graded construction pads, construction staging areas, off-road vehicle trails, and old home-sites. This portion of the BYSP Area contains dirt and concrete roads connecting abandoned developments.

## Remnant Orchard (BYSP Area)–Approximately 35.4 Acres

An orchard is an intentional plantation of trees or shrubs that is maintained for food production. Orchards comprise fruit or nut-producing trees which are generally grown for commercial production. Such trees are often arranged in rows. Orchard communities are typically comprised of artificially irrigated habitat dominated by one, sometimes several, tree or shrub species planted for cultivation. Trees are typically low and bushy, and the understory is open, with little groundcover. Deciduous orchards include a variety of fruit trees (e.g., apples, apricots, cherries, citrus, kiwi, peaches, nectarines, pears, persimmons, plums, pluots, pomegranates, etc.) and/or nut trees and shrubs (e.g., almonds, olives, pistachios, walnuts, etc.). Understory species generally consist of short native and non-native grasses and other herbaceous species. The remnant orchard within the northern, western, and eastern portions of the BYSP Area is comprised mostly of almond (*Prunus dulcis*) trees. Google Earth aerial imagery indicates that the remnant orchard has been mostly inactive for over 20 years.



#### Southern Study Area 13.51 acres

Detention Basin

Land Cover and Vegetation (Southern Study Area)

0.21 acre

	Non-native grassland	5.41 acres
	Orchard	7.04 acres
	Developed	0.32 acre
	Dirt access road / Baren	0.51 acre
	Elderberry cluster	0.03 acre
	Commanche Creek	0.07 acre
	Valley Oak Riparian Woodland	0.13 acre
A 01		



Source: Google Earth Aerial Imagery. Butte County Association of Governments; and NorthStar, 02/2023.

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## Exhibit 5 Vegetation Communities and Land Cover Types

### Developed/Access Roads (BYSP Area)–Approximately 15.9 Acres

Developed/Access Roads land cover areas are characterized by a combination of developed and hardscaped areas, including paved roads, with little or no exposed soil substrates. Cement access roads in varying degrees of condition can be found interspersed throughout the central portion of the BYSP Area.

#### Mixed Ornamental Woodland (BYSP Area)–Approximately 13.4 Acres

Several clusters of ornamental trees occur in the northern and westerns portion of the BYSP Area in association with former developments on-site. These trees and areas of ornamental vegetation are primarily composed of valley oak (*Quercus lobata*), black walnut (*Juglans nigra*), pecan (*Carya illinoinensis*), deodar cedar (*Cedrus deodara*), tree of heaven (*Ailanthus altissima*), California fan palm (*Washingtonia filifera*), and Monterey cypress (*Cupressus macrocarpa*), among others.

### Detention Basin (BYSP Area)–Approximately 0.2 Acre

A detention basin can be found toward the southwestern corner of the BYSP Area. The basin is contained by an approximately 10-foot-tall earthen berm. The basin appears to be fed by a culvert on its east bank. At the time of the field surveys, the basin was dry. Ruderal vegetation and annual grasses were present within the basin (see Appendix A). Species observed within this area included medusa head (*Taeniatherum caput-medusae*) and yellow star thistle, among others. Based on review of Google Earth aerial imagery, the basin appears to have been constructed sometime between 1947 and 1969. The basin has likely been non-functional for numerous years due to the vacant nature of the BYSP Area. This feature is discussed further in Section 5.4 and 6.2 below.

## 4.4.2 - Southern Study Area

The Southern Study Area consists of the approximately 21.5-acre area (adjacent to the BYSP Area) where the proposed stormwater basin would be constructed, as well as the area surrounding the two outfall alignment options. This area consists of the following vegetation communities and land cover types, as shown on Exhibit 5.

#### **Orchard–Approximately 7 Acres**

The southern portion of the Southern Study Area, where the two outfall alignment options traverse, consists of almond orchards. These orchards appear to be actively managed, with herbaceous understory plant cover that consists of managed ruderal non-native grasses and forbs.

#### Non-native grassland–Approximately 12.2 Acres

This community is found within a field in the northern portion of the Southern Study Area. This community is dominated by non-native annual grasses, such as soft brome (*Bromus hordeaceus*), wild oats (*Avena* sp.), and ripgut brome.

## Dirt Access Road/Barren–Approximately 0.5 Acre

A dirt access road is located within the eastern border of the Southern Study Area. The dirt road is associated with the terminus of Estes Road. Small areas of managed, non-native grasses and forbs were observed on the edges of the road.

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#### **Developed–Approximately 1.5 Acre**

While not a natural habitat type, urban/developed areas typically consist of buildings, hardscape such as asphalt or concrete, and other man-made structures. The eastern portion of the Southern Study Area contains developed land in the form of a single-family residence and associated driveway.

### Valley Oak Riparian Woodland–Approximately 0.2 Acre

The woody vegetation present along Comanche Creek can be best described as Valley Oak Riparian Woodland given the dominate tree species consists of valley oak. Other trees and shrubs observed included black walnut, Himalayan blackberry (Rubus armeniacus), blue elderberry (Sambucus nigra ssp. caerulea), and willows (Salix sp.). This community gualifies as California Sensitive Natural Community (71.045.00 Valley Oak Riparian Forest and Woodland).<sup>30</sup> This feature is discussed in further detail in Sections 5.1 and 5.2 below.

### Comanche Creek/Aquatic–Approximately 0.1 Acre

The southern boundary of the Southern Study Area overlaps with the aquatic habitat of Comanche Creek.

### Elderberry Cluster (Outside of Off-site Improvement Area)–Approximately 0.03 Acre

In addition to the types of vegetation communities/land cover types described above within the project site, this analysis considers an off-site blue elderberry cluster containing six individuals with DBHs ranging from 4 to 42 inches, which were observed within the Valley Oak Riparian Woodland Community. Specifically, the Arborist Survey Report (Appendix D.2) identified these shrubs as "ELD # 2-7." This cluster is located adjacent to (but outside of) the southwestern corner of the off-site improvement rea. This feature is discussed in further detail below in relation to potential habitat for the VELB.

## 4.5 - Common Wildlife

The vegetation community and land cover types discussed above provide habitat for numerous wildlife species. Wildlife activity during the field surveys consisted primarily of avian species, including California scrub jay (Aphelocoma californica), turkey vulture (Cathartes aura), house finch (Haemorhous mexicanus), European starling (Sturnus vulgaris), mourning dove (Zenaida macroura), northern mockingbird (*Mimus polyglottos*), and American crow (*Corvus brachyrhynchos*).

Additionally, western fence lizard (Sceloporus occidentalis) and black-tailed jackrabbit (Lepus californicus) were also observed during the field surveys.

## 4.6 - Wildlife Movement Corridors and Nursery Sites

The majority of the Study Area consists of partially vacant land that has been subject to varying degrees of anthropogenic disturbances. The Study Area is directly bounded by urban development to the north and east and scattered development to the west that limits wildlife movement.

<sup>&</sup>lt;sup>30</sup> California Department of Fish and Wildlife (CDFW).2022. California Sensitive Natural Communities. Website: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609&inline. Accessed October 23, 2024.

Therefore, the upland portions (e.g., those to the north of Comanche Creek) of the Study Area would not function as a wildlife movement corridor. However, Comanche Creek and the associated riparian habitat that flanks the creek could function as a wildlife corridor for aquatic and terrestrial wildlife along the southern edge of the Southern Study Area, but primarily outside the Study Area.

There are no native wildlife nursey sites present within the Study Area.

## 4.7 - Trees

According to the Arborist Survey Report, the BYSP Area and the Southern Study Area and its immediate vicinity contain approximately 935 trees with DBHs greater or equal to 6 inches.<sup>31</sup> Species observed consists of almond (*Prunus amygdalus*), black walnut, California fan palm, Canary Island date palm (*Phoenix canariensis*), Chinese hackberry (*Celtis sinensis*), Chinese pistache (*Pistacia chinensis*), coastal redwood (*Sequoia sempervirens*), Mexican fan palm (*Washingtonia robusta*), pecan (*Carya illinoinensis*), sycamore (*Platanus occidentalis*), tree of heaven (*Ailanthus altissima*), and valley oak (*Quercus lobata*).

As outlined in Section 4.4.1 and 4.4.2 above, one blue elderberry shrub was observed within the BYSP Area. Additionally, an off-site blue elderberry cluster (containing six individuals) was observed adjacent to the southwestern corner of the Southern Study Area, bordering Comanche Creek. Of the approximately 935 trees surveyed, approximately 721 trees are in good health and approximately 152 are recommended for removal.

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<sup>&</sup>lt;sup>31</sup> Adema Environmental. 2024. Arborist Survey Report Baber Yard Area. Accessed October 23, 2024

## **SECTION 5: SENSITIVE BIOLOGICAL RESOURCES**

The following section discusses the existing site conditions and presence or potential presence for sensitive biological resources to occur within the Study Area.

## **5.1 - Sensitive Natural Communities**

As noted above, sensitive natural communities are vegetation communities or special wildlife habitats that are rare or occur in limited distributions or provide specific habitat requirements for special-status plant or wildlife species. The CDFW maintains a list of natural communities that classifies vegetation types found within the State of California and ranks them based on rarity. Communities identified on CDFW's list as "sensitive" and/or communities ranked S1-S3 are considered sensitive natural communities under CEQA.<sup>32</sup> Wetlands and riparian habitats are also typically considered sensitive natural communities and are addressed in the environmental review process.

## 5.1.1 - Valley Oak Riparian Woodland

Valley Oak Riparian Woodland (CDFW California Sensitive Natural Community 71.045.00) can be found along Comanche Creek, located in the southern portion of the Southern Study Area. No other sensitive natural communities were found within the Study Area.

## **5.2 - Special-status Plant Species**

The Special-status Plant Species Evaluation Table (Appendix B, Table 1) lists 27 special-status plant species and CNPS sensitive species that have been recorded on the *Chico, California* USGS Topographic Quadrangle Map and the eight surrounding quadrangles by the CNDDB, CNPSEI, and IPaC.<sup>33,34,35</sup> The CNDDB occurrences near the Study Area are shown on Exhibit 6. This evaluation includes the species' status, required habitat, and potential to occur within the Study Area. Special-status plant species that were determined to have no potential to occur within the Study Area are included in the analysis, along with the justification for their exclusion from further discussion.

<sup>&</sup>lt;sup>32</sup> California Department of Fish and Wildlife (CDFW). 2022. Natural Communities List, Sacramento: California Department of Fish and Wildlife. https://wildlife.ca.gov/Data/VegCAMP/Natural-Communities. Accessed October 23, 2024.

<sup>&</sup>lt;sup>33</sup> United States Geological Survey (USGS). 2022. National Geospatial Program. Website: https://www.usgs.gov/core-sciencesystems/national-geospatial-program/us-topo-maps-america?qt-science\_support\_page\_related\_con=4#qtscience\_support\_page\_related\_con. Accessed October 23, 2024.

<sup>&</sup>lt;sup>34</sup> California Department of Fish and Wildlife (CDFW). 2022. CNDDB RareFind 5 California Natural Diversity Database Query for Specialstatus Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed October 23, 2024.

<sup>&</sup>lt;sup>35</sup> California Native Plant Society (CNPS). 2022. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/. Accessed October 23, 2024.







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Exhibit 6 CNDDB Special-Status Species Occurrences

CITY OF CHINO BARBER YARD BIOLOGICAL RESOURCE ASSESSMENT

Based upon the literature review, field surveys, and professional experience, no special-status plant species occur or are expected to occur within the Study Area due to the absence of suitable habitat, previous land uses, and the extent and frequency of ground disturbance. Much of the Study Area has been previously utilized for former industrial operations, agriculture, and ongoing disturbance from tilling, herbicide application, and competition from non-native species. For these reasons, the Study Area does not promote the establishment of or provide suitable conditions for rare plants, which are typically sensitive to these types of disturbances. Moreover, the Study Area lacks microhabitats such as vernal pools, chenopod scrub, and alkaline or acidic soils that are typically necessary to support many rare plants. For the reasons outlined above, it is reasonable to conclude that special-status plant species are determined to be absent from the site. As such, this resource category is not further addressed in the impact analysis and recommendations section of this document.

## 5.3 - Special-status Wildlife Species

The Special-status Wildlife Species Evaluation (Appendix B, Table 2) identifies 27 federal and Statelisted threatened and/or endangered wildlife species and State Species of Special Concern that have been documented within the *Chico, California* USGS Topographic Quadrangle Map and eight surrounding quadrangles by CNDDB and IPaC. <sup>36,37</sup> This evaluation includes the species' status, required habitat types and features, and potential to occur within the Study Area. Appendix B, Table 2, includes all special-status wildlife species that have been determined unlikely to occur within the Study Area, primarily based on the absence of suitable habitat and the lack of recorded occurrences in the Study Area and project vicinity, along with the justification for their exclusion from further discussion.

Specifically, 19 of the 27 special-status wildlife species documented were determined to have no potential to occur and are therefore excluded from further analysis. The remaining eight species (Swainson's hawk (*Buteo swainsoni*), burrowing owl (*Athene cunicularia*), Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), giant garter snake (*Thamnophis gigas*), western pond turtle (*Emys marmorata*), pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis californicus*), and western red bat (*Lasiurus blossevillii*)) were determined to have a potential to occur in the Study Area and are discussed in further detail below.

## 5.3.1 - Swainson's Hawk

Swainson's hawk is listed as threatened under CESA.<sup>38</sup> Swainson's hawk is a medium-sized bird of prey with relatively long, pointed wings that curve up somewhat in a slight dihedral while the bird is in flight. Adult females weigh between 900 and 1,100 grams (32 to 39 ounces) and males from 800 to 1,000 grams (28 to 35 ounces). The most distinctive identifying features of an adult Swainson's

Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-IN)/1723/17230003/BRA/17230003 Barber Yard BRA.docx

<sup>&</sup>lt;sup>36</sup> California Department of Fish and Wildlife (CDFW). 2023. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed October 23, 2024.

<sup>&</sup>lt;sup>37</sup> United States Fish and Wildlife Service (USFWS). 2023. Information for Planning and Consultation (IPaC). Website: https://ecos.fws.gov/ipac/. Accessed October 23, 2024.

<sup>&</sup>lt;sup>38</sup> California Department of Fish and Wildlife (CDFW). 2023. California Natural Diversity Database (CNDDB). Special Animals List. Sacramento, CA. Updated April 5, 2024.

hawk are its dark head and breast band that is distinctive from the lighter-colored belly and the linings on the underside of the wing that are lighter than the dark gray flight feathers.

Swainson's hawk breeds in the western United States and Canada and winters in South America as far south as Argentina. The breeding season for Swainson's hawk in the Central Valley typically lasts from March to the end of July. Swainson's hawk typically forages in open grasslands and has become increasingly dependent on agriculture, especially alfalfa crops, as native communities are converted to agricultural lands. The diet of the Swainson's hawk in California consists of small rodents such as voles; however, other small mammals, birds, and insects are also preyed upon. Swainson's hawk often nest near riparian woodlands. They will also use lone trees in agricultural fields or pastures, and roadside trees that are adjacent to suitable foraging habitat.<sup>39</sup>

Within the Draft BRCP area, nest sites have been documented along the Sacramento River, Feather River, Butte Creek, and other riparian corridors, as well as non-riparian habitats associated with farmlands. The nearest CNDDB record for nesting Swainson's hawk is approximately 2.4 miles south of the Study Area (CNDDB Occurrence No. 699). No Swainson's hawk nests were observed within the Study Area or within the immediate vicinity of the Study Area during the FCS field surveys. However, given recorded occurrences within dispersal distance and the existence of suitable nesting habitat in the form of several large trees near suitable foraging habitat present on properties adjacent to the Study Area, there is a moderate potential for this species to within the Study Area.

## 5.3.2 - Western Burrowing Owl

Burrowing owls occur in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. This species utilizes, modifies, and nests in burrows created by other species, most notably the California ground squirrel (*Otospermophilus beecheyi*).<sup>40</sup> The burrowing owl is a California Species of Special Concern, but has recently been named as a "candidate" species for protective status under CESA

The nearest CNDDB record was documented approximately 2 miles east of the Study Area (CNDDB Occurrence No. 1029). No burrowing owls or signs of burrowing owl were observed during FCS field surveys. However, burrows suitable for burrowing owl were observed within the Study Area. Therefore, it cannot be ruled out that burrowing owl may appear within the Study Area under certain circumstances before start of construction and could potentially be impacted by the proposed project. There is a low potential for this species to occur within the Study Area.

## 5.3.3 - Valley Elderberry Longhorn Beetle

Valley elderberry longhorn beetle (VELB) is listed as Threatened by the Endangered Species Act. This species is a member of the longhorn beetles (family Cerambidae). Males range in length from about 2 centimeters (about 0.5 inch to nearly 1 inch), measured from the front of the head to the end of the abdomen, with antennae about as long as their bodies. Females are slightly broader than males

<sup>&</sup>lt;sup>39</sup> California Department of Fish and Wildlife (CDFW). 2023. Swainson's Hawks in California. Website: https://wildlife.ca.gov/Conservation/Birds/Swainson-Hawks. Accessed October 23, 2024.

<sup>&</sup>lt;sup>40</sup> California Department of Fish and Wildlife (CDFW). 2023. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed October 23, 2024.

and have shorter antennae. Adult males have red-orange elytra (wing covers) with four elongated spots. Adult females have dark colored elytra. The species is nearly always found on or close to its host plant, red or blue elderberry, along rivers and streams. Females lay their eggs on the bark. Larvae hatch and burrow into the stems.<sup>41</sup> The Study Area is within the known range of this species.

Six elderberry shrubs, with DBHs from 4 to 42 inches were observed off-site growing along the northern bank of Comanche Creek adjacent to (but outside of) the boundary of the Southern Study Area. Exit holes consistent with the size and shape of VELB exit holes were observed within these shrubs. An additional on-site elderberry shrub with a DBH of 6 inches was observed within the southwestern corner of the BYSP Area. Exit holes consistent with the size and shape of VELB exit holes is and shape of VELB exit holes were observed within the southwestern corner of the BYSP Area. Exit holes consistent with the size and shape of VELB exit holes were observed within this individual shrub.

The nearest CNDDB record of this species is documented approximately 2.3 miles north of the Study Area (CNDDB Occurrence No. 291). Literature suggests that VELB are more likely to occur in riparian areas that contain dense stands of elderberry and typically do not disperse more than 800 meters (or 0.5 mile) from occupied elderberry trees.<sup>42</sup>

The outfall for the proposed project would be located within approximately 86 to 272 feet of the elderberry cluster, as depicted in Exhibit 5 and Exhibit 7b, depending on the selected outfall location. Current or future permanent or temporary occupation of the elderberry clusters by VELB cannot be ruled out due to the cryptic nature of the species and its potential (current or future) presence in the vicinity of the Study Area. This determination is consistent with the recent USFWS Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (USFWS Framework), which considers riparian elderberry located within 165 feet of a project site within VELB range "suitable habitat, likely occupied," regardless of the current presence/absence of VELB exit holes.<sup>43</sup> Additionally, the proposed buildout of the BYSP Area would directly impact the single elderberry shrub identified by the Arborist Survey Report (Appendix D). There is a moderate potential for this species to occur within the Study Area. Direct and indirect impacts to VELB are discussed in further detail in Section 6.1.1 below.

## 5.3.4 - Giant Garter Snake

The giant garter snake (GGS) is listed as Threatened by the Endangered Species Act and CESA. This snake is a member of the family Colubridae and is one of the largest garter snakes, reaching lengths of 64 inches or more. The GGS inhabits agricultural wetlands and other waterways such as irrigation and drainage canals, sloughs, ponds, small lakes, low gradient streams, and adjacent uplands in the Central Valley. Much of this species' natural habitat in the San Joaquin Valley has been lost due to

<sup>&</sup>lt;sup>41</sup> United States Fish and Wildlife Service (USFWS). 2017. Species Information: Valley Elderberry Longhorn Beetle. Sacramento Fish and Wildlife Office. Website:

https://www.fws.gov/sacramento/es\_species/Accounts/Invertebrates/valley\_elderberry\_longhorn\_beetle/. Updated December 6, 2017.

<sup>&</sup>lt;sup>42</sup> Talley, T.S., E. Fleishman, M. Holyoak, D.D. Murphy, and A. Ballard. 2007. Rethinking a rare species conservation strategy in an urban landscape: The case of the valley elderberry longhorn beetle. Biological Conservation.

<sup>&</sup>lt;sup>43</sup> United States Fish and Wildlife Service (USFWS). 2017. Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle.

agriculture, flood control, and land management practices, as well as predation from non-native species, road mortalities, and water pollution.<sup>44</sup>

The Study Area contains riparian habitat along Comanche Creek. Comanche Creek is considered by the USFWS to be a migration or travel corridor for GGS and is hydrologically connected to known GGS habitat in Butte Creek. Additionally, the top of the bank is dominated by disturbed and annual grassland and could provide marginal basking habitat.

The nearest recorded occurrence of GGS is located approximately 5 miles southwest of the Study Area CNDDB Occurrence No. 235). Given potential project impacts to Comanche Creek and its riparian corridor from outfall construction, it cannot be ruled out that the GGS may appear within the creek or adjacent upland habitat under certain circumstances before start of construction and could potentially be impacted by the proposed project. There is a low potential for this species to occur within the Study Area.

## 5.3.5 - Western Pond Turtle

Western pond turtle (WPT) is a California Species of Special Concern. This species is aquatic and found in ponds, marshes, rivers, streams, and irrigation ditches with rocks and logs for basking. This species only leaves aquatic habitat to reproduce and overwinter. This species requires basking sites and suitable (grassy open fields) upland habitat for egg-laying. Eggs are buried in nests that are usually found within 250 meters of water. WPT are omnivorous generalists and opportunistic predators that prey upon small insects, aquatic invertebrates, fish, frogs, snakes, and small mammals.

The nearest recorded occurrence of WPT is located approximately 1 mile east of the Study Area (CNDDB Occurrence No. 1227) within a pond to the north of Comanche Creek. Given potential project impacts to Comanche Creek and its riparian corridor from outfall construction, it cannot be ruled out that the WPT may appear within the creek or adjacent upland habitat under certain circumstances before start of construction and could potentially be impacted by the proposed project. There is a low potential for this species to occur within the Study Area.

## 5.3.6 - Protected Functional Groups

Nesting birds and roosting bats include groups of species that are protected under federal and State law and regulations and are considered sensitive and protected under certain conditions (e.g., when nesting, breeding), and are therefore included in this section.

#### Nesting Birds

The Valley Oak Riparian Woodland found along the banks of Comanche Creek and other trees within the greater Study Area could provide suitable nesting habitat for many bird species, including special-status species such as Swainson's hawk.

<sup>&</sup>lt;sup>44</sup> United States Fish and Wildlife Service (USFWS). 2017. Species Information: Giant Garter Snake. Sacramento Fish & Wildlife Office. https://www.fws.gov/sites/default/files/documents/survey-protocols-for-the-giant-garter-snake.pdf. Accessed October 23, 2024.

The active nests of most bird species are protected by federal and/or State laws and regulations (MBTA and Fish and Game Code). Species that are protected pursuant to the MBTA are identified by the USFWS.<sup>45</sup> Nests are generally defined as being "active" if they contain eggs or altricial young. The Study Area contains trees, shrubs, and structures that provide suitable habitat for protected migratory or native resident nesting bird species relatively tolerant of human disturbance.

### **Roosting Bats**

The Study Area offers degraded but potentially viable roosting habitat for special-status bat species including pallid bat, western mastiff bat, and western red bat. Bats could potentially use cavities in trees or buildings within the Study Area to roost and forage thereon. No bats were observed during the field surveys.

Bat species are often grouped together on the basis of their roosting habitat requirements. Western mastiff bat is most likely to be found roosting in artificial structures (e.g., the structures within the BYSP Area), although it is known to roost in natural features also. Other species, such as the pallid bat and western red bat, are more likely to roost in natural features rather than artificial structures.

Roosts are used during the daytime to seek refuge; at night between foraging excursions to rest, digest prey, seek refuge from predators or poor weather conditions, or for social purposes; and in winter for hibernation. Adult females and their young use particularly secure roosts as maternity roosts. The number of bats occupying a given roost can vary from a solitary individual to a large colony, depending on the species. Roosting sites are very sensitive to human disturbance, especially when bats are hibernating or rearing young.

At dusk, bats leave their roosts to forage for insects near ponds or riparian habitats. Bats generally prey on insect species that are locally abundant near water bodies. Ecotone areas (areas of transition between habitats) are also used as foraging areas. The Study Area and adjacent riparian area of Comanche Creek has foraging potential for bat species.

Therefore, it cannot be ruled out that bat roosts are present within the Study Area. There is a low potential for these species to occur within the Study Area.

## 5.4 - State or Federally Protected Waters and Wetlands

## 5.4.1 - Comanche Creek

The southern boundary of the Study Area contains a portion of Comanche Creek which shows evidence of a bed, bank, and OHWM. Comanche Creek flows west where it joins Little Chico Creek and becomes Angel Slough. Angel Slough drains into Butte Creek which connects to the Sacramento River, which then flows into the Suisun Bay. Therefore, it is likely that Comanche Creek has a downstream connection to a traditional navigable water (TNW). As such, Comanche Creek is likely a potential jurisdictional water of the United States and a water of the State. It is also likely State and federally protected water pursuant the CWA, the Porter-Cologne Water Quality Control Act, and the

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<sup>&</sup>lt;sup>45</sup> United States Fish and Wildlife Service (USFWS). 2020. Website: https://www.federalregister.gov/documents/2020/04/16/2020-06779/general-provisions-revised-list-of-migratory-birds. Accessed October 23, 2024.

Fish and Game Code (Streambed Alteration Program, Sections 1600–1616). However, a final determination about the extent of jurisdictional waters (if any) within the Study Area can only be made by the appropriate regulatory agencies (e.g., USACE, RWQCB, and CDFW).

## 5.4.2 - Detention Basin

The approximately 0.2-acre detention basin described in Section 4.4.5 was constructed between 1947 and 1969. Based on the conditions observed during the field surveys, the basin was likely constructed in upland habitat and does not appear to have a connection to downstream waters. The man-made basin has likely been non-functional for numerous years due to the vacant nature of the BYSP Area. For these reasons, the basin is likely to be exempt as a water of the United States. If not exempt (e.g., as a treatment basin designed to meet the requirements of the CWA or if it is part of an approved water treatment system), the basin could qualify as a jurisdictional water of the United States. A final determination about the extent of waters of the United States (if any) on the Study Area can only be made by the USACE.

The RWQCB exempts artificial wetlands that are currently used and maintained for detention, retention, infiltration, or treatment of stormwater runoff from waters of the State fill permit requirements (Procedures § II.3(d)(iii)).<sup>46</sup> However, a final determination about the extent of waters of the State (if any) on the Study Area can only be made by the RWQCB.

## 5.5 - Regulated Trees

The Arborist report identified approximately 935 trees associated with the BYSP and Southern Study Area with a DBH greater or equal to 6 inches. Out of the 935 trees identified, 885 trees are associated with the BYSP while approximately 50 trees are associated with the Southern Study Area and its immediate vicinity. At the time of this writing the proposed project has not committed to retaining any trees within the BYSP Area except for trees within a 10-foot boundary along the neighborhood boundary to the northeast and east. For trees within the BYSP Area, the proposed project would be subject to adherence with the applicable provisions of the City's Tree Preservation Regulations, as described in Chapter 16.66 of the City's Municipal Code.

Portions of the Southern Study Area that would be permanently disturbed by the proposed project contain orchard trees. Trees are present in some areas of the temporary impact area of Potential Outfall Alignments 1 and 2; however, no native or sensitive riparian tree removal is anticipated. Construction of improvement features within the Southern Study Area would be subject to applicable tree protection requirements that arise from County, State and federal permitting processes.

<sup>&</sup>lt;sup>46</sup> California State Water Resources Control Board (State Water Board). 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. April 2, 2019.

## SECTION 6: IMPACT ANALYSIS AND RECOMMENDATIONS

The following discussion addresses potential project impacts on sensitive biological resources, including special-status species, and recommends feasible measures to avoid and/or mitigate impacts to a less than significant level under CEQA.

## 6.1 - Impact Analysis for Special-status Species

The following section analyzes potential project-related impacts on special-status wildlife species potentially occurring on or within disturbance distance of the Study Area (Exhibit 7a and Exhibit 7b).

## 6.1.1 - Impact Analysis for Special-status Wildlife Species

#### Swainson's Hawk

Suitable Swainson's hawk nesting trees are located within the Study Area. If a Swainson's hawk nest is active on or near the Study Area during construction, the proposed project could impact this species in several ways:

- The proposed project could cause direct harm to the species by the destruction of active nests during tree removal activities.
- The proposed project could cause indirect harm to the species by generating noise, light, and other disturbances during project construction and operation, which may cause this species to abandon its nests.

To reduce potential impacts on Swainson's hawk to less than significant levels under CEQA, the relevant project applicant shall implement the following mitigation measures in connection with each individual development phase, in accordance with the CDFW Guidelines:<sup>47,48</sup>

<sup>&</sup>lt;sup>47</sup> California Department of Fish and Wildlife (CDFW). 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Sacramento, CA: Swainson's Hawk Technical Advisory Committee. May 31, 2000. Website: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline. Accessed October 23, 2024.

<sup>&</sup>lt;sup>48</sup> California Department of Fish and Wildlife (CDFW). 1994. Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo swainsoni*) in the Central Valley of California. November 8, 1994. Website: https://nrm.dfg.ca.gov/ FileHandler.ashx?DocumentID=83992&inline#:~:text=Since%20over%2095%25%20of%20Swainson's,urban%20development%20an d%20other%20changes. Accessed October 23, 2024.





## Exhibit 7a BYSP Area Biological Impacts

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CITY OF CHICO BARBER YARD SPECIFIC PLAN BIOLOGICAL RESOURCE ASSESSMENT

	Decommissioned UPRR Spur	
Legend  Southern Study Area 13.51 acres  Permanent Impact 5.46 acres  Temporary Impact 1.80 acres  Storm Drainage Outfall Routes Infiltration Basin and Detention Pond Storm Drain Connector Storm Drainage Outfall Route 1 Storm Drainage Outfall Route 2 Disturbance Limits		
Proposed 12' wide all weather maintenance access road         Land Cover and Vegetation       Study Area       Perm Implication         Non-native grassland       5.41 acres       5.14 acres         Orchard       7.04 acres       0.14 acres         Developed       0.32 acre       0.00 acre         Dirt access road / Baren       0.51 acre       0.14 acres         Elderberry cluster       0.03 acre       0.00 acre         Commanche Creek       0.07 acre       0.00 acre         Valley Oak Riparian Woodland       0.13 acre       0.04 acre         Ruderal/Disturbed       0.16 acre       0.00 acre	pacts Temp Impacts 0.20 acre 1.04 acre 0.01 acre 0.35 acre 0.00 acre 0.00 acre 0.04 acre 0.16 acre	

Source: Google Earth Aerial Imagery. Butte County Association of Governments; and NorthStar, 02/2023.

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Exhibit 7b Southern Study Area Biological Impacts

#### MM BIO-1a Pre-construction Surveys for Swainson's Hawk (BYSP and Southern Study Area)

Prior to City (or County) approval of subdivision improvement plans or grading permits for ground disturbance for any individual development phase (within the BYSP or Southern Study Area) that occurs during the nesting season for Swainson's hawk, the developer shall hire a qualified Biologist to conduct Swainson's hawk nesting surveys within a 0.5-mile radius of the subject area to determine whether there are any nests and if so, whether they are occupied. Occupancy shall be determined through observation of all accessible areas, including from public roads or other publicly accessible observation areas, of Swainson's hawk activity (e.g., foraging or nesting) on and near the project site.

If construction halts but does not cease for more than 1-year, general nesting bird surveys as described in MM BIO-6 are recommended for subsequent nesting seasons. However, if construction ceases for more than 1-year, Swainson's hawk preconstruction surveys in their entirety (as articulated in MM BIO-1a and 1b) must be repeated.

The qualified Biologist shall follow the survey protocol outlined in the California Department of Fish and Wildlife (CDFW) *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley*<sup>49</sup>, which recommends surveys for at least two defined periods prior to construction, according to the following schedule:

- I. January—March 20: Conduct one survey total. Survey shall be conducted all day.
- **II.** March 20—April 5: Conduct three surveys total. Surveys shall be conducted between sunrise to 10:00 a.m. and 4:00 p.m. to sunset.
- **III. April 5—April 20:** Conduct three surveys total. Surveys shall be conducted between sunrise to 12:00 p.m. and 4:30 p.m. to sunset.
- IV. April 21—June 10: Avoid initiation of surveys during this period
- V. June 10—July 30: (post-fledging) Conduct three surveys total. Surveys shall be conducted between sunrise to 12:00 p.m. and 4:00 p.m. to sunset.

If Swanson's hawk nests are located pursuant to MM BIO-1a and determined to be occupied, minimization measures shall be implemented by the developer for any individual development phase (within the BYSP or Southern Study Area) in connection with the subject individual development phase as follows:

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<sup>&</sup>lt;sup>49</sup> California Department of Fish and Wildlife (CDFW). 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Sacramento, CA: Swainson's Hawk Technical Advisory Committee. May 31, 2000. Website: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline. Accessed October 23, 2024.

- 1. Construction activities shall be prohibited within 200 yards (600 feet) of active and occupied Swainson's hawk nest(s), or within 200 yards (600 feet) of nests under construction, to prevent nest abandonment.<sup>51</sup>
- 2. Notwithstanding the foregoing, if site-specific conditions or the nature of the construction activity (e.g., other nearby development, steep topography, dense vegetation, limited activities) indicate that a smaller buffer, or no buffer at all, could be used, the project applicant may seek approval from the qualified Biologist who in coordination with the California Department of Fish and Wildlife (CDFW) shall determine the appropriate buffer size, which, once approved, shall govern.
- 3. No tree containing an active Swainson's hawk nest shall be removed or altered; provided, however, once the nest is no longer occupied, said tree may be removed, subject to compliance with applicable provisions of the City of Chico's Tree Preservation Ordinance.

#### **Burrowing Owl**

Burrowing owl, a California Species of Special Concern, was assessed as having the potential to occur within the Study Area. The ruderal and non-native grassland portions of the Study Area could provide habitat for burrowing owl. If burrowing owls are present within the Study Area, construction could result in direct loss of burrowing owls or the degradation of burrowing owl habitat due to temporary construction impacts and increased human activity within the Study Area. Therefore, project implementation could potentially result in significant impacts to burrowing owls. To reduce potential impacts on burrowing owls to less than significant levels under CEQA, the relevant project applicant, in connection with the subject individual development phase, shall implement the following mitigation measures:

#### MM BIO-2 Pre-construction Surveys for Burrowing Owl (BYSP and Southern Study Area)

Prior to City (or County) approval of subdivision improvement plans or grading permits for ground disturbance for any individual development phase (within the BYSP and Southern Study Area), the developer shall hire a qualified Biologist to perform a pre-construction burrowing owl survey to determine burrow locations within 30 days prior to construction activities in connection with each individual development phase using applicable California Department of Fish and Wildlife (CDFW) Guidelines. Surveys for occupied burrows shall be completed within all construction areas in connection with the subject individual development phase and within 300 feet of the subject impact area (where feasible and appropriate based on locations of barren or ruderal habitats). At least 15 days prior to the expected start of any project-related ground disturbance activities in connection with the subject individual development phase, or the restart of activities related thereto, the

<sup>&</sup>lt;sup>51</sup> California Department of Fish and Wildlife (CDFW). 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley. Sacramento, CA: Swainson's Hawk Technical Advisory Committee. May 31, 2000. Website: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83990&inline. Accessed October 23, 2024.

relevant developer shall provide a burrowing owl survey report with mapping exhibits to the CDFW. If no burrowing owl are detected during the pre-construction survey, no further action in connection with the subject individual development proposal is necessary.

If burrowing owl are detected during the pre-construction survey, consultation with the United States Fish and Wildlife Service (USFWS) as well as CDFW will be required and the following actions shall be taken to offset impacts during construction in connection with the subject individual development proposal (as outlined in the CDFW 2012 Guidelines):

- During the nonbreeding season (September 1 through January 31), no disturbance shall occur within an approximately 160-foot radius of an occupied burrow. During the nesting season (February 1 through August 31), occupied burrows shall not be disturbed within a 300-foot radius unless a qualified Biologist approved by the CDFW verifies through non-invasive methods that either (1) the birds have not begun egg-laying and incubation; or (2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.
- If owls must be moved away from the disturbance area, passive relocation techniques (as outlined by the CDFW [i.e., use of one-way doors]) should be used rather than trapping. At least one or more weeks will be necessary to accomplish this and to allow the owls to acclimate to alternate burrows.
- If unpaired owls or paired owls are present in or within 300 feet of areas scheduled for disturbance or degradation (e.g., grading) and nesting is not occurring, owls are to be removed per CDFW-approved passive relocation protocols. Passive relocation requires the use of one-way exclusion doors, which must remain in place at least 48 hours prior to site disturbance to ensure owls have left the burrow prior to construction. A CDFW-approved exclusion plan shall be required to implement this measure.
- If paired owls are nesting in areas scheduled for disturbance or degradation, there shall be a minimum 300-foot buffer from the nest(s) from February 1 through August 31 or until fledging has occurred. Outside of the time period of February 1 through August 31 or following fledging, owls may be passively relocated.

#### Valley Elderberry Longhorn Beetle

A total of seven elderberry shrubs were identified within the Study Area and its immediate vicinity, six shrubs located along the northern bank of Comanche Creek adjacent to the southwestern corner of the Southern Study Area and one shrub located within the southwestern corner of the BYSP Area. The six elderberry shrubs located along the north bank of Comanche Creek could potentially be indirectly impacted by project construction related to the proposed outfall. The single elderberry shrub located adjacent to the detention basin would be directly impacted by project-related construction.

Following the guidance of the USFWS Framework,<sup>53</sup> the elderberry cluster located along the northern bank of Comanche Creek could be currently or in the future occupied by dispersing VELB (regardless of current presence or absence of exit holes; see Section 5.3.3). These elderberry clusters would not be directly impacted by either of the proposed outfall alignments. However, the construction of the either proposed outfall could have indirect impacts on the elderberry clusters through the generation of dust that may coat and potentially adversely impact VELB, if present. Therefore, the proposed project shall implement MM BIO- 3a to prevent any indirect impacts to VELB during construction and to reduce indirect impacts to VELB to a less than significant level under CEQA.

Additionally, the single elderberry shrub identified within the southwestern corner of the BYSP Area would be directly impacted due to the full buildout planned in the BYSP Area. Therefore, the proposed project shall implement MM BIO-3b and MM BIO-3c to reduce direct impacts to VELB to a less than significant level under CEQA.

These measures (MM BIO 3a-3c) are based on the USFWS Framework<sup>54</sup> include additional dust control measures.

## MM BIO-3a Valley Elderberry Longhorn Beetle Avoidance and Minimization Measures (Southern Study Area)

Prior to County approval of subdivision improvement plans or grading permits for ground disturbance to construct the new outfall to Comanche Creek within the Southern Study Area, the developer shall list the following measures on the relevant construction plans and hire a qualified biologist to ensure adherence to the following measures during construction:

- **Dust Control and Fencing.** Above and along top of bank of Comanche Creek and between the off-site elderberry cluster and the subject construction site in connection with the proposed outfall, a dust screen shall be installed at a sufficient width and height as defined by a qualified Biologist to prevent excessive construction-generated dust from reaching the elderberry cluster in question. At a minimum, the dust screen shall be 100 feet wide and 6 feet tall.
- Avoidance area. Construction activities that may damage or kill the off-site elderberry cluster (e.g., trenching, paving, etc.) shall implement an avoidance area of at least 6 meters (20 feet) from the drip line of the subject elderberry cluster, depending on the type of activity, as determined by a qualified Biologist.
- Worker education. Prior to ground disturbance associated with the construction of the stormwater outfall, a qualified Biologist shall provide training for all contractors, work crews, and any on-site personnel on the status of the valley elderberry longhorn beetle (VELB), its host plant and habitat, the need to avoid

<sup>&</sup>lt;sup>53</sup> United States Fish and Wildlife Service (USFWS). 2017. Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle.

<sup>&</sup>lt;sup>54</sup> United States Fish and Wildlife Service (USFWS). 2017. Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle. United States Fish and Wildlife Service; Sacramento, California.

damaging the off-site elderberry cluster, and the possible penalties for noncompliance.

- **Construction monitoring.** A qualified Biologist shall monitor the work area associated with the construction of the stormwater outfall at least once per day during outfall construction to ensure that all required avoidance and minimization measures are implemented. The amount and duration of monitoring shall depend on the project specifics and may be reduced with concurrence from the United States Fish and Wildlife Service.
- **Timing.** To the extent feasible, all construction activities that could occur within 50 meters (165 feet) of the off-site elderberry cluster, shall be conducted outside of the flight season of the VELB (March 1–July 30).

#### MM BIO-3b Transplant Directly Impacted On-site Elderberry Shrub (BYSP Area)

Prior to City approval of subdivision improvement plans or grading permits for ground disturbance to develop the future lot containing the one elderberry shrub identified within the BYSP Area, the developer of the specific development proposal that involves the removal of the elderberry shrub shall transplant the elderberry shrub, including removal of the entire root ball, if feasible, as part of the transplant process. The elderberry shrub shall be relocated adjacent to the project footprint if, as determined by a qualified Biologist: (1) the planting location is suitable for elderberry growth and reproduction; and (2) the subject developer is able to protect the shrub after transplantation via protection fencing or buffers until it is ensured that the shrub becomes reestablished. If these criteria cannot be met, the shrub shall be transplanted to an appropriate USFWS-approved mitigation site. Provided, however, that if a qualified Biologist determines that the elderberry shrub is unlikely to survive transplanting because of poor condition or location, or the shrub would be extremely difficult to move because of access problems, then the elderberry shrub shall not be transplanted and no further mitigation under this MM BIO-3b shall be required.

The following transplanting guidelines shall be used by the subject developer in implementing this mitigation measure:

- **Monitor**. A qualified Biologist shall be on-site for the duration of transplanting activities to assure compliance with this mitigation measure.
- Exit Holes. Exit-hole surveys shall be completed immediately before transplanting. The number of exit holes found, GPS location of the plant to be relocated, and the GPS location of where the plant is transplanted shall be reported to the USFWS and to the California Natural Diversity Database (CNDDB).
- **Timing**. Any transplanting of the elderberry shrub shall occur when the shrub is dormant (November through the first two weeks in February) and after it has lost its leaves. Transplanting during the non-growing season will reduce shock to the shrub and increase transplantation success.

• **Transplanting Procedure**. Any transplanting shall follow the most current version of the ANSI A300 (Part 6) guidelines for transplanting (http://www.tcia.org/).

# MM BIO-3c Compensatory Mitigation for Valley Elderberry Longhorn Beetle Impacts (BYSP Area)

Prior to City approval of subdivision improvement plans or grading permits that will result in the removal or disturbance of the one elderberry shrub located within the BYSP Area, the subject developer shall compensate for the loss of the shrub by purchasing one credit (1,800 square feet or 0.041 acre) of valley elderberry longhorn beetle (VELB) habitat at a mitigation bank approved by the United States Fish and Wildlife Service (USFWS). This compensatory mitigation is in addition to the transplanting requirement of MM BIO-3b. However, since it is within the purview of the USFWS to determine the appropriate type and amount of compensatory mitigation for impacts to VELB habitat, this mitigation measure shall be fulfilled upon the developer meeting final elderberry shrub mitigation requirements as determined by the USFWS.

#### **Giant Garter Snake**

Comanche Creek is considered by the USFWS to be a migration or travel corridor for GGS. Because Comanche Creek is hydrologically connected to known GGS habitat in Butte Creek and basking habitat around the creek is marginally present, installation of either proposed outfall structure could result in adverse effects to GGS individuals or the degradation of GGS habitat due to temporary construction impacts. Therefore, the following mitigation measures shall be implemented by the relevant applicant in connection with the subject individual development phase that involves the construction of the proposed outfall to prevent any direct and indirect impacts to GGS during the construction of the proposed project.

These measures are based on the 1997 Programmatic Formal Consultation for U.S. Army Corps of Engineers 404 Permitted Projects with Relatively Small Effects on the Giant Garter Snake within Butte, Colusa, Glenn, Fresno, Merced, Sacramento, San Joaquin, Solano, Stanislaus, Sutter and Yolo Counties, California.

## MM BIO-4 Avoidance and Minimization Measures for Giant Garter Snake (Southern Study Area)

The giant garter snake (GGS) is unlikely to migrate to the BYSP area from Comanche Creek, so the following avoidance and minimization measures for this species are recommended only for the Southern Study Area. Prior to County approval of improvement plans or grading permits for the construction of the new outfall to Comanche Creek, the following measures shall be incorporated into project plans and then implemented to minimize potential impacts on GGS:

- To minimize any direct impacts to the species, construction activities within 200 feet of Comanche Creek shall be conducted, to the extent feasible, during the active season for GGS (between May 1 and October 1).
- Dewatered (removal of surface water or ground water from a riverbed or construction site by pumping or evaporation) portions of Comanche Creek after April 15 (if applicable) must remain dry for at least 15 consecutive days prior to excavation or filling of the dewatered habitat.
- Construction personnel in connection with the subject individual development proposal shall participate in a United States Fish and Wildlife Service (USFWS) approved worker environmental awareness training program prior to the initiation of ground disturbance within 200 feet of Comanche Creek. During the training, workers shall be informed of the potential for this species to be present and the associated habitat for GGS and that it is unlawful to take, harm or harass GGS.
- 24 hours prior to construction activities within 200 feet of Comanche Creek, the subject area shall be surveyed for GGS by a qualified Biologist. Surveys of the subject area shall be repeated if a lapse in construction activity within the subject area of two weeks or more has occurred. If a snake is encountered during construction within the subject area, activities within 200 feet of this area shall cease until a qualified Biologist has determined that appropriate corrective measures have been completed such that the snake will not be harmed. The relevant project applicant shall report any known reported sightings and any known reported incidental take to the USFWS immediately by telephone at (916) 414-6600.
- The clearing of wetland vegetation (if any) shall be confined to the minimal area reasonably necessary to excavate the toe of bank for the proposed outfall and riprap placement. Excavation equipment shall be located and operated from the top of the bank.
- With respect to construction activities occurring within 200 feet of Comanche Creek, movement of heavy equipment to and from the subject area shall be restricted to existing unimproved roadways to minimize habitat disturbance to the extent feasible and no staging or storing of equipment shall occur within 200 feet of Comanche Creek.

#### Western Pond Turtle

WPT, a California Species of Special Concern, was assessed as having the potential to occur within the Study Area. The upland portions of the Study Area associated with Comanche Creek could provide habitat for basking. If WPT are present within the Study Area, construction could result in direct loss of WPT or the general degradation of habitat due to temporary construction impacts. Therefore, project implementation could potentially result in significant impacts to WPT. To reduce potential impacts on WPT to less than significant levels under CEQA, the relevant project applicant shall implement the following mitigation measure in connection with the subject individual development phase:

## MM BIO-5 Pre-construction Surveys for Western Pond Turtle, includes avoidance and passive relocation if found (Southern Study Area)

The western pond turtle is unlikely to migrate to the BYSP area from Comanche Creek, so the following avoidance and minimization measures for this species are recommended only for the Southern Study Area.

Prior to County approval of improvement plans or grading permits for the construction of the new outfall to Comanche Creek, the developer shall hire a qualified Biologist to conduct a focused survey for western pond turtle (WPT) 30 days prior to the onset of construction activities within the Southern Study Area to determine presence or absence of this species within 100 feet of the subject construction area, regardless of the time of year. If construction for the outfall occurs between April 1 and September 30, this survey shall include turtle nests. If WPT is found within the subject construction area, the qualified Biologist shall move the turtle to a location outside of the subject construction area to suitable habitat as determined by a qualified Biologist under consultation with the California Department of Fish and Wildlife (CDFW). If a nest is found within the subject construction area or within a 100-foot radius of the subject construction area, construction shall not take place within 100 feet of the nest until the turtles have hatched or the eggs have been moved to an appropriate location determined by the qualified Biologist under consultation with CDFW. Construction within 100 feet of Comanche Creek shall be avoided to the extent feasible when WPT adults and juveniles are overwintering (October 1 to February 29), because of the likelihood that turtle adults and juveniles could be present in upland habitats. If it is not feasible to avoid such construction activities during this time frame, an additional survey for overwintering locations shall be conducted no more than 14 days prior to construction within 100 feet of Comanche Creek in connection with the subject individual development proposal. If this species is found to be overwintering within the subject construction area, den locations shall be avoided until the area is unoccupied, as determined by a qualified Biologist under consultation with CDFW.

#### **Protected Nesting Birds**

The vegetated habitats within the Study Area and adjacent areas provide suitable nesting habitat for a variety of species of nesting birds. Construction activities that occur during the avian nesting season (generally February 1 to August 31) could disturb protected nesting sites within the construction footprint and within disturbance distance. Grading and the removal of vegetation during the nesting season could result in direct harm to nesting birds, while noise, light, and other construction-related disturbances may cause nesting birds adjacent to the vegetation removal areas to abandon their nests.

With implementation of Mitigation Measure (MM) BIO-6, below, requiring pre-construction nesting bird surveys and avoidance of direct and indirect impacts on nests, potential project-related impacts on protected bird nests can be reduced to a less than significant level under CEQA.

## MM BIO-6 Protection of Active Bird Nests, includes pre-construction survey and implementation of avoidance buffer if found. (BYSP and Southern Study Area)

Prior to City or County approval of improvement plans or grading permits that may result in the removal of trees, the following measures shall be taken to minimize the effects of tree removal on active bird nests:

- If a proposed development phase requires ground disturbance or vegetation removal to commence during the nesting season (February 1 to August 31), the subject developer shall hire a qualified biologist to conduct pre-construction surveys within 7 days prior to the start of ground or vegetation disturbance (including tree removal) to determine whether or not active nests are present.
- If an active nest of a protected bird is located during pre-construction surveys, a qualified Biologist shall determine an appropriately sized avoidance buffer based on the species and anticipated disturbance level. The California Department of Fish and Wildlife [CDFW] recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors.) A qualified Biologist shall delineate the avoidance buffer using Environmentally Sensitive Area fencing, pin flags, and/or yellow caution tape. The buffer zone shall be maintained around the active nest site(s) until the young have fledged and are foraging independently, as confirmed by a qualified Biologist. No construction activities or construction foot traffic is allowed to occur within the avoidance buffer(s).
- In consultation with the United States Fish and Wildlife Service (USFWS) or CDFW (as appropriate), the qualified Biologist shall monitor any active nest(s) during the subject construction activities and shall modify the protection zone accordingly if determined necessary to prevent project-related nest disturbance, until the young have fledged.

#### **Roosting Bats**

The Study Area contains trees and vacant buildings that could provide suitable bat roosting habitat, including for special-status bats such as the pallid bat, western mastiff bat, and western red bat. Potential direct and indirect impacts could occur to roosting bats due to removal of potential roosting habitat during project construction. These activities could potentially subject bats to risk of death or injury, and they are likely to avoid using the area until such construction activities have dissipated or ceased. Relocation, in turn, could cause hunger or stress among individual bats by displacing them into adjacent territories belonging to other individuals.

With implementation of MM BIO-7 below, requiring pre-construction roosting bat surveys and avoidance of direct and indirect impacts on active bat roosts, potential project-related impacts on protected roosting bats can be reduced to a less than significant level under CEQA.

## MM BIO-7 Roosting Bat Pre-construction Survey and Avoidance (BYSP and Southern Study Area)

Prior to City or County approval of improvement plans or grading permits for any phase of the project, the developer shall hire a qualified Biologist with relevant roosting bat experience to conduct a survey for the proposed impacted area and a 250 foot buffer for special-status bats during the appropriate time of day to maximize detectability to determine whether bat species are roosting near the work area no less than 7 days and no more than 14 days prior to beginning ground disturbance and/or construction in connection with each individual development proposal. Survey methodology may include visual surveys of bats (e.g., observation of bats during foraging period), inspection for suitable habitat, bat sign (e.g., guano), or use of ultrasonic detectors (Anabat, etc.) as determined appropriate by the qualified Biologist.

If the Biologist determines or presumes bats are present (if there are site access issues or structural safety concerns) as a result of any of the foregoing survey(s), the relevant Applicant shall ensure the following activities related to the subject proposal occur: the Biologist shall exclude the bats from suitable spaces by installing one-way exclusion devices. After the bats vacate the space, the Biologist shall close off the space to prevent recolonization. Bat houses(s) shall be installed adjacent to any excluded roost(s) or as close as feasible, to be determined by a qualified wildlife Biologist, to ensure excluded bats are provided adjacent roosting habitat. The relevant building demolition, ground disturbance, or other construction activities shall only commence after the Biologist verifies seven to 10 days later that the exclusion methods have successfully prevented bats from returning and that bats have vacated the bat house(s). To avoid impacts on non-volant (i.e., nonflying) bats, the Biologist shall only conduct bat exclusion and eviction from September 1 through March 31 (after maternity/pupping season). Exclusion efforts shall be restricted during periods of sensitive activity.

## 6.2 - Impact Analysis for State and Federally Protected Waters and Wetlands

## 6.2.1 - Comanche Creek

Comanche Creek and its riparian corridor are located in southern portion of the Study Area. The proposed project would construct an outfall into Comanche Creek, resulting in potential impacts to Comanche Creek and its riparian corridor. As stated in Section 5.4, Comanche Creek is likely a State and federally protected water pursuant to CWA Sections 404 and 401, the Porter-Cologne Water Quality Control Act, and Fish and Game Code (Streambed Alteration Program, Sections 1600–1616).

Impacts to this feature will require further evaluations; as such, it is recommended that the project applicant implement MM BIO-8, which requires a formal jurisdictional delineation to document and quantify the full extent of potentially jurisdictional waters within the Study Area and to coordinate with the applicable regulatory agencies (USACE, RWQCB, and CDFW) to determine the extent of

regulated aquatic features regulated under the CWA, the Porter-Cologne Water Quality Control Act, and/or the California Fish and Game Code.

## 6.2.2 - Detention Basin

Development of the proposed project would involve the removal of the existing detention basin located within the BYSP Area. As discussed in Section 5.4 of this BRA, the detention basin may potentially qualify as a jurisdictional water of the United States and/or a water of the State and thus be potentially regulated by the USACE and the RWQCB, respectively. A final determination about the extent of waters of the United States on the Study Area (if any) can only be made by the USACE, and final determination about the extent of waters of the State on the Study Area (if any) can only be made by the RWQCB. Therefore, the relevant applicant, in connection with the subject individual development proposal involving the removal of the detention basin, would need to coordinate with the USACE and RWQCB to obtain a determination and subsequent regulatory permits (if necessary), as described in MM BIO-8 below. If there are jurisdictional waters, unless the regulatory agencies determine this feature is exempt, compensatory mitigation in connection with the subject individual development proposal would be required to offset the impacts thereof to this feature.

# MM BIO-8 Conduct Delineation of Potentially Jurisdictional Aquatic Resources (Creek and Detention Basin)

The relevant applicant in connection with the subject individual development proposal involving the removal of the existing detention basin or the installation of the outfall structure, shall complete a formal jurisdictional delineation to document and quantify the full extent of potentially jurisdictional waters within the Study Area (if any) in coordination with the applicable regulatory agencies. The relevant applicant in connection with the subject individual development proposal involving the removal of the existing detention basin shall also coordinate, to the extent required under applicable laws and regulations, with the applicable regulatory agencies (United States Army Corps of Engineers [USACE] and/or Regional Water Quality Control Board [RWQCB] to determine whether the detention basin within the Study Area is protected under Section 404 and 401 of the Clean Water Act (CWA).

# Obtain CWA Sections 401 and 404 Permits Prior to Construction (After Agency Coordination)

• To the extent resource agency coordination is required pursuant to this measure, after such coordination with the USACE and RWQCB, the relevant applicant in connection with the subject individual development phase involving the removal of the existing detention basin or the installation of the outfall shall comply with applicable laws and regulations including, if required, obtaining a Section 404 CWA permit for impacts to waters of the United States and a Section 401 Water Quality Certification from the RWQCB. Any such required permit and certification shall be obtained prior to issuance of grading permits for the implementation of the subject individual development phase.

- If required pursuant to an approved Section 404 permit and 401 water quality certification, the relevant applicant in connection with the subject individual development proposal shall design said proposal to result in no net loss of functions and values of waters of the United States and State by incorporating impact avoidance, impact minimization, and/or compensatory mitigation for the impact, as set forth in the subject Section 404 permit and 401 water quality certification.
- If required pursuant to an approved Section 404 permit and 401 water quality certification, compensatory mitigation may consist of (1) obtaining credits from a mitigation bank; (2) making a payment to an in lieu fee program that would conduct wetland, stream, or other aquatic resource restoration, creation, enhancement, or preservation activities; and/or (3) providing compensatory mitigation through an aquatic resource restoration, establishment, enhancement, and/or preservation activity. This final type of compensatory mitigation may be provided at or adjacent to the impact site (i.e., on-site mitigation) or at another location, usually within the same watershed as the permitted impact (i.e., off-site mitigation). The relevant project/permit applicant shall retain responsibility for the implementation and success of the mitigation approach in connection with the subject individual development proposal.

## Obtain Approval of and File Notification of Streambed Alteration Agreement Prior to Construction (After Agency Coordination)

In connection with an individual development phase that involves the construction of the proposed outfall into Comanche Creek, the relevant applicant, after coordination with the California Department of Fish and Wildlife (CDFW), shall obtain and file a notification of a Streambed Alteration Agreement, if and to the extent required by applicable laws and regulations, prior to conducting construction activities within any aquatic resources that may qualify as streams under CDFW jurisdiction (i.e., those having bed and bank and at least periodical flow). If required, the relevant applicant shall implement all mitigation measures imposed by the CDFW related to the subject Streambed Alteration Agreement, which may include but not be limited to the implementation of erosion and bank stabilization measures, riparian habitat enhancement, and/or restoration and revegetation of the stream corridor habitat at no less than a 1:1 ratio, as determined by the CDFW.

## 6.3 - Impact Analysis for Wildlife Movement Corridors and Nursery Sites

The Study Area is not within a designated wildlife corridor based on the Essential Connectivity Areas geospatial data set, which uses habitat modeling to identify areas of land with value as wildlife
corridors.<sup>55</sup> As noted in Section 4.6 of this BRA, the majority of the Study Area consists of partially vacant land that has been subject to varying degrees of human-caused disturbances for decades. The Study Area is directly bounded by urban development to the north and east and scattered, less dense urban development to the west which serves as significant barriers to movement of terrestrial species. The BYSP Area does not provide corridor functions beyond connecting similar lightly developed land parcels in the local surrounding areas. Therefore, the BYSP Area is not likely to function as a wildlife movement corridor.

Comanche Creek and the associated riparian habitat that flanks the creek south of the Study Area could function as a wildlife corridor for aquatic and terrestrial. The proposed project would not result in any permanent migration barriers with the Creek. With implementation of MM BIO-1 through 8, and adherence to the City's General Plan Policies OS-1.1, 1.2, 2.5, and 2.6 that protect biological resources, impacts to wildlife movement corridors would be reduced to less than significant.

The Study Area does not contain native wildlife nursery sites. No significant breeding/nesting colonies were observed during the field surveys. However, individual nesting birds and roosting bats have the potential of being present on-site seasonally. Potential impacts to individual nesting birds and roosting bats are addressed through the implementation of MM BIO-6 and BIO-7. As such, impacts to nursery sites would be less than significant.

#### 6.4 - Regulated Trees

The City of Chico Municipal Code Chapter 16.66 sets forth the City's Tree Preservation Regulations. At the time of this writing, it is anticipated that all trees within the BYSP Area may be removed except for trees within 10 feet of the BYSP Area boundary along the neighborhood to the northeast and east and existing palm trees along the 16th Street corridor. Where feasible, the proposed project would preserve trees protected under the Tree Preservation Guidelines and obtain permits to remove any trees subject to the chapter. Each future subdivision map in the BYSP Area will be required to show all trees subject to the Tree Preservation Regulations, information for each tree, including which specific trees are proposed for removal or retention based on the subdivision layout and development plans for the individual lots. With adherence to Chapter 16.66 of the Chico's Municipal Code, the proposed project would not result in the removal of regulated trees.

With respect to the Southern Study Area, no native trees were identified to be in the area proposed for permanent disturbance, although there are trees (including Valley Oak Woodland) within the area proposed for temporary disturbance along Comanche Creek. However, no native or sensitive riparian tree removal is anticipated. Trees located within the Southern Study Area are located on Butte County land and consist of orchard trees and some elderberry shrubs. At the time of this writing, there is no Butte County-related tree ordinance. Construction within the Southern Study Area and federal

FirstCarbon Solutions

Https://adecinnovations.sharepoint.com/sites/PublicationsSite/Shared Documents/Publications/Client (PN-JN)/1723/17230003/BRA/17230003 Barber Yard BRA.docx

<sup>&</sup>lt;sup>55</sup> California Department of Fish and Wildlife (CDFW) and California Department of Transportation (Caltrans). 2022. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. Website: https://www.wildlife.ca.gov/Conservation/Planning/Connectivity/CEHC. Accessed October 23, 2024.

permitting processes, which would ensure the avoidance of sensitive or regulated trees along the Comanche Creek riparian corridor.

#### 6.5 - Conflict with the Draft Butte Regional Conservation Plan

At the time of this writing, the Draft BRCP had not been adopted and thus there is no adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State Habitat Conservation Plan; therefore, the proposed project would have no impact in this regard. Nonetheless, in the interests of informed decision-making, project consistency with the Draft BRCP is addressed for informational purposes only.

The Study Area is located within the boundaries of the proposed Draft BRCP. The plan has been developed to provide coverage for the "take" of 38 threatened and endangered plant and wildlife species within approximately 560,000 acres of western Butte County, including areas within the City of Chico. The Draft BRCP includes programmatic State and federal "take" permits for activities and projects identified in general plans that have the potential to impact the covered sensitive species and habitats. The Study Area is located within one of 15 Urban Permit Areas identified by the Draft BRCP. It covers all land-disturbing activities within the Urban Permit Areas; therefore, since all land-disturbing activities associated with the proposed project are covered under the Draft BRCP and no "take" permits are expected to be required due to the mitigation measures specified above, the development activities associated with the proposed project would not conflict with the provisions of the Draft BRCP.

## Appendix A: Site Photographs

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### Appendix B: Special-status Species Occurrence Evaluation

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#### Table 1: Special-status Plant Species Evaluated

Scientific Name		Status			
Common Name	USFWS <sup>1</sup>	CDFW <sup>2</sup>	CNPS <sup>3</sup>	Habitat Description <sup>4</sup>	Occurrence Determination and Rationale <sup>5</sup>
<i>Astragalus tener var. ferrisiae</i> Ferris' milk-vetch	_		18.1	Meadows and seeps, valley and foothill grassland. Subalkaline flats on overflow land in the Central Valley; usually seen in dry, adobe soil. Elevation: 4-80 m. Bloom period: April-May	<b>Absent.</b> Project site does not contain meadows, seeps, valley and foothill grassland. The project site has been subjected to many years of anthropogenic disturbances.
Balsamorhiza macrolepis big-scale balsamroot	_	_	18.2	Chaparral, cismontane woodland and valley and foothill grassland. Sometimes occurs in serpentinite soils. Elevation: 45-1555 m. Bloom period: March-June.	<b>Absent.</b> Project site does not contain suitable habitat chaparral cismontane woodland, or valley or foothill grassland. The project site has been subjected to many years of anthropogenic disturbances.
Brasenia schreberi watershield	_	_	2B.3	Freshwater marshes and swamps. Aquatic known from water bodies both natural and artificial in California. Elevation: 1-2180 m. Bloom period: May-July	<b>Absent.</b> Project site does not contain marshes or swamps. The project site has been subjected to many years of anthropogenic disturbances.
Calystegia atriplicifolia ssp. buttensis Butte County morning-glory	_	_	4.2	Chaparral, lower montane coniferous forest, valley and foothill grassland. Prefers rocky terrain. Elevation: 565-1524 m Bloom period: May-July	<b>Absent.</b> Project site does not contain chaparral, lower montane coniferous forest, valley, or foothill grassland. The project site has been subjected to many years of anthropogenic disturbances.
Cardamine pachystigma var. dissectifolia dissected-leaved toothwort	_	_	18.2	Chaparral, lower montane coniferous forest, rocky and serpentinite habitat. Elevation: 255-2100 m. Bloom period: February-March	<b>Absent.</b> Project site does not contain chaparral, lower montane coniferous forest. The project site has been subjected to many years of anthropogenic disturbances.
Castilleja rubicundula var. rubicundula pink creamsacs	—	_	18.2	Chaparral in openings, cismontane woodland, meadows and seeps, and valley and foothill grassland. Needs serpentine soils. Elevation: 20-910 m. Bloom period: April-June	<b>Absent.</b> Project site does not contain chaparral cismontane woodlands, meadows or seeps, or valley and foothill grasslands. The project site has been subjected to many years of anthropogenic disturbances.
Clarkia gracilis ssp. albicaulis white-stemmed clarkia	_	_	18.2	Chaparral and Cismontane woodland. Serpentinite habitat preferred. Elevation: 245-1085 Bloom Period: May-July	<b>Absent.</b> Project site does not contain chaparral or cismontane woodlands. The project site has been subjected to many years of anthropogenic disturbances.

Scientific Name	Status				
Common Name	USFWS <sup>1</sup>	CDFW <sup>2</sup>	<b>CNPS<sup>3</sup></b>	Habitat Description <sup>4</sup>	Occurrence Determination and Rationale <sup>5</sup>
<i>Cryptantha crinita</i> silky cryptantha	_	_	18.2	Cismontane woodland, lower montane coniferous forest, riparian forest, riparian woodland, valley and foothill grassland. Elevation: 61-1215 m Bloom Period: April-May	<b>Absent.</b> Project site does not contain suitable habitat such as cismontane woodlands, lower montane coniferous forests, riparian forests, riparian woodlands or valley and foothill grasslands. The project site has been subjected to many years of anthropogenic disturbances.
Delphinium recurvatum recurved larkspur	_	_	18.2	Chenopod scrub, cismontane woodland, valley and foothill grassland. Alkaline soil. Elevation: 3-790 m Bloom Period: March-June	<b>Absent.</b> Project site does not contain suitable habitat such as chenopod scrub, cismontane woodlands, valley or foothill grasslands. The project site has been subjected to many years of anthropogenic disturbances.
Eriogonum umbellatum var. ahartii Ahart's buckwheat	_	_	18.2	Chaparral and cismontane woodland. Prefers openings, serpentinite and slopes. Elevation: 400-2000 m Bloom Period: June-September	<b>Absent.</b> Project site does not contain suitable habitat such as cismontane woodlands or chaparral habitats. The project site has been subjected to many years of anthropogenic disturbances.
Euphorbia hooveri Hoover's spurge	FT	—	1B.2	Vernal pools. Elevation: 25 - 250 m. Blooming period: Jul – Sep (Oct).	<b>Absent.</b> Project site does not contain suitable habitat such as vernal pools. The project site has been subjected to many years of anthropogenic disturbances.
Fritillaria eastwoodiae Butte County fritillary	_	_	3.2	Chaparral, cismontane woodland, lower montane coniferous forest. Usually on dry slopes but also found in wet places; Grows in serpentine, red clay, or sandy soils. Elevation: 1475 – 4550 m. Blooming period: March – June	<b>Absent.</b> Project site does not contain suitable habitat such as chaparral, cismontane woodlands, or lower montane coniferous forests. The project site has been subjected to many years of anthropogenic disturbances.
Fritillaria pluriflora adobe-lily	_	_	18.2	Chaparral, cismontane woodland, valley and foothill grassland. Usually on clay soils; sometimes serpentine. Elevation: 45-945 m. Blooming period: February-April	<b>Absent.</b> Project site does not contain suitable habitat such as cismontane woodlands, chaparral, valley and foothill grassland. The project site has been subjected to many years of anthropogenic disturbances.
Hibiscus lasiocarpos var. occidentalis woolly rose-mallow	_	_	18.2	Marshes and swamps (freshwater), often in riprap on sides of levees. Elevation: 0-120 m Bloom Period: June-September	<b>Absent.</b> Project site does not contain suitable habitat such as marshes and swamps. The project site has been subjected to many years of anthropogenic disturbances.
Imperata brevifolia California satintail	_	_	2B.1	Occurs in mesic and alkali soils (often) in chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps, and riparian scrub. Elevation: 1,370–2,895 m Bloom period: February–July	<b>Absent.</b> Project site does not contain suitable habitat such as chaparral or coastal scrub, meadows and seeps. The project site has been subjected to many years of anthropogenic disturbances.
Juncus leiospermus var.	_	_	1B.1	Chaparral, cismontane woodland, meadows and seeps,	Absent. Project site does not contain suitable habitat such

Scientific Name		Status			
Common Name	USFWS <sup>1</sup>	CDFW <sup>2</sup>	CNPS <sup>3</sup>	Habitat Description <sup>4</sup>	Occurrence Determination and Rationale <sup>5</sup>
<i>leiospermus</i> Red Bluff dwarf rush				valley and football grassland, vernal pools. Elevation: 35-1250 m Bloom Period: March-June	as chaparral, cismontane woodland, meadows and seeps. The project site has been subjected to many years of anthropogenic disturbances.
<i>Limnanthes floccosa ssp.</i> <i>californica</i> Butte County meadowfoam	FE	SE	1B.1	Valley and foothill grassland (mesic) and vernal pools. Elevation: 46-930 Blooming period: March-May	<b>Absent.</b> The project site does not contain suitable habitat such as vernal pools. The project site has been subjected to many years of anthropogenic disturbances.
<i>Limnanthes floccosa ssp. floccosa woolly meadowfoam</i>	_	_	4.2	Chapparal, cismontane woodland, valley and foothill grassland, vernal pools. Most commonly occurs in vernally wet areas, ditches, and ponds. Elevation: 60-1335 m. Bloom period: March-June	<b>Absent.</b> Project site does not contain suitable habitat such as cismontane woodlands, chaparral, foothill grasslands, or vernal pools. The project site has been subjected to many years of anthropogenic disturbances.
Monardella venosa veiny monardella	_	_	1B.1	Cismontane woodland, valley and foothill grassland, clay soil. Elevation: 60-410 m Bloom Period: May-July	<b>Absent.</b> Project site does not contain suitable habitat such as cismontane woodlands and foothill grasslands. The project site has been subjected to many years of anthropogenic disturbances.
Paronychia ahartii Ahart's paronychia	_	_	1B.1	Cismontane woodland, valley and foothill grassland, vernal pools. Elevation: 30-510 m Bloom Period: February-June	<b>Absent.</b> Project site does not contain suitable habitat such as cismontane woodlands, valley and foothill grasslands. The project site has been subjected to many years of anthropogenic disturbances.
Rhynchospora californica California beaked-rush	_	-	18.1	Bogs and fens, open marshes and swamps, lower montane coniferous forest, meadows and freshwater seeps. Elevation: 45-270 m. Bloom period: May-July	<b>Absent.</b> Project site does not contain suitable habitat such as bogs, ferns, open marshes, swamps, or lower montane coniferous forests. The project site has been subjected to many years of anthropogenic disturbances.
Rhynchospora capitellata brownish beaked-rush	_	_	28.2	Lower montane coniferous forest, meadows and seeps, marshes and swamps, upper montane coniferous forest. Mesic sites. Elevation: 45-1710 m. Bloom period: July-August	<b>Absent.</b> Project site does not contain suitable habitat such as lower montane coniferous forest, meadows and seeps, marshes and swamps. The project site has been subjected to many years of anthropogenic disturbances.
<i>Sidalcea robusta</i> Butte County checkerbloom	_	_	18.2	Chaparral and cismontane woodland. Elevation 90-1600 m. Bloom period: April-June	<b>Absent.</b> Project site does not contain suitable habitat such as chaparral and cismontane woodland. The project site has been subjected to many years of anthropogenic disturbances.
Stuckenia filiformis ssp. alpina	—	_	2B.2	Marshes and swamps. Shallow, clear water of lakes and drainage channels.	Absent. Project site does not contain suitable habitat such marshes and swamps. The project site has been subjected

Scientific Name	Status					
Common Name	USFWS <sup>1</sup>	CDFW <sup>2</sup>	CNPS <sup>3</sup>	Habitat Description <sup>4</sup>	<b>Occurrence Determination and Rationale<sup>5</sup></b>	
northern slender pondweed				Elevation: 5-2325 m. Bloom period: May-July	to many years of anthropogenic disturbances.	
<i>Trifolium jokerstii</i> Butte County golden clover	_	-	1B.2	Valley and foothill grassland (mesic) and vernal pools. Elevation: 50-480 m Bloom period: March-May	<b>Absent.</b> Project site does not contain suitable habitat such mesic valley and foothill grasslands and vernal pools. The project site has been subjected to many years of anthropogenic disturbances.	
<i>Tuctoria greenei</i> Greene's tuctoria	FE	CR	1B.1	Vernal pools Elevation 30 -1070 m. Blooming period: May – July	<b>Absent.</b> Project site does not contain suitable habitat such as vernal pools. The project site has been subjected to many years of anthropogenic disturbances.	
<i>Wolffia brasiliensis</i> Brazilian watermeal	_	-	2B.3	Marshes and swamps (shallow freshwater) Elevation: 20-100 m Blooming period: April-December	<b>Absent.</b> Project site does not contain suitable habitat such as marshes and swamps. The project site has been subjected to many years of anthropogenic disturbances.	
				Code Designations		
<sup>1</sup> Federal Status: 2	2023 USFWS	Listing		<sup>2</sup> State Status: 2023 CDFW Listing	<sup>3</sup> CNPS: 2023 CNPS Listing	
IFederal Status: 2023 USFWS ListingESU=Evolutionary Significant Unit is a distinctive population.StFE=Listed as endangered under the FESA.StFT=Listed as threatened under the FESA.FFFC=Candidate for listing (threatened or endangered) under FESA.CIFD=Delisted in accordance with the FESA.CIFPD=Federally Proposed to be Delisted.CIMBTA=protected by the Migratory Bird Treaty Act		SE = ST = SSC = FP = CFG = CR = =	<ul> <li>Listed as endangered under the CESA.</li> <li>Listed as threatened under the CESA.</li> <li>Species of Special Concern as identified by the CDFW.</li> <li>Listed as fully protected under FGC.</li> <li>FGC =protected by FGC 3503.5</li> <li>Rare in California.</li> <li>Not state listed</li> </ul>	<ul> <li>Rank 1A = Plants species that presumed extinct in California.</li> <li>Rank 1B = Plant species that are rare, threatened, or endangered in California and elsewhere.</li> <li>Rank 2 = Plant species that are rare, threatened, or endangered in California, but more common elsewhere.</li> <li>Rank 3 = Plants about which we need more information—A Review List</li> <li>Rank 4 = Plants of limited distribution—A Watch List</li> <li>Blooming period: Months in parentheses are uncommon.</li> </ul>		

<sup>4</sup> Habitat Description: Habitat description adapted from CNDDB<sup>1</sup> and CNPS online inventory<sup>2</sup> or other specified source<sup>\*</sup>.

<sup>5</sup> Potential to Occur and Rationale: Location of recorded species occurrences determined by geospatial information from BIOS 5<sup>3</sup> or other specified source<sup>\*</sup>.

<sup>&</sup>lt;sup>1</sup> California Department of Fish and Wildlife (CDFW). 2020. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed February 5, 2021.

<sup>&</sup>lt;sup>2</sup> California Native Plant Society (CNPS). 2020. California Native Plant Society Rare and Endangered Plant Inventory. Website: http://www.rareplants.cnps.org/. Accessed February 5, 2021.

<sup>&</sup>lt;sup>3</sup> California Department of Fish and Wildlife (CDFW). 2020. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/. Accessed February 5, 2021.

#### Table 2: Special-status Wildlife Species Evaluated

Scientific Name	Stat	us					
Common Name	USFWS <sup>1</sup>	CDFW <sup>2</sup>	Habitat Description <sup>3</sup>	Potential to Occur and Rationale <sup>4</sup>			
Amphibians	·						
<i>Rana boylii</i> foothill yellow-legged frog	_	SE SSC	Partly shaded, shallow streams and riffles with a rocky substrate in forests, chaparral, and woodlands. Needs at least some cobble-sized substrate for egg-laying.	<b>None.</b> There is no documented breeding habitat within the project area. There nearest recorded occurrence of this species is 5 miles west of the project site from 1961. This occurrence is now considered extirpated due to observations of bullfrogs throughout the 1970s. Moreover, the project site is cut off from any potential frog in-migration by previous anthropogenic disturbances- intensive agricultural, residential housing, roads etc.			
Spea hammondii western spadefoot	_	 SSC	Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	<b>None.</b> The project site does not habitat suitable for breeding, such as vernal pools. There is also no record of this species within the project area.			
Birds							
Agelaius tricolor tricolored blackbird	 MBTA	ST SSC	Breeds near fresh water in dense emergent vegetation.	<b>None.</b> The project site does contain dense emergent vegetation to support this species. Additionally, the nearest record of this species is 2.7 miles east of the project site. Moreover, there is no record of this species within the project area or associated with the creek.			
Athene cunicularia burrowing owl	— MBTA	 SSC	Found in open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. A subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel ( <i>Otospermophilus beecheyi</i> ).	<b>Low.</b> Marginal habitat is present on-site. Burrows were observed on-site, but no signs of burrowing owl presence were observed during the field survey. The nearest record of this species is 2 miles east of the project site.			
<i>Buteo swainsoni</i> Swainson's hawk	— MBTA	ST —	Breeds in stands with few trees in juniper-sage flats, riparian areas, and in oak savannah. Requires adjacent suitable foraging areas such as grasslands or alfalfa fields supporting rodent populations.	<b>Moderate.</b> The project site does contain habitat suitable for this species. There are numerous potential nesting trees and access to adjacent foraging habitat. The nearest record of this species is 2.4 miles south of the project site.			
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	FT MBTA	SE —	Nests in riparian forest along the broad lower flood- bottoms of larger river systems. Found in riparian jungles of willow, often mixed with cottonwoods; understory consists of blackberry, nettles, and wild grape.	<b>None.</b> The project site does not contain suitable habitat to support this species. The nearest recorded occurrences are all associated with the Sacramento River and are over 6 miles west of the project site.			

Scientific Name	Stat	us		
Common Name	USFWS <sup>1</sup>	CDFW <sup>2</sup>	Habitat Description <sup>3</sup>	Potential to Occur and Rationale <sup>4</sup>
Falco peregrinus anatum American peregrine falcon	FPD MBTA	— FP	Near wetlands, lakes, rivers, or other aquatic features. Nests on cliffs, coastal habitats or tall buildings.	<b>None.</b> No nesting habitats such as cliffs and coastal habitats are present within the project area. There is also no record of this species within the project area or associated with the creek. The site is also heavily disturbed from agricultural and industrial development activities.
Haliaeetus leucocephalus bald eagle	FPD MBTA	SE FP	Breeding habitat is usually within 4 km of a water source in a tall tree or cliffs; roosting in large numbers in winter is common.	<b>None.</b> The project site does not contain suitable habitat to support this species. The nearest recorded occurrence is over 5.5 miles northeast of the project site associated with Bidwell Park and Horseshoe Lake.
Lanius ludovicianus loggerhead shrike	 MBTA	 SSC	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub & washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	<b>None.</b> The project site does not contain suitable habitat to support this species. The site and surrounding areas have been subject to anthropogenic disturbance. There is also no recent occurrence record of the species within the project area.
<i>Laterallus jamaicensis coturniculus</i> California black rail	 MBTA	ST FP	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Needs water depths of about 1 inch that do not fluctuate during the year and dense vegetation for nesting habitat.	<b>None.</b> The project site does not contain habitat suitable for this species such as freshwater marshes, wet meadows, and shallow margins of saltwater marshes. There is also no record of this species within the project area or associated with the creek.
<i>Riparia riparia</i> bank swallow	— MBTA	ST —	Nests in riparian scrub and riparian woodland. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	<b>None.</b> The project site does not contain suitable habitat to support this species. The nearest recorded occurrences are all associated with the Sacramento River and are over 6 miles west of the project site.
Setophaga petechia yellow warbler	— MBTA	 SSC	Occurs and nests in willow shrubs and thickets, cottonwoods, sycamores, ash, and alders, predominantly in riparian habitats.	<b>None.</b> The project site does not contain suitable habitat to support this species. The nearest recorded occurrence is over 12 miles south of the project site associated with Gold Run Creek in 2002.
Vireo bellii pusillus least Bell's vireo	FE MBTA	SE —	Occurs and nests in low riparian habitat in the vicinity of water or in dry river bottoms.	<b>None.</b> The project site does not contain suitable habitat to support this species. All two recorded occurrences within 10 miles are from over 100 years ago. These occurrences are now considered extirpated due to conversion of habitat into agriculture.
Invertebrate				
Branchinecta conservatio Conservancy fairy shrimp	FE		Endemic to the grasslands of the northern two-thirds of the Central Valley; found in large, turbid pools. Inhabit astatic pools located in swales formed by old, braided alluvium; filled by winter/spring rains, last until June.	<b>None.</b> The project site does not contain habitat suitable for this species such as turbid pools or swales. There is also no record of this species within the project area or associated with the creek.

Scientific Name	Status					
Common Name	USFWS <sup>1</sup>	CDFW <sup>2</sup>	Habitat Description <sup>3</sup>	Potential to Occur and Rationale <sup>4</sup>		
Branchinecta lynchi vernal pool fairy shrimp	FT	_	Endemic to the grasslands of the Central Valley, Central Coast mountains, and South Coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone- depression pools and grassed swale, earth slump, or basalt-flow depression pools.	<b>None.</b> The project site does not contain habitat suitable for this species such as rain-filled pools or sandstone depressions. There is also no record of this species within the project area or in association with the creek.		
Desmocerus californicus dimorphus valley elderberry longhorn beetle	FT	_	Occurs only in the Central Valley of California, in association with blue elderberry (Sambucus mexicana). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries. Common in riparian scrub.	<b>Moderate.</b> The project site contains elderberry shrubs which have the potential to provide suitable habitat for this species. Exit holes were observed during field surveys. There is a record of this species within 2.3 miles of the project area, but none within the project site itself.		
<i>Lepidurus packardi</i> vernal pool tadpole shrimp	FE	_	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass-bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid	<b>None.</b> The project site does not contain habitat suitable for this species such as vernal pools and swales. There is also no record of this species within the project area or in association with the creek.		
Fish						
Acipenser medirostris pop. 1 green sturgeon - southern DPS	FT	_	Spawning occurs primarily in cool (11-15 C) sections of mainstem rivers in deep pools (8-9 meters) with substrate containing small to medium sized sand, gravel, cobble, or boulder.	<b>None.</b> The project site does not contain suitable aquatic habitat to support this species. There is also no record of this species within the project area or in association with the creek.		
Oncorhynchus mykiss irideus (pop. 8) steelhead (central California coast DPS) <sup>4</sup>	FT	_	Steelhead require cool, swift, shallow water & clean loose gravel for spawning, & suitably large pools in which to spend the summer. Minimum water depth for upstream migration is 18 cm. Water velocities greater than 3-4 m/sec may impede upstream progress.	<b>None.</b> The project site does not contain suitable aquatic habitat to support this species. There is also no record of this species within the project site or in association with the creek. Moreover, the reach of the creek within the project area does not contain suitable substrate for spawning.		
Oncorhynchus tshawytscha pop. 11 chinook salmon - Central Valley spring-run ESU	FT	ST —	Occurs in Sacramento and San Joaquin Rivers and their tributaries. Adult numbers depend on pool depth and volume, amount of cover, and proximity to gravel. Water temps >27 C are lethal to adults.	<b>None.</b> The project site does not contain suitable aquatic habitat to support this species. There is also no record of this species within the project area or in association with the creek.		

<sup>&</sup>lt;sup>4</sup> DPS includes all naturally spawned populations of steelhead (and their progeny) in streams from the Russian River to Aptos Creek, Santa Cruz County, California (inclusive). Also includes the drainages of San Francisco and San Pablo Bays. Source: CNDDB 2021.

Scientific Name		us		
Common Name	USFWS <sup>1</sup>	CDFW <sup>2</sup>	Habitat Description <sup>3</sup>	Potential to Occur and Rationale <sup>4</sup>
Mammals				
<i>Antrozous pallidus</i> pallid bat	_	_ SSC	Found in deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Species is very sensitive to disturbance of roosting sites.	<b>Low.</b> The project site does contain suitable roosting habitat to support this species. There has been a recorded occurrence of the species within the project area.
<i>Eumops perotis californicus</i> western mastiff bat	_	_ SSC	Found in a variety of habitats, from desert scrub to chaparral to oak woodland and into the ponderosa pine belt and high elevation meadows of mixed conifer forests. Crevices in cliff faces, high buildings, trees, and tunnels are required for roosting.	<b>Low.</b> The project site does contain suitable roosting habitat to support this species. There has been a recorded occurrence of this species within the project area.
<i>Lasiurus blossevillii</i> western red bat	_	 SSC	Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	<b>Low.</b> Trees along Comanche Creek and within the project site contain potential roosting habitat.
<i>Taxidea taxus</i> American badger	_	 SSC	Found in drier open stages of most shrub, forest, and herbaceous habitats with friable soils. Requires sufficient food sources (rodents), friable soils, and open, uncultivated ground. Digs large burrows.	<b>None.</b> There is no record of this species within the project site or surrounding project area. The project site has been subjected to many years of anthropogenic disturbances from agricultural and industrial activities further precluding this species.
Reptiles				
<i>Emys marmorata</i> western pond turtle	—	– SSC	This species is a thoroughly aquatic turtle found in ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation below 6000 feet elevation. Requires basking sites and suitable upland habitat (sandy banks or grassy open fields) up to 0.5 km from water for egg-laying.	<b>Low.</b> Commanche Creek and adjacent upland habitat provides potential suitable habitat. The nearest occurrences recorded are located a mile east of the site within ponds located along Fair Street. te
Phrynosoma blainvillii coast horned lizard	_	 SSC	Inhabits open areas of sandy soil and low vegetation in valleys, foothills and semiarid mountains. Found in grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil. Often found in lowlands along sandy washes with scattered shrubs and along dirt roads. Often found near ant hills feeding on ants.	<b>None.</b> The project site does not contain suitable habitat to support this species such as coniferous forests, woodlands, and chaparral. There is also no record of this species within the project site or project area. The project site has been subjected to many years of anthropogenic disturbances.

Scientific Name Status		us				
Common Name	USFWS <sup>1</sup>	CDFW <sup>2</sup>	Habitat Description <sup>3</sup>		Potential to Occur and Rationale <sup>4</sup>	
Thamnophis gigas giant garter snake	FT	ST —	Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals and irrigation ditches.		<b>Low.</b> Comanche Creek, which is considered a potential travel corridor GGS. There has been a recorded occurrence of the species 5 miles we of the project site.	
Code Designations						
	<sup>1</sup> Federal	Status: 202	3 USFWS Listing		<sup>2</sup> State Status: 2023 CDFW Listing	
ESU = Evolutionary Significant Unit is a distinctive population.				SE = Liste ST = Liste	d as endangered under the CESA. d as threatened under the CESA.	

**SSC** = Species of Special Concern as identified by the CDFW.

**FP** = Listed as fully protected under FGC.

**CE** = Candidate endangered under the CESA.

**CFG** = FGC = protected by FGC 3503.5

= Not state listed

\_

DPS = Distinct Population Segment.

= Listed as endangered under the FESA. FE

FT = Listed as threatened under the FESA.

FC = Candidate for listing (threatened or endangered) under FESA.

FD = Delisted in accordance with the FESA.

= Federally Proposed to be Delisted. FPD

**MBTA** = protected by the Migratory Bird Treaty Act

= Not federally listed \_

3 Habitat Description: Habitat description adapted from CNDDB<sup>5</sup> or other specified source\*.

4 Potential to Occur and Rationale: Location of recorded species occurrences determined by geospatial information from BIOS 5<sup>6</sup> or other specified source\*.

<sup>5</sup> California Department of Fish and Wildlife (CDFW). 2020. CNDDB RareFind 5 California Natural Diversity Database Query for Special-Status Species. Website: https://map.dfg.ca.gov/rarefind/view/RareFind.aspx. Accessed February 5, 2021.

<sup>6</sup> California Department of Fish and Wildlife (CDFW). 2020. Biogeographic Information and Observation System (BIOS 5). Website: https://map.dfg.ca.gov/bios/. Accessed February 5, 2021.

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## Appendix C: Database Searches

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#### California Natural Diversity Database

Query Criteria: Quad<span style='color:Red'> IS </span>(Chico (3912167)<span style='color:Red'> OR </span>Ord Ferry (3912168)<span style='color:Red'> OR </span>Ord Ferry (3912177)<span style='color:Red'> OR </span>Paradise West (3912176)<span style='color:Red'> OR </span>Hamlin Canyon (3912166)<span style='color:Red'> OR </span>Shippee (3912156)<span style='color:Red'> OR </span>Nelson (3912157)<span style='color:Red'> OR </span>Llano Seco (3912158))

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Acipenser medirostris pop. 1	AFCAA01031	Threatened	None	G2T1	S1	
green sturgeon - southern DPS						
Agelaius tricolor	ABPBXB0020	None	Threatened	G1G2	S1S2	SSC
tricolored blackbird						
Anthicus antiochensis	IICOL49020	None	None	G1	S3	
Antioch Dunes anthicid beetle						
Anthicus sacramento	IICOL49010	None	None	G1	S4	
Sacramento anthicid beetle						
Antrozous pallidus	AMACC10010	None	None	G4	S3	SSC
pallid bat						
Ardea alba	ABNGA04040	None	None	G5	S4	
great egret						
Ardea herodias	ABNGA04010	None	None	G5	S4	
great blue heron						
Astragalus tener var. ferrisiae	PDFAB0F8R3	None	None	G2T1	S1	1B.1
Ferris' milk-vetch						
Athene cunicularia	ABNSB10010	None	None	G4	S3	SSC
burrowing owl						
Atractelmis wawona	IICOL58010	None	None	G3	S1S2	
Wawona riffle beetle						
Balsamorhiza macrolepis	PDAST11061	None	None	G2	S2	1B.2
big-scale balsamroot						
Bombus crotchii	IIHYM24480	None	None	G2	S1S2	
Crotch bumble bee						
Branchinecta conservatio	ICBRA03010	Endangered	None	G2	S2	
Conservancy fairy shrimp						
Branchinecta lynchi	ICBRA03030	Threatened	None	G3	S3	
vernal pool fairy shrimp						
Branchinecta mesovallensis	ICBRA03150	None	None	G2	S2S3	
midvalley fairy shrimp						
Brasenia schreberi	PDCAB01010	None	None	G5	S3	2B.3
watershield						
Buteo swainsoni	ABNKC19070	None	Threatened	G5	S3	
Swainson's hawk						
Calystegia atriplicifolia ssp. buttensis Butte County morning-glory	PDCON04012	None	None	G5T3	S3	4.2



### Selected Elements by Scientific Name California Department of Fish and Wildlife California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Campylopodiella stenocarpa	NBMUS84010	None	None	G5	S1?	2B.2
flagella-like atractylocarpus						
Cardamine pachystigma var. dissectifolia	PDBRA0K1B1	None	None	G3G5T2Q	S2	1B.2
dissected-leaved toothwort						
Castilleja rubicundula var. rubicundula	PDSCR0D482	None	None	G5T2	S2	1B.2
pink creamsacs						
Clarkia gracilis ssp. albicaulis	PDONA050J1	None	None	G5T3	S3	1B.2
white-stemmed clarkia						
Coastal and Valley Freshwater Marsh	CTT52410CA	None	None	G3	S2.1	
Coastal and Valley Freshwater Marsh						
Coccyzus americanus occidentalis	ABNRB02022	Threatened	Endangered	G5T2T3	S1	
western yellow-billed cuckoo						
Cryptantha crinita	PDBOR0A0Q0	None	None	G2	S2	1B.2
silky cryptantha						
Delphinium recurvatum	PDRAN0B1J0	None	None	G2?	S2?	1B.2
recurved larkspur						
Desmocerus californicus dimorphus	IICOL48011	Threatened	None	G3T2T3	S3	
valley elderberry longhorn beetle						
Emys marmorata	ARAAD02030	None	None	G3G4	S3	SSC
western pond turtle						
Erethizon dorsatum	AMAFJ01010	None	None	G5	S3	
North American porcupine						
Eriogonum umbellatum var. ahartii	PDPGN086UY	None	None	G5T3	S3	1B.2
Ahart's buckwheat						
Eumops perotis californicus	AMACD02011	None	None	G4G5T4	S3S4	SSC
western mastiff bat						
Euphorbia hooveri	PDEUP0D150	Threatened	None	G1	S1	1B.2
Hoover's spurge						
Falco peregrinus anatum	ABNKD06071	Delisted	Delisted	G4T4	S3S4	FP
American peregrine falcon						
Fritillaria eastwoodiae	PMLIL0V060	None	None	G3Q	S3	3.2
Butte County fritillary						
Fritillaria pluriflora	PMLIL0V0F0	None	None	G2G3	S2S3	1B.2
adobe-lily						
Great Valley Cottonwood Riparian Forest	CTT61410CA	None	None	G2	S2.1	
Great Valley Cottonwood Riparian Forest						
Great Valley Mixed Riparian Forest	CTT61420CA	None	None	G2	S2.2	
Great Valley Mixed Riparian Forest						
Great Valley Valley Oak Riparian Forest	CTT61430CA	None	None	G1	S1.1	
Great Valley Valley Oak Riparian Forest				_	_	
Great Valley Willow Scrub	CTT63410CA	None	None	G3	S3.2	



### Selected Elements by Scientific Name California Department of Fish and Wildlife California Natural Diversity Database



Rare Plant Rank/CDFW

Species	Element Code	Federal Status	State Status	Global Rank	State Rank	SSC or FP
Haliaeetus leucocephalus	ABNKC10010	Delisted	Endangered	G5	S3	FP
bald eagle						
Hibiscus lasiocarpos var. occidentalis	PDMAL0H0R3	None	None	G5T3	S3	1B.2
woolly rose-mallow						
Imperata brevifolia	PMPOA3D020	None	None	G3	S3	2B.1
California satintail						
Juncus leiospermus var. leiospermus	PMJUN011L2	None	None	G2T2	S2	1B.1
Lanius Iudovicianus	ABPBR01030	None	None	G4	S4	SSC
loggerhead shrike						
Lasionycteris noctivagans	AMACC02010	None	None	G3G4	S3S4	
silver-haired bat				_	_	
Lasiurus blossevillii	AMACC05060	None	None	G4	S3	SSC
western red bat					_	
Lasiurus cinereus hoary bat	AMACC05030	None	None	G3G4	S4	
Laterallus jamaicensis coturniculus	ABNME03041	None	Threatened	G3T1	S1	FP
California black rail						
Lepidurus packardi	ICBRA10010	Endangered	None	G4	S3S4	
vernal pool tadpole shrimp						
Limnanthes floccosa ssp. californica	PDLIM02042	Endangered	Endangered	G4T1	S1	1B.1
Butte County meadowfoam						
Limnanthes floccosa ssp. floccosa	PDLIM02043	None	None	G4T4	S3	4.2
woolly meadowfoam						
Linderiella occidentalis	ICBRA06010	None	None	G2G3	S2S3	
California linderiella						
Monardella venosa	PDLAM18082	None	None	G1	S1	1B.1
veiny monardella						
Myotis yumanensis	AMACC01020	None	None	G5	S4	
Yuma myotis						
Northern Basalt Flow Vernal Pool	CTT44131CA	None	None	G3	S2.2	
Northern Basalt Flow Vernal Pool						
Northern Hardpan Vernal Pool	CTT44110CA	None	None	G3	S3.1	
Northern Volcanic Mud Flow Vornal Pool	CTT44132CA	Nono	Nono	C1	<b>C1 1</b>	
Northern Volcanic Mud Flow Vernal Pool	C1144132CA	None	None	GI	51.1	
Oncorhynchus mykiss irideus pop. 11	AFCHA0209K	Threatened	None	G5T2Q	S2	
steelhead - Central Valley DPS						
Oncorhynchus tshawytscha pop. 11	AFCHA0205L	Threatened	Threatened	G5T2Q	S2	
chinook salmon - Central Valley spring-run ESU						
Pandion haliaetus	ABNKC01010	None	None	G5	S4	WL
osprey						

Commercial Version -- Dated September, 4 2022 -- Biogeographic Data Branch Report Printed on Friday, September 30, 2022



### Selected Elements by Scientific Name California Department of Fish and Wildlife California Natural Diversity Database



Species	Element Code	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
Paronychia ahartii	PDCAR0L0V0	None	None	G3	S3	1B.1
Ahart's paronychia						
Phrynosoma blainvillii	ARACF12100	None	None	G3G4	S3S4	SSC
coast horned lizard						
Rana boylii	AAABH01050	None	Endangered	G3	S3	SSC
foothill yellow-legged frog						
Rhynchospora californica	PMCYP0N060	None	None	G1	S1	1B.1
California beaked-rush						
Rhynchospora capitellata	PMCYP0N080	None	None	G5	S1	2B.2
brownish beaked-rush						
Riparia riparia	ABPAU08010	None	Threatened	G5	S2	
bank swallow						
Setophaga petechia	ABPBX03010	None	None	G5	S3S4	SSC
yellow warbler						
Sidalcea robusta	PDMAL110P0	None	None	G2	S2	1B.2
Butte County checkerbloom						
Spea hammondii	AAABF02020	None	None	G2G3	S3	SSC
western spadefoot						
Stuckenia filiformis ssp. alpina	PMPOT03091	None	None	G5T5	S2S3	2B.2
northern slender pondweed						
Stygobromus gallawayae	ICMAL05E10	None	None	G1	S1	
Gallaway's amphipod						
Taxidea taxus	AMAJF04010	None	None	G5	S3	SSC
Thamnophis gigas	ARADB36150	Ihreatened	Ihreatened	G2	S2	
		Ness	News	00	00	40.0
Putto County goldon alovor	PDFAB40310	None	None	G2	52	1B.2
		E des served	Dama	04	04	45.4
Groopols tustoria	PMPOA6N010	Endangered	Rare	GI	51	1 <b>B</b> .1
		Fadarasad	For days we would	0570	<u>60</u>	
vireo delli pusillus	ABPBW01114	⊏naangerea	⊏ndangered	GOIZ	32	
		Nono	Nono	C E	60	0P 0
Brazilian watermeal	PIVILEIVIU3020	INUTIE	INUTIE	65	32	2D.3
Brazilian watermea						

Record Count: 77

**CNPS Rare Plant Inventory** 



### Search Results

3 matches found. Click on scientific name for details

# Search Criteria: <u>CRPR</u> is one of [1A:1B:2A:2B] <u>Fed List</u> is one of [FE:FT:FC] or <u>State List</u> is one of [CE:CT:CR:CE:CT] , <u>Quad</u> is one of [3912167:3912168:3912177:3912176:3912166:3912156:3912157:3912158]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	рното
<u>Euphorbia hooveri</u>	Hoover's spurge	Euphorbiaceae	annual herb	Jul-Sep(Oct)	FT	None	G1	S1	1B.2	No Photo Available
<u>Limnanthes</u> f <u>loccosa ssp.</u> californica	Butte County meadowfoam	Limnanthaceae	annual herb	Mar-May	FE	CE	G4T1	S1	1B.1	© 2007 George W. Hartwell
<u>Tuctoria greenei</u>	Greene's tuctoria	Poaceae	annual herb	May-Jul(Sep)	FE	CR	G1	S1	1B.1	©2008 F. Gauna

Showing 1 to 3 of 3 entries

#### **Suggested Citation**:

California Native Plant Society, Rare Plant Program. 2022. Rare Plant Inventory (online edition, v9-01 1.5). Website https://www.rareplants.cnps.org [accessed 30 September 2022].

https://rareplants.cnps.org/Search/result?frm=T&crpr=1A:1B:2A:2B&fesa=FE:FT:FC&cesa=CE:CT:CR:CE:CT&fsao=or&sl=1&quad=3912167:3912168:3912177:3912176:3912166:3912156:3912157:3912158: 1/1

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.



# Local office

Sacramento Fish And Wildlife Office

**└** (916) 414-6600 **i** (916) 414-6713

NOTFORCONSULTATION

Federal Building 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846

https://ipac.ecosphere.fws.gov/location/NDLO4TKFABFA7PWHYNZVSAYFT4/resources

# Endangered species

# This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

- 1. Draw the project location and click CONTINUE.
- 2. Click DEFINE PROJECT.
- 3. Log in (if directed to do so).
- 4. Provide a name and description for your project.
- 5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the <u>Ecological Services Program</u> of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact <u>NOAA Fisheries</u> for <u>species under their jurisdiction</u>.

 Species listed under the <u>Endangered Species Act</u> are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the <u>listing status page</u> for more information. IPaC only shows species that are regulated by USFWS (see FAQ). 2. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

# Fishes

NAME	STATUS
Delta Smelt Hypomesus transpacificus Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. <u>https://ecos.fws.gov/ecp/species/321</u>	Threatened
Insects NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate
Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/7850	Threatened
Crustaceans	
NAME	STATUS
Conservancy Fairy Shrimp Branchinecta conservatio	Endangered

Wherever found

There is **final** critical habitat for this species. Your location does not overlap the critical habitat.

https://ecos.fws.gov/ecp/species/8246

Vernal Pool Fairy Shrimp Branchinecta lynchi Threatened Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/498 Vernal Pool Tadpole Shrimp Lepidurus packardi

Endangered

Wherever found

There is final critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2246

## **Flowering Plants**

NAME

STATUS

Endangered

Butte County Meadowfoam Limnanthes floccosa ssp. californica Wherever found There is final critical habitat for this species. Your location does not overlap the critical habitat.

https://ecos.fws.gov/ecp/species/4223

# **Critical habitats**

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

# Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection  $Act^{2}$ .

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

<sup>1.</sup> The Migratory Birds Treaty Act of 1918.

<sup>2.</sup> The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <u>https://www.fws.gov/program/migratory-birds/species</u>
- Measures for avoiding and minimizing impacts to birds <u>https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds</u>
- Nationwide conservation measures for birds <u>https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf</u>

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the <u>E-bird data mapping tool</u> (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle Haliaeetus leucocephalus This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Jan 1 to Aug 31
Belding's Savannah Sparrow Passerculus sandwichensis beldingi This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8	Breeds Apr 1 to Aug 15

Black Swift Cypseloides niger This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/8878</u>	Breeds Jun 15 to Sep 10
Black Tern Chlidonias niger This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/3093</u>	Breeds May 15 to Aug 20
Bullock's Oriole Icterus bullockii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Mar 21 to Jul 25
California Thrasher Toxostoma redivivum This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
Cassin's Finch Carpodacus cassinii This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/9462</u>	Breeds May 15 to Jul 15
Clark's Grebe Aechmophorus clarkii This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jun 1 to Aug 31
<b>Common Yellowthroat</b> Geothlypis trichas sinuosa This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <u>https://ecos.fws.gov/ecp/species/2084</u>	Breeds May 20 to Jul 31
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <u>https://ecos.fws.gov/ecp/species/1680</u>	Breeds Jan 1 to Aug 31

Lawrence's Goldfinch Carduelis lawrencei This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/9464</u>	Breeds Mar 20 to Sep 20
Long-eared Owl asio otus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/3631</u>	Breeds Mar 1 to Jul 15
Nuttall's Woodpecker Picoides nuttallii This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <u>https://ecos.fws.gov/ecp/species/9410</u>	Breeds Apr 1 to Jul 20
Oak Titmouse Baeolophus inornatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/9656</u>	Breeds Mar 15 to Jul 15
Olive-sided Flycatcher Contopus cooperi This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/3914</u>	Breeds May 20 to Aug 31
Short-billed Dowitcher Limnodromus griseus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Tricolored Blackbird Agelaius tricolor This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/3910</u>	Breeds Mar 15 to Aug 10
Western Grebe aechmophorus occidentalis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/6743</u>	Breeds Jun 1 to Aug 31

Willet Tringa semipalmata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Wrentit Chamaea fasciata This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 10
Yellow-billed Magpie Pica nuttalli	Breeds Apr 1 to Jul 31

## Probability of Presence Summary

range in the continental USA and Alaska. <u>https://ecos.fws.gov/ecp/species/9726</u>

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

#### Probability of Presence (

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

- 1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

#### Breeding Season (=)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

#### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

#### No Data (–)

A week is marked as having no data if there were no survey events for that week.

#### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

			🔳 pr	obabilit	y of pre	sence	breed	ling seas	son I s	urvey ef	fort –	no data
SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Bald Eagle Non-BCC Vulnerable	<u>un</u>	(III)	<b>1</b> 111	┼ <b>∎</b> ┿₿	<b>↓</b> ↓↓I	∎+++	+++∎	∎≢∔∔	++++	<b>#</b> +++	<b>₩#</b> ++	₩₩┼║
Belding's Savannah Sparrow BCC - BCR		+#+#		111	<b>ŧ</b> ╂ <b>≢</b> Ŧ	++++	++++	ŧ¦ŧ	••••		]]]]]	<b>    </b>
Black Swift BCC Rangewide (CON)	++++	++++	++++	++++	++++	++++	++++	++++	<mark>┼┼</mark> 啷┼	++++	++++	++++
Black Tern BCC Rangewide (CON)	++++	++++	++++	++++	<b>↓</b> ↓ ↓	++++	++++	┼┼┼┼	++++	++++	++++	++++
Bullock's Oriole BCC - BCR	++++	++++	┼┿ <mark>┃┃</mark>			1111			<b>#</b> +++	++++	++++	++++
California Thrasher BCC Rangewide (CON)	++++	┼┼┼┼	┼┼╪┼	┼┼┼┼	++++	++++	++++	┼╪┼┼	<b>#</b> +++	++++	++++	++++

BCC Rangewide (CON)	+ <b>###</b>	+++++++++++++++++++++++++++++++++++++++	+##+	++++	<u>+</u> +++	++++	<del>┃</del> <u>┃</u>	++++	++++	++++	++++	+++#
Clark's Grebe BCC Rangewide (CON)	++++	++++	+++#	+ -+++	+++I	1+11	+111	]+11	<b>₩₩</b> +₩	+∎+∎	<b>*</b> +++	++++
Common Yellowthroat BCC - BCR	+ <b>**</b>	<b>₩</b> ++ <b>₩</b>	┼┿╇║			[11]				#∎++	++++	++++
Golden Eagle Non-BCC Vulnerable	++++	++++	++++	++++	<u></u>       	++++	++++	++++	++++	++++	++++	++++
Lawrence's Goldfinch BCC Rangewide (CON)	++++	++++	++ <mark>∔</mark> ≢	┼┼║┼	<b>#</b> #++	<b>#</b> +++	++++	∎♦┼┼	┼┼┼┼	++++	++++	HH 1111
Long-eared Owl BCC Rangewide (CON)	++++	++++	++++	++++	++++	++++	++++	++++	++++	÷∎∔ŧ	++++	++++
SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Nuttall's Woodpecker BCC - BCR							WD	mi				IIII
Oak Titmouse BCC Rangewide (CON)		ШІ		ÌIII	<u>in</u> t	1111			IIII			
Oak Titmouse BCC Rangewide (CON) Olive-sided Flycatcher BCC Rangewide (CON)	++++	####	++++	++++	•+• <mark>•</mark> +	1111 +1++	<b>       </b>   ++++		<b></b>	<b></b>	<b>**</b> **	+++++
Oak Titmouse BCC Rangewide (CON) Olive-sided Flycatcher BCC Rangewide (CON) Short-billed Dowitcher BCC Rangewide (CON)	+++++	<b>**</b> ++++	++++	+++++	•+••	<b>1111</b> + <b>1</b> ++ ++++	<b>1111</b> ++++ ++++	1 1 1 1 ++++ + 1 1 1	<b></b>	<b>***</b>	<b>**</b> **	<b>H H H H</b> +++++ +++++
Oak Titmouse BCC Rangewide (CON) Olive-sided Flycatcher BCC Rangewide (CON) Short-billed Dowitcher BCC Rangewide (CON) Tricolored Blackbird BCC Rangewide (CON)		#### +++++ ++++#	++++ +++++ ++++	+++++ +++++	•+•• +++++ +++++	1111			<b>####</b> +++++ +++++	<b>***</b>	<b>IIIII</b> +++++ +++++	
Oak Titmouse BCC Rangewide (CON) Olive-sided Flycatcher BCC Rangewide (CON) Short-billed Dowitcher BCC Rangewide (CON) Tricolored Blackbird BCC Rangewide (CON) Western Grebe BCC Rangewide (CON)	<b>***</b>	<b>**</b> +++ <b>*</b> +++++ +++++	+++++ +++=+		<pre> •+••• •+••• •+••• •+••• •••••••••••••</pre>				<b>X X X X X X X X X X X X X X X X X X X </b>	<b>IIIIII</b> +++++ +++++ + <b>IIIII</b>	<b>IIIII</b> +++++ +++++ +++++	

(CON)

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Yellow-billed Magpie BCC Rangewide	****	║┼┿₩	<b>***#</b>	<b>†</b> ‡ <b>1</b> ‡	<b>   </b>	<b>↓</b> ↓+]]	1111	║┼║║	+#+#		┼╇║║	

# Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

<u>Nationwide Conservation Measures</u> describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. <u>Additional measures</u> or <u>permits</u> may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

# What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS <u>Birds of Conservation Concern (BCC)</u> and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge</u> <u>Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science</u> <u>datasets</u> and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (<u>Eagle Act</u> requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the <u>Rapid Avian Information Locator (RAIL) Tool</u>.

# What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey</u>, <u>banding</u>, <u>and</u> <u>citizen science datasets</u>.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the <u>RAIL Tool</u> and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

#### What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- 2. "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
- 3. "Non-BCC Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the <u>Eagle Act</u> requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

#### Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the <u>Northeast Ocean Data</u> <u>Portal</u>. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the <u>NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird</u> <u>Distributions and Abundance on the Atlantic Outer Continental Shelf</u> project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

#### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> to avoid violating the Eagle Act should such impacts occur.

#### Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory

#### IPaC: Explore Location resources

birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

# Coastal Barrier Resources System

Projects within the John H. Chafee Coastal Barrier Resources System (CBRS) may be subject to the restrictions on federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local Ecological Services Field Office or visit the CBRA Consultations website. The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

## There are no known coastal barriers at this location.

#### Data limitations

The CBRS boundaries used in IPaC are representations of the controlling boundaries, which are depicted on the <u>official CBRS maps</u>. The boundaries depicted in this layer are not to be considered authoritative for in/out determinations close to a CBRS boundary (i.e., within the "CBRS Buffer Zone" that appears as a hatched area on either side of the boundary). For projects that are very close to a CBRS boundary but do not clearly intersect a unit, you may contact the Service for an official determination by following the instructions here: <u>https://www.fws.gov/service/coastal-barrier-resources-system-property-documentation</u>

#### Data exclusions

CBRS units extend seaward out to either the 20- or 30-foot bathymetric contour (depending on the location of the unit). The true seaward extent of the units is not shown in the CBRS data, therefore projects in the offshore areas of units (e.g., dredging, breakwaters, offshore wind energy or oil and gas projects) may be subject to CBRA even if they do not intersect the CBRS data. For additional information, please contact <u>CBRA@fws.gov</u>.

# Facilities

## National Wildlife Refuge lands

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

## Fish hatcheries

There are no fish hatcheries at this location.

# Wetlands in the National Wetlands Inventory (NWI)

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of</u> <u>Engineers District</u>.

## Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the <u>NWI map</u> to view wetlands at this location.

#### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

#### Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

#### Data precautions

TF

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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## Appendix D: Arborist Survey Report

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# Arborist & Preliminary Biological Survey Report: Barber Yard Project Site - Chico, CA

April 2023, Updated as of March 2024



Prepared for:

Gonzales Development Corporation 1811 Concord Avenue, Suite 200 Chico, CA 95928

Prepared by:



2568 Fair Street Chico, CA 95928 Contact: Scott McMillan; (530) 321-8433 Email: <u>6382scooter@gmail.com</u>



418 Del Norte Avenue Corning, CA 96021 Contact: Carol Wallen Adema; (530) 864-1143 Email: <u>AdemaEnviro@gmail.com</u>

## Arborist & Preliminary Biological Survey Report for the Barber Yard Project Site - Chico, CA April 2023, Updated as of March 2024

As per your request, Certified Arborist Scott McMillan and Principal Biologist Carol Wallen Adema evaluated the approximately 133-acre area which comprises the Barber Yard Specific Plan Area (BYSP Area), Assessor Parcel Numbers (APNs) 039-400-016 (partial), 039-400-024, 039-400-025, 039-400-026, 039-400-050, 039-400-051, 039-400-052, 039-400-053, 005-195-001 (partial), 005-195-005 (partial), and 005-221-001 (partial), located in The City of Chico (COC/City), Butte County, CA in March and April, 2023. In October 2023, Mr. McMillin evaluated an additional approximately 15.86-acre adjacent area located due south of the BYSP Area (Off-Site Improvement Area), upon which a stormwater detention basin and associated storm drain alignment with outfall and related access drive from Estes Road, as well as various other public utility connections and various public roadway/bike path connections would be installed to serve the proposed project.

The Off-Site Improvement Area is located within APNs 039-410-025, 039-410-039, and 039-410-068; portions are located within unincorporated Butte County and the remaining portions are within the City. In January and February of 2024, Ms. Adema evaluated certain portions of the Off-Site Improvement Area that consist of immediately adjacent public rights-of-way and an area to the north of the Barber Yard area with potential to be impacted by project activities. Together, the BYSP Area and the Off-Site Improvement Area constitute the "Project Site" for purposes of this analysis. This review evaluated existing conditions with respect to trees located within the Project Site relative to moving a project forward (Attachment A - Figure 1: Project Site Location Map).

The following report is a summary of our findings based on a review of the current conditions of the Project Site secondary to site surveys conducted in March and April 2023 by Mrs. Adema and Mr. McMillan, a follow-up arborist evaluation of the Off-Site Improvement Area by Mr. McMillan in October 2023, and additional surveys of certain portions of the Off-Site Improvement Area (consisting of COC right-of-way areas) and the above-referenced area to the north of the yard area by Ms. Adema in January and February 2024. A table summarizing species found within the Project Site may be found in Table 1 while a listing of all trees found within the Project Site listed individually by species and including tree health, tag number, diameter at breast height (DBH), and arborist recommendation may be found as **Attachment B**. Representative site and tree photos have been included as **Attachment C**.

#### **Project Understanding & Location**

It is our understanding that the proposed project would involve the full buildout of the Barber Yard Specific Plan, including modifications to the Off-Site Improvement Area, resulting in a mixed-use community accommodating a diverse range of housing opportunities with a mix of commercial, recreational/open space and office uses located throughout. With respect to the Off-Site Improvement Area, modifications that may occur include the construction of a stormwater detention basin, installation of a storm drain outfall into the bordering Comanche Creek, the construction of access routes for maintenance activities, as well as various other public utility connections and various public roadway/bike path connections to existing public roadways at 14th, 16th, 18th, 20th and Ivy Streets.

The BYSP Area is located in the southern portion of the COC and is bounded by various individual properties to the northwest, Chestnut Street and Normal Avenue to the northeast, Estes Road to the east, as well as Union Pacific Railroad (UPRR) to the southwest. To the south, the BYSP Area is bounded by a portion of Butte County that is unincorporated, including a decommissioned UPRR spur. Agricultural and rural residential areas lie to the south and west across the UPRR. As stated previously, the BYSP Area falls within COC limits while much of the Off-Site Improvement Area, which is located directly south of the BYSP Area, falls within unincorporated Butte County.



The BYSP Area is generally flat and is fenced to prevent public access. The BYSP Area was the home of a factory operated by the Diamond Match Company in the early twentieth century. The factory closed in 1975. The Louisiana Pacific Corporation purchased the BYSP Area in 1984 and operated its Finished Wood Product Division and a remanufacturing facility until 1989. The BYSP Area was used by other owners for various industrial uses until all such uses terminated in 2004. Currently, uses consist primarily of abandoned structures and roadways in various states of disrepair, as well as existing Recreational Vehicle (RV) storage.

#### Survey Methodology & Regulatory Setting

#### Methodology:

Several site visits were conducted by Ms. Adema and Mr. McMillan in March and April of 2023 for the purposes of identifying, tagging, and geo-locating all trees on-site with a DBH of 6" or greater. A follow up survey by the arborist was conducted in October 2023 to survey the existing conditions within the Off-Site Improvement Area. Evaluations of additional areas of potential impact were conducted by Ms. Adema in January and February 2024.

Prior to and after the site visits, Ms. Adema reviewed current and historical aerial imagery, historical photographs, and current and historical U.S. geological topography maps of the Project Site. Research included information regarding original disturbances and construction activities to the Project Site, original building footprints, and general land use throughout the Project Site's history.

Ms. Adema generated maps of the Project Site designating areas for survey and areas that were to be excluded from the survey as they either did not contain trees or only contained remnant orchard trees. The areas within the Project Site selected for survey (Survey Zones) were traversed by foot, with each applicable tree within a respective Survey Zone being tagged, geo-located, and its health assessed. Additional surveys purposefully included certain portions of the Off-Site Improvement Area consisting of COC public right-of-way (as well as an area to the north of the yard area) where potential impacts may occur secondary to street improvements and the addition of curb, gutter, and sidewalk.

#### **Regulatory Setting:**

As further detailed in the proposed project's biological resources assessment and related section of the Draft EIR, the following agencies or regulations (laws) may be relevant to the existing on-site trees within the Project Site with potential to be impacted by the proposed project, as presented to, and understood by Adema Environmental.

**Federal Endangered Species Act:** The United States Congress passed the federal Endangered Species Act (ESA) in 1973 to protect those species that are endangered or threatened with extinction. The ESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

Under the ESA, species may be listed as one of four categories: 1) endangered, 2) threatened, 3) candidate, or 4) proposed. An endangered species is in danger of extinction throughout all or a significant portion of its range. A threatened species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. "Candidate" species are species for which there is enough information to warrant proposing them for listing, but that have not yet been proposed. "Proposed" species are those that have been proposed for listing but have not yet been listed.

Section 9 of the ESA prohibits the "take" of a listed animal without a permit. The term "take" is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting or any attempt to engage in any such conduct. "Harm" is defined as "an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it



actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering." Under Section 7 of the ESA, federal agencies are required to consult with the United States Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS) if their actions, including permit approvals or funding, could adversely affect an endangered plant or wildlife species or its habitat, or could adversely affect designated critical habitat. Through consultation and the issuance of a Biological Opinion (BO), USFWS or NMFS can issue an incidental take statement allowing take of the species, provided the action will not jeopardize the continued existence of any federally listed species or result in the destruction or adverse modification of habitats of those species. If adverse impacts will occur, the purchase of mitigation is typically required. ESA § 10 provides for issuance of lincidental take permits to private parties without a federal nexus, provided a Habitat Conservation Plan is developed.

#### **Results**

#### Tree Survey Results:

A total of 935 trees with a DBH of 6 inches or greater were surveyed within the BYSP Area and the Off-Site Improvement Area. A summary of the trees by species, DBH, health and arborist recommendation may be found in Table 1 while a table of individual trees, as presented on the maps in Attachment A may be found in Attachment B.

BARBER YARD TRE	E SURVEY RE	SULTS:	MAR-AF	RIL & C	CTOBER 2023/JA	N & FEB	2024
Species	DBH	Count	Health	Count	Recommendation	Count	Total
	≥ 6 and < 12"	13	Good	4	SP/GP	4	
Almond	≥ 12 and < 24"	3	Fair	12	Removal	9	18
	≥ 36 and < 48"	2	Poor	2	TBD	2	
	≥ 6 and < 12"	7	Good	27	SP/GP	34	
Black Walnut	≥ 12 and < 24"	16	Fair	6	Removal	14	
	≥ 24 and < 36"	16	Poor	13	TBD	1	49
(one dead tree excluded	≥ 36 and < 48"	6	Dead	3			
from DBH)	≥ 48 and < 60"	4					
	≥ 4 and < 12"	6	Good	7	SP/GP	N/A	-
Blue Elderberry	≥ 36 and < 48"	1	Fair	0	Removal	N/A	
CA Fan Dalm	≥ 12 and < 24"	29	Good	76	SP/GP	76	76
CA Fan Paim	≥ 24 and < 36"	47	Fair	0	Removal		76
Canany Island Data	≥ 12 and < 24"	6	Good	9	SP/GP	9	
Callary Island Date	≥ 24 and < 36"	2	Fair				9
Paim	≥ 36 and < 48"	1	Poor				
	≥ 6 and < 12"	8	Fair	2	SP/GP	1	
Chinese Hackberry	≥ 12 and < 24"	2	Poor	5	Removal	8	10
		•	Dead	1	TBD	1	
	≥ 6 and < 12"	20	Good	24	SP/GP	18	
Chinese Pistache	≥ 12 and < 24"	10	Fair	8	Removal	7	34
chinese ristache	≥ 24 and < 36"	2	Poor	2	TBD	7	54
	≥ 36 and < 48"	2	Dead	0			
	≥ 6 and < 12"	3	Good	5	TBD	5	_
Coastal Redwood	≥ 12 and < 24"	2	Fair				5
	≥ 12 and < 24"	16	Good	24	SP/GP	24	
Mexican Fan Palm	≥ 24 and < 36"	6					24
	≥ 24 and < 36"	2					

#### TABLE 1. SUMMARY OF SURVEY RESULTS

#### To: Gonzales Development Corporation

RE: Barber Yard Project Site: Arborist & Preliminary Biological



Survey Report- April 2023, Updated as of March 2024

	≥ 6 and < 12"	9	Good	11	SP/GP	10				
Deser	≥ 12 and < 24"	5	Fair	3	Removal	7	1 40			
Pecan	≥ 24 and < 36"	4	Poor	5	TBD	2	19			
	≥ 36 and < 48"	1	Dead				1			
	≥ 12 and < 24"	2	Good	3	SP/GP	2				
Successore and	≥ 24 and < 36"	Х	Fair	х	Removal	2	c			
Sycamore	≥ 36 and < 48"	3	Dead	2	TBD	2	<b>O</b>			
	≥ 48 and < 60"	1	TBD	1						
	≥ 6 and < 12"	44	Good	39	Removal	50				
Tree of Heaven	≥ 12 and < 24"	6	Fair	4			50			
			Poor	7						
	≥ 6 and < 12"	272	Good	457	SP/GP	368	577			
	≥ 12 and < 24"	216	Fair	93	Removal	39				
Valley Oak	≥ 24 and < 36"	67	Poor	25	TBD	92				
valley Oak	≥ 36 and < 48"	13	Dead	6			5//			
	≥ 48 and < 60"	5								
	≥ 60"	4								
Other species	≥ 6 and < 12"	21	Good	35	SP/GP	21				
Other species	≥ 12 and < 24"	18	Fair	8	Removal	16				
(with total count of 5	≥ 24 and < 36"	8	Poor	6	TBD	14	51			
individuals or less per	≥ 36 and < 48"	2	Dead	3						
species)	≥ 48 and < 60"	2								
TOTAL OF ALL TREES 6" OR GREATER ON-SITE										
*Blue elderberry shrubs wit	h a DBH of >1" and	l <6" were	included du	e to the feo	lerally listed nature of the	species an	d			
associated protection requi	rements.									

#### Species and Habitat Survey Results:

Special-status species with the potential to occur within existing trees within the Project Site include the valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*). Other species with the potential to occur within the Project Site (but not specific to existing trees) will be addressed in the proposed project's Biological Resources Assessment and related section of the proposed project's Draft Environmental Impact Report.

*Valley Elderberry Longhorn Beetle (VELB):* VELBs occur in the Central Valley of California below 3,000 feet and are distributed primarily within riparian habitats from Shasta to Kern counties. VELB rely solely on blue elderberry shrubs to complete its lifecycle. The adult beetles emerge from the elderberry stems from April to early June and mate; with females laying eggs on the tips of twigs. Once eggs hatch, the larva bore into twigs and feed on the pith. Before the larva pupates, it makes an exit hole in the elderberry stem. These holes serve as an indication of the occurrence of VELB in elderberry shrubs.

In addition to exhibiting a preference for "stressed" shrubs, VELB prefer shrubs with stems of a certain size class. Exit holes have been found more frequently in trunks or branches that are 2-8 inches in diameter, however, stems that are at least 1.0 inch or greater at ground height and less than one meter off the ground are considered suitable. Research also shows that exit holes more consistently occur in clumps or stands more often than in isolated shrubs. (USFWS 1999)

A small elderberry shrub was located within the 133-acre BYSP Area along what appears to be a remnant human-made ditch. Larger shrubs with exit holes were located within the Off-Site Improvement Area along Comanche Creek. The presence of the elderberry shrubs and clusters with exit holes both within the BYSP Area and the Off-Site Improvement Area indicates potential for their occurrence.



If complete avoidance of these shrubs is not feasible, then avoidance measures and/or mitigation may be required per the USFWS, secondary to consultation. Avoidance and minimization measures that may become necessary may include exclusion fencing and avoidance areas, worker education, construction monitoring, timing of work, and regulation of chemical usage (herbicides) near the shrubs.

If construction results in direct impact to (transplant and/or removal of) a shrub(s), then compensatory mitigation may be required at the ratios as seen in Table 2. (USFWS)

	HEAHON NATIOS				
Habitat	Compensation Ratio*	If the entire shrub will be removed			
Riparian	2:1	Transplant the shrub + 2:1 compensation though purchase of credit(s)**			
Non-riparian (exit holes present)	1:1	Transplant the shrub + 1:1 compensation though purchase of credit(s)**			

#### TABLE 2. USFWS ELDERBERRY SHRUB MITIGATION RATIOS

\* number of credits: number of shrubs trimmed/relocated/removed

\*\* One credit (unit) = 1800 square feet or 0.041 acre

Please see the Biological Resources Assessment and related section of the proposed project's Draft Environmental Impact Report for discussion of any identified mitigation measures regarding the abovementioned special-status species.

#### **Summary**

Please see the attached information regarding the existing conditions as it relates to trees within the Project Site.

Please feel free to contact Carol at Adema Environmental with any questions at (530) 864-1143 or via email at ademaenviro@gmail.com.

Sincerely,

Carol Wallen Adema Principal Regulatory Biologist

#### **Attachments**

- Attachment A Figures
  - Figure 1 Project Site Location Map
  - o Figure 2 Tree Survey Zone Map
  - o Survey Zone Result Maps:
    - Figure 3a Survey Zone 1 Results
    - Figure 3b Survey Zone 2 Results
    - Figure 3c Survey Zone 3 Results
    - Figure 3d Survey Zone 4 Results
    - Figure 3e Survey Zone 5 Results
- Attachment B Table of Surveyed Trees
- Attachment C Representative Site Photos

S. McMillan

Scott McMillan Certified Arborist (License No. WE-8761A)

- Figure 3f Survey Zone 6 Results
- Figure 3g Survey Zone 7a & 7b Results
- Figure 3h Survey Zone 7c Results
- Figure 3i Survey Zone 8 Results



#### **References**

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To: Gonzales Development Corporation RE: Barber Yard Project Site: Arborist & Preliminary Biological Survey Report- April 2023, Updated as of March 2024



#### **ATTACHMENT A - FIGURES**

#### Figures Included in Attachment A:

- Figure 1 Project Site Location Map
- Figure 2 Tree Survey Zone Map
- Survey Zone Result Maps:
  - Figure 3a Survey Zone 1 Results
  - o Figure 3b Survey Zone 2 Results
  - o Figure 3c Survey Zone 3 Results
  - Figure 3d Survey Zone 4 Results
  - o Figure 3e Survey Zone 5 Results
  - Figure 3f Survey Zone 6 Results
  - o Figure 3g Survey Zone 7a & 7b Results
  - o Figure 3h Survey Zone 7c Results
  - o Figure 3i Survey Zone 8 Results





## Figure 2: Tree Survey Zone Map

## Barber Yard Tree Survey Gonzales Development Corps - Chico, Butte County, CA -

0 200 400 800  $\overline{\mathbf{N}}$ 

1 inch = 400 ft (printed at 11 x 17)

**Imagery Sources:** ESRI; Maxar Vivid (9/7/2021) ESRI; USGS Topo

Within Section 35, Township 22N, Range 01E, and Section 2, Township 21N, Range 01E Butte County, CA, CHICO USGS 7.5' Quad APNs: 039-400-031, 039-410-025 & 039

## Legend

**GDC Barber Tree Survey** Areas

- Barber Yard Specific Plan Area (135 ac)
- Off-Site Improvement Area (15.6 ac)

**GDC Barber Tree Survey** Zones

> Survey Zone 1 (18.4 ac) Survey Zone 2 (12.4 ac) Survey Zone 3 (25.9 ac) Survey Zone 4 (28.9 ac Survey Zone 5 (12.4 ac) Survey Zone 6 (13.1 ac) Survey Zone 7 (3 ac) Survey Zone 8 (2.2 ac)

Exclusion Zones (34.7 ac)

## **Barber Trees - All** Surveys (935)

#### **Species**

- ☆ Blue Elderberry (7\*)
- Cottonwood (1)
- Holm Oak (1)
- Live Oak (1)
- Sycamore (6)
- Scrub Oak (1)
- Valley Oak (577)

- Blue spruce (1)
- CA Grey Pine (4)
- CA Incense Cedar (1)
- Deodar Cedar (5)
- Cypress (1)
- Monterey Cypress (2)
- Weeping Pine (1)
- White Pine (6)
- CA Fan Palm (76)
- Canary Island Date Paln (9)
- Mexican Fan Palm (24)
- Almond (18)
- Bastogne Walnut (2)
- Black Walnut (49)
- English Walnut (3)
- Maple (2)
- Myrtle (1)
- Pecan (19)
- Camphor (1)
- Chinese Hackberry (8)
- Chinese Pistache (36)
- Coastal Redwood (5)
- ▲ Crepe Myrtle (1)
- Eucalyptus (5)
- Raywood Ash (3)
- Privet (8)
- Tree of Heaven (50)

Map Date: 4/10/2023; updated 2/29/2024

ADEMA

Environmental







Map Date: 4/10/2023; Updated 2/29/2024







453 454

Map Date: 4/10/2023; Updated 2/29/2024



Map Date: 4/10/2023; Updated 2/29/2024







Map Date: 4/10/2023; Updated 2/29/2024





Map Date: 2/29/2024





Map Date: 4/10/2023; Updated 2/29/2024 Drawn

To: Gonzales Development Corporation RE: Barber Yard Project Site: Arborist & Preliminary Biological Survey Report- April 2023, Updated as of March 2024



ATTACHMENT B - Table of Surveyed Trees

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
Where:	REC = Recommendation		Red r	ecords = ne	eds imm	ediate ar	borist attention	AD =
DB	H = Diameter at breast hei	ght	"machinery" = stru	uctural defe	ects cause	ed by pas	t machinery damage evident	added
in in	ches (approx. 54" from gro	ound)	"in channe	l" = tree loc	ated in a	former o	drainage channel area	survey
	CD = Codominant trunk		"in bas	sin" = tree l	ocated in	n former	retention basin / pond area	
	SD = structural defect		"good arch" = tr	ee has uniq	ue archit	ecture; s	hould be considered for preserva	ation
26	Almond	Fair	Removal	11	х		fence intrusion	26
30	Almond	Fair	Removal	18		х	fence intrusion	30
88	Almond	Poor	Removal	8				88
96	Almond	Fair	Safety prune	7			sap suckers	96
105	Almond	Poor	Removal	7				105
279	Almond	Poor	Removal	8	х			279
364	Almond	Fair	Safety prune	8		х	granulated	364
367	Almond	Good	Safety prune	7	х		granulated	367
383	Almond	Good	Safety prune	7	х		channel edge	383
402	Almond	Fair	Removal	8	х			402
N/A	Almond	Fair	Removal	6				AD-14
N/A	Almond	Fair	Removal	6				AD-15
N/A	Almond	Fair	Removal	16			for a taken store	AD-20
838	Almond	Fair	TBD	38	X		fence intrusion	838
839	Almond	Fair	IBD	42	х		concueker	839
047	Almond	Fair		10			sapsucker	047
947	Almond	Fall	I DD Safaty prupa	15			sapsucker	947
954		Good		0			forestintuises	954
248	Bastogne Walnut	Good	Removal Sefety prupe	20			tence intrusion	248
637	Bastogne walnut	Good	Safety prune	15				637
9 21	Black Walnut	Good	Safety prune	10	×			9 21
120	Black Walnut	Poor	Bomoval	10	X			120
120	Black Walnut	Poor	Removal	10				120
122	Black Walnut	Poor	Removal	23				122
124	Black Walnut	Fair	Safety prune	29				124
138	Black Walnut	Poor	Removal	9				138
149	Black Walnut	Good	Safety prune	20				149
226	Black Walnut	Poor	Removal	28				226
252	Black Walnut	Poor	Removal	34				252
253	Black Walnut	Good	Safety prune	15	x			253
268	Black Walnut	Poor	Removal	9				268
275	Black Walnut	Good	Safety prune	17	х			275
284	Black Walnut	Poor	Removal	12			fence intrusion	284
292	Black Walnut	Poor	Removal	10	х			292
319	Black Walnut	Dead	Removal	30				319
324	Black Walnut	Dead	Removal	32				324
325	Black Walnut	Dead	TBD	NA				325
333	Black Walnut	Good	Safety prune	32				333
337	Black Walnut	Poor	Removal	14				337
338	Black Walnut	Dead	Removal	28				338
344	Black Walnut	Good	Safety prune	16				344
359	Black Walnut	Good	Safety prune	10	х			359
361	Black Walnut	Good	Safety prune	9	х			361
551	Black Walnut	Good	Safety prune	43				551
552	Black Walnut	Fair	Safety prune	27		Х		552
553	Black Walnut	Poor	Safety prune	20		Х		553
554	Black Walnut	Fair	Safety prune	38		х		554
555	Black Walnut	Fair	Safety prune	37				555
556	Black Walnut	Good	Safety prune	57				556
557	Black Walnut	Good	Safety prune	30	Х		good architecture	557
558	Black Walnut	Good	Satety prune	38				558

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
559	Black Walnut	Good	Safety prune	48				559
560	Black Walnut	Good	Safety prune	30				560
561	Black Walnut	Good	Safety prune	44		х		561
562	Black Walnut	Good	Safety prune	30				562
563	Black Walnut	Good	Safety prune	23				563
564	Black Walnut	Good	Safety prune	32				564
565	Black Walnut	Good	Safety prune	36				565
571	Black Walnut	Good	Safety prune	9			good architecture	571
625	Black Walnut	Good	Safety prune	16				625
629	Black Walnut	Good	Safety prune	7	х			629
630	Black Walnut	Good	Safety prune	13				630
663	Black Walnut	Good	Safety prune	16				663
665	Black Walnut	Good	Safety prune	32				665
666	Black Walnut	Poor	Removal	31	х	х		666
668	Black Walnut	Poor	TBD	48		х	major structure defect	668
N/A	Black Walnut	Fair	TBD	31	Х			AD-3
N/A	Black Walnut	Good	TBD	55				AD-56
N/A	Blue Elderberry	Good		6				ELD-1
N/A	Blue Elderberry	Good		42				ELD-2
N/A	Blue Elderberry	Good		4				ELD-3
N/A	Blue Elderberry	Good		5				ELD-4
N/A	Blue Elderberry	Good		9				ELD-5
N/A	Blue Elderberry	Good		8				ELD-6
N/A	Blue Elderberry	Good		9				ELD-7
212	Blue spruce	Good	Safety prune	32				212
1	CA Fan Palm	Good	Safety prune	26				1
2	CA Fan Palm	Good	Safety prune	28				2
3	CA Fan Palm	Good	Safety prune	28				3
4	CA Fan Palm	Good	Safety prune	28				4
171	CA Fan Palm	Good	Safety prune	29				171
173	CA Fan Palm	Good	Safety prune	27				173
174	CA Fan Palm	Good	Safety prune	24				174
175	CA Fan Palm	Good	Safety prune	24				175
176	CA Fan Palm	Good	Safety prune	27				176
177	CA Fan Palm	Good	Safety prune	24				177
178	CA Fan Palm	Good	Safety prune	26				178
179	CA Fan Palm	Good	Safety prune	28				179
181	CA Fan Palm	Good	Safety prune	28				181
182	CA Fan Palm	Good	Safety prune	28				182
183	CA Fan Palm	Good	Safety prune	24				183
184	CA Fan Palm	Good	Safety prune	23				184
185	CA Fan Palm	Good	Safety prune	23				185
186	CA Fan Palm	Good	Safety prune	25				186
187	CA Fan Palm	Good	Safety prune	24				187
188	CA Fan Palm	Good	Safety prune	24				188
189	CA Fan Palm	Good	Safety prune	24				189
190	CA Fan Palm	Good	Safety prune	23				190
191	CA Fan Palm	Good	Safety prune	24				191
192	CA Fan Palm	Good	Safety prune	24				192
193	CA Fan Palm	Good	Safety prune	24				193
194	CA Fan Palm	Good	Safety prune	24				194
196	CA Fan Palm	Good	Safety prune	24				196
197	CA Fan Palm	Good	Safety prune	24				197
198	CA Fan Palm	Good	Safety prune	24				198
199	CA Fan Palm	Good	Safety prune	27				199
200	CA Fan Palm	Good	Safety prune	26				200
201	CA Fan Palm	Good	Safety prune	22				201
202	CA Fan Palm	Good	Safety prune	22				202

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
203	CA Fan Palm	Good	Safety prune	19				203
204	CA Fan Palm	Good	Safety prune	22				204
205	CA Fan Palm	Good	Safety prune	23				205
206	CA Fan Palm	Good	Safety prune	21				206
207	CA Fan Palm	Good	Safety prune	21				207
208	CA Fan Palm	Good	Safety prune	22				208
209	CA Fan Palm	Good	Safety prune	21				209
210	CA Fan Palm	Good	Safety prune	22				210
218	CA Fan Palm	Good	Safety prune	23				218
219	CA Fan Palm	Good	Safety prune	23				219
220	CA Fan Palm	Good	Safety prune	23				220
221	CA Fan Palm	Good	Safety prune	23				221
222	CA Fan Palm	Good	Safety prune	22				222
223	CA Fan Palm	Good	Safety prune	23				223
224	CA Fan Palm	Good	Safety prune	21				224
225	CA Fan Palm	Good	Safety prune	21				225
227	CA Fan Palm	Good	Safety prune	22				227
228	CA Fan Palm	Good	Safety prune	23				228
229	CA Fan Palm	Good	Safety prune	25				229
230	CA Fan Palm	Good	Safety prune	24				230
231	CA Fan Palm	Good	Safety prune	24				231
232	CA Fan Palm	Good	Safety prune	22				232
233	CA Fan Palm	Good	Safety prune	19				233
234	CA Fan Palm	Poor	Removal	23				234
235	CA Fan Palm	Good	Safety prune	22				235
242	CA Fan Palm	Good	Safety prune	24				242
243	CA Fan Palm	Good	Safety prune	26				243
249	CA Fan Palm	Good	Safety prune	26				249
255	CA Fan Palm	Good	Safety prune	24				255
262	CA Fan Palm	Good	Safety prune	26				262
263	CA Fan Palm	Good	Safety prune	26				263
264	CA Fan Palm	Good	Safety prune	26				264
265	CA Fan Palm	Good	Safety prune	24				265
360	CA Fan Palm	Good	Safety prune	28				360
640	CA Fan Palm	Good	Safety prune	24				640
641	CA Fan Palm	Good	Safety prune	24				641
642	CA Fan Palm	Good	Safety prune	24				642
643	CA Fan Palm	Good	Safety prune	24				643
644 645	CA Fan Palm	Good	Safety prune	20				644
661	CA Fan Palm	Good	Safety prune	20				661
662	CA Fan Palm	Good	Safety prune	27				662
NT	CA Fan Palm	Good	Bemoval	27				NT-20
326	CA Grev Pine	Good	Safety prupe	12				326
320	CA Grey Pine	Good	Safety prune	12				320
664	CA Grey Pine	Good	Safety prune	34			heavy lean	664
667	CA Grey Pine	Good	Safety prune	32			ileavy lean	667
N/A	CA Incense Cedar	Good	TBD	42				AD-55
82	camphor	Poor	Removal	7	x			82
180	Canary Island Date	Good	Safety prune	36				180
256	Canary Island Date	Good	Safety prune	24				256
257	Canary Island Date	Good	Safety prune	19				257
258	Canary Island Date	Good	Safety prune	21				258
259	Canary Island Date	Good	Safety prune	23				259
260	Canary Island Date	Good	Safety prune	21				260
261	Canary Island Date	Good	Safety prune	23				261
353	Canary Island Date	Good	Safety prune	27				353
NT	Canary Island Date	Good	Safety prune	18				NT-37

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
50	Chinese hackberry	Poor	Removal	7				50
51	Chinese hackberry	Poor	Removal	8				51
52	Chinese hackberry	Fair	Removal	8				52
53	Chinese hackberry	Fair	Safety prune	11				53
54	Chinese hackberry	Poor	Removal	7				54
55	Chinese hackberry	Poor	Removal	7				55
56	Chinese hackberry	Dead	Removal	11				56
57	Chinese hackberry	Poor	Removal	11		х		57
11	Chinese Pistache	Fair	Removal	10				11
14	Chinese Pistache	Fair	Removal	14	X			14
15	Chinese Pistache	Fair	Removal	22	X	v		15
21	Chinese Pistache	Fall	Safety prupe	22 0	X	X		21
40	Chinese Pistache	Poor	Removal	18	v	v		40
40 92	Chinese Pistache	Good	Safety prupe	10	^	^		92
254	Chinese Pistache	Fair	Safety prune	21	x			254
274	Chinese Pistache	Good	Safety prune	7	x			274
285	Chinese Pistache	Good	Safety prune	9				285
287	Chinese Pistache	Good	Safety prune	8	х			287
295	Chinese Pistache	Good	Safety prune	6	х			295
339	Chinese Pistache	Good	Safety prune	14				339
340	Chinese Pistache	Good	Safety prune	22				340
341	Chinese Pistache	Good	Safety prune	15				341
342	Chinese Pistache	Good	Safety prune	12				342
343	Chinese Pistache	Good	Safety prune	27				343
398	Chinese Pistache	Good	TBD	8			fence intrusion	398
403	Chinese Pistache	Poor	Removal	8	х	х		403
404	Chinese Pistache	Good	Removal	6	х			404
405	Chinese Pistache	Good	Safety prune	6	х			405
417	Chinese Pistache	Good	Safety prune	6	х			417
436	Chinese Pistache	Fair	IBD Sofoty prupo	8		x		436
507	Chinese Pistache	Good	Safety prune	8 7	X			507
594 N/A	Chinese Pistache	Good		/ Q	X			594 AD-18
N/A N/A	Chinese Pistache	Good	TBD	10				AD-18 AD-24
N/A	Chinese Pistache	Good	TBD	10				AD-33
N/A	Chinese Pistache	Good	Removal	42	х			AD-37
NT	Chinese Pistache	Good	Safety prune	9				NT-21
NT	Chinese Pistache	Good	Safety prune	8	х			NT-23
849	Chinese Pistache	Very Poor	Removal	14	х			849
861	Chinese Pistache	Fair	TBD	18	х			861
879	Chinese Pistache	Fair	Removal	36	Х			879
880	Chinese Pistache	Fair	Removal	7				880
894	Chinese Pistache	Good	TBD	32				94
N/A	Coastal redwood	Good	TBD	20				AD-19
N/A	Coastal redwood	Good	TBD	16				AD-21
N/A	Coastal redwood	Good	TBD	12				AD-31
N/A	Coastal redwood	Good	TBD	10				AD-50
N/A	Coastal redwood	Good	TBD	8				AD-51
	cottonwood	Fair	Kemoval	11	Х		in basin	NT-26
N/A	Crepe myrtle	Good	IBD	4				AD-22
N/A	Cypress	Good	I BD	8 20				AD-58
211	Deodar Cedar	Good	Safety prune	28				211
213	Deodar Cedar	Good	Safety prune	24 1/				213
237 N/A	Deodar Cedar	Good		10				AD-17
N/A	Deodar Cedar	Good	TBD	38				AD-54
N/A	English walnut	Deceased	Removal	20				AD-29
	0.0						1	

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
N/A	English walnut	Deceased	Removal	32				AD-30
N/A	English walnut	Deceased	Removal	20				AD-48
250	eucalyptus	Poor	Removal	28			invasive	250
251	eucalyptus	Fair	Removal	7			invasive	251
270	eucalyptus	Poor	Removal	10		х	invasive	270
271	eucalyptus	Fair	TBD	58			invasive	271
273	eucalyptus	Fair	Removal	7		х	invasive	273
864	Holm Oak	Fair	TBD	8				864
164	Live Oak	Good	Safety prune	9	х			164
N/A	Maple	Good	TBD	10				AD-59
N/A	Maple	Good	TBD	8				AD-60
NI	Mexican Fan Palm	Good	Safety prune	20				NI-1
NI	Mexican Fan Palm	Good	Safety prune	16				NI-10
	Mexican Fan Palm	Good	Safety prune	1/				NI-11
	Mexican Fan Palm	Good	Safety prune	14				NT-13
	Mexican Fan Palm	Good	Safety prune	32				NT-14
	Mexican Fan Palm	Good	Safety prune	32				NT-15
	Movican Fan Palm	Good	Safety prune	19				NT 17
	Movican Fan Palm	Good	Safety prune	19				NT 10
	Mexican Fan Palm	Good	Safety prune	1/				NT-10
NT	Mexican Fan Palm	Good	Safety prune	20				NT-13
	Mexican Fan Palm	Good	Safety prune	20				NT-2
NT	Mexican Fan Palm	Good	Safety prune	22				NT-31
NT	Mexican Fan Palm	Good	Safety prune	22				NT-32
NT	Mexican Fan Palm	Good	Safety prune	12				NT-33
NT	Mexican Fan Palm	Good	Safety prune	22				NT-34
NT	Mexican Fan Palm	Good	Safety prune	28				NT-35
NT	Mexican Fan Palm	Good	Safety prune	18				NT-36
NT	Mexican Fan Palm	Good	Safety prune	36				NT-4
NT	Mexican Fan Palm	Good	Safety prune	32				NT-5
NT	Mexican Fan Palm	Good	Safety prune	28				NT-6
NT	Mexican Fan Palm	Good	Safety prune	16				NT-7
NT	Mexican Fan Palm	Good	Safety prune	16	х			NT-8
NT	Mexican Fan Palm	Good	Safety prune	16				NT-9
172	Monterey cypress	Good	Safety prune	7				172
NT	Monterey cypress	Good	Safety prune	7		х		NT-12
627	myrtle	Good	Safety prune	7				627
64	pecan	Poor	Removal	11	х			64
65	pecan	Poor	Removal	13				65
110	pecan	Good	Safety prune	11				110
123	pecan	Good	Safety prune	16	х			123
125	pecan	Good	Safety prune	9				125
195	pecan	Poor	Removal	36		х		195
239	pecan	Good	Safety prune	35				239
240	pecan	Good	Safety prune	25				240
241	pecan	Poor	Removal	27				241
266	pecan	Good	Removal	24		х		266
548	pecan	Good	Safety prune	/				548
572	pecan	GOOD	Satety prune	8	X			572
579	pecan	Fair	I BD	8	X			5/9
581	pecan	Good	Safety prune	12	X			581
	pecan	GOOD	Salety prune	11	X			
N/A	pecan	Fall	Safaty prupa	19	X		blackborne	AD-39
	Pecali	Enir	Bomoval	/			DIACKDEITY	020
020 816	Pecan	Fail Very Door	Removal	9 16	v			020 816
802	Drivot	Good	Safety prupo	5010	^			240 202
002	FINEL	000u	Salety prulle	0				002

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
811	Privet	Good	Removal	47	х		fence intrusion	811
812	Privet	Very Poor	Removal	9	х		fence intrusion	812
816	Privet	Fair	Removal	6	х			816
821	Privet	Good	TBD	11	х			821
836	Privet	Good	Removal	10	х			836
845	Privet	Good	TBD	14	х			845
850	Privet	Very Poor	Removal	23	Х	Х	fence intrusion	850
N/A	Raywood Ash	Good	TBD	20				AD-16
N/A	Raywood Ash	Good	TBD	12				AD-23
N/A	Raywood Ash	Good	TBD	14				AD-25
113	scrub oak	Poor	Removal	12				113
632	Sycamore	Good	Safety prune	48				632
633	Sycamore	Dead	Removal	38				633
634	Sycamore	Good	Safety prune	19				634
635	Sycamore	Dead	Removal	36			un auchunte faultuide	635
636	Sycamore	IBD	TBD	43			re-evaluate for buds	636
N/A	Sycamore	Good	IBD	23			in realize	AD-57
136	Tree of Heaven	Good	Removal	12	x		invasive	136
137	Tree of Heaven	Good	Removal	/			invasive	137
139		Good	Removal	8 7			invasive	139
140	Tree of Heaven	Boor	Removal	/ 0				140
200	Tree of Heaven	FUUI	Removal	0 0			invasivo	200
299	Tree of Heaven	Good	Removal		v		invasive	309
303	Tree of Heaven	Good	Removal	, 11	^		invasive	303
372	Tree of Heaven	Good	Removal	13			invasive	372
374	Tree of Heaven	Poor	Removal	16		x	invasive	374
376	Tree of Heaven	Good	Removal	7		~	invasive	376
377	Tree of Heaven	Poor	Removal	7	x	x	in channel: invasive	377
378	Tree of Heaven	Poor	Removal	7	x	~	invasive	378
381	Tree of Heaven	Good	Removal	10	x		basin edge: invasive	381
382	Tree of Heaven	Poor	Removal	16	х	х	basin edge; invasive	382
389	Tree of Heaven	Good	Removal	10	х		in channel	389
419	Tree of Heaven	Fair	Removal	6	х	х	invasive	419
421	Tree of Heaven	Fair	Removal	7		х	invasive	421
426	Tree of Heaven	Poor	Removal	7	х	х	invasive	426
427	Tree of Heaven	Good	Removal	7	х		invasive	427
455	Tree of Heaven	Good	Removal	10	х		invasive	455
544	Tree of Heaven	Good	Removal	8			invasive	544
545	Tree of Heaven	Good	Removal	8			invasive	545
546	Tree of Heaven	Good	Removal	8			invasive	546
547	Tree of Heaven	Good	Removal	8	х		invasive	547
549	Tree of Heaven	Good	Removal	8	х		cluster; invasive	549
582	Tree of Heaven	Good	Removal	11			invasive	582
586	Tree of Heaven	Good	Removal	13			invasive	586
587	Tree of Heaven	Good	Removal	10			invasive	587
588	Tree of Heaven	Good	Removal	10			invasive	588
590	Tree of Heaven	Good	Removal	7			invasive	590
591	Tree of Heaven	Good	Removal	10			invasive	591
592	Tree of Heaven	Good	Removal	8			invasive	592
597	Iree of Heaven	Good	Removal	6	Х		invasive	597
598	Tree of Heaven	Good	Removal	6	X		invasive	598
599	Tree of Heaven	Fair	Removal	8	X	Х	invasive	599
601	Tree of Heaven	Good	Removal	b 0	Х		invasive	601
602		GOOd	Removal	ð			invasive	602
604		Good	Removal	ŏ		<u> </u>	invasive	604
60F		Good	Pomoval	0 7			invasive	605
005	nee of neaven	9000	Removal	/			IIIVasive	005
609Tree of HeavenGoodRemoval8in610Tree of HeavenGoodRemoval6xin611Tree of HeavenGoodRemoval10in612Tree of HeavenGoodRemoval7xin613Tree of HeavenGoodRemoval6in614Tree of HeavenGoodRemoval6in	vasive     609       vasive     610       vasive     611       vasive     612       vasive     613       vasive     614							
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------							
610Tree of HeavenGoodRemoval6xin611Tree of HeavenGoodRemoval10in612Tree of HeavenGoodRemoval7xin613Tree of HeavenGoodRemoval6in614Tree of HeavenGoodRemoval6in	vasive     610       vasive     611       vasive     612       vasive     613       vasive     614							
611Tree of HeavenGoodRemoval10in612Tree of HeavenGoodRemoval7xin613Tree of HeavenGoodRemoval6in614Tree of HeavenGoodRemoval6in	vasive 611 vasive 612 vasive 613							
612 Tree of Heaven Good Removal 7 x in   613 Tree of Heaven Good Removal 6 in   614 Tree of Heaven Good Removal 6 in	vasive 612 vasive 613							
613 Tree of Heaven Good Removal 6 in	vasive 613							
	(acivo 614							
ויי וויפט אנס	Vasive 014							
615 Tree of Heaven Good Removal 7 x in	vasive 615							
NT Tree of Heaven Good Removal 7 x in basi	n; invasive NT-27							
844 Tree of Heaven Very Poor Removal 13 leaning	g; invasive 844							
5 Valley Oak Good Safety prune 23	5							
6 Valley Oak Good Safety prune 17	6							
7 Valley Oak Fair Removal 13 fence	intrusion /							
8 Valley Oak Fair Removal 19	8							
10 Valley Oak Good Safety prune 13	10							
12 Valley Oak Poor Removal 10	12							
13 Valley Oak Dead Removal 13	13							
17 Valley Oak Good Safety prune 25	17							
18 Valley Oak Good Salety prule 16 X	18							
19 Valley Oak Pool Removal 11   20 Valley Oak Fair Bemoval 21 fance	intrusion 20							
20 Valley Oak Fair Safety prupe 19	20							
23 Valley Oak Dead Removal 16	22							
24 Valley Oak Poor Removal 22 fence	intrusion 24							
25 Valley Oak Poor Removal 22 fence	intrusion 25							
27 Valley Oak Fair Removal 21 x fence	intrusion 27							
28 Valley Oak Fair Safety prune 30	28							
29 Valley Oak Good Safety prune 13	20							
32 Valley Oak Fair Removal 14 fence	intrusion 32							
33 Valley Oak Poor Removal 12 x x fence	intrusion 33							
34 Valley Oak Fair Safety prune 21	34							
35 Valley Oak Dead Removal 17 fence	intrusion 35							
36 Valley Oak Fair Safety prune 17	36							
37 Valley Oak Fair Removal 22 fence	intrusion 37							
38 Valley Oak Good Safety prune 9	38							
39 Valley Oak Fair Removal 12 x	ean 39							
41 Valley Oak Good Safety prune 16	41							
42 Valley Oak Good Safety prune 23 up ag	ainst wall 42							
43 Valley Oak Good Safety prune 27	43							
44 Valley Oak Good Safety prune 12 large har	nging branch 44							
45 Valley Oak Good Safety prune 21	45							
46 Valley Oak Dead Removal 10	46							
47 Valley Oak Good Safety prune 8	47							
48 Valley Oak Good Safety prune 14 x	48							
49 Valley Oak Good Safety prune 8 x	49							
58 Valley Oak Good Safety prune 29	58							
59 Valley Oak Good Safety prune 17	59							
60 Valley Oak Good Safety prune 24	60							
bit Valley Uak Fair Safety prune 9   Ca Valley Oak Fair Cafety Cafety	61							
b2 valley Oak Fair Safety prune 21   62 Valley Oak Fair Safety prune 2	62							
OS Valley Oak Fair Safety prune 8   66 Valley Oak Fair Safety prune 8	63							
OD Valley Oak Fair Safety prune b   67 Valley Oak Cood Safety prune 22	66							
69 Volley Oak Epir Safety prune 23	b/							
Volue Value Value Value   60 Value Door Door	08							
U3     Valley Oak     POUL     Refiloval     21       70     Valley Oak     Eair     Safaty prupo     10     v	59 70							
70 Valley Oak Fail Safety prune 10 X	70							
72 Valley Oak Good Safety prune 1/1 v	71							
73 Valley Oak Fair Removal 12 fence	intrusion 73							

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
74	Valley Oak	Fair	Safety prune	14				74
75	Valley Oak	Poor	Removal	8	х			75
76	Valley Oak	Fair	TBD	20			fence intrusion	76
77	Valley Oak	Fair	Safety prune	8				77
78	Valley Oak	Fair	Safety prune	28	х		remove half	78
79	Valley Oak	Fair	Safety prune	14				79
80	Valley Oak	Good	Safety prune	6				80
81	Valley Oak	Good	Safety prune	20	х			81
83	Valley Oak	Poor	Removal	24				83
84	Valley Oak	Fair	Safety prune	8	х			84
85	Valley Oak	Good	Safety prune	6				85
86	Valley Oak	Good	Safety prune	6	х			86
87	Valley Oak	Good	Safety prune	8			old nest	87
89	Valley Oak	Good	Safety prune	6				89
90	Valley Oak	Good	Safety prune	14	х			90
91	Valley Oak	Good	Safety prune	9	х			91
93	Valley Oak	Good	Removal	22	х		fence intrusion	93
94	Valley Oak	Good	Safety prune	16	х			94
95	Valley Oak	Good	Safety prune	16	х			95
97	Valley Oak	Poor	Removal	15	х		no growth	97
98	Valley Oak	Good	Safety prune	9				98
99	Valley Oak	Poor	TBD	9	х		fence intrusion	99
100	Valley Oak	Fair	TBD	18	х		fence intrusion	100
101	Valley Oak	Good	Safety prune	13	х			101
102	Valley Oak	Good	Safety prune	9				102
103	Valley Oak	Good	Safety prune	8	х			103
104	Valley Oak	Good	Safety prune	25	х			104
106	Valley Oak	Fair	Safety prune	18	х			106
107	Valley Oak	Poor	TBD	12	х			107
108	Valley Oak	Poor	TBD	16			fence intrusion	108
109	Valley Oak	Good	Safety prune	12	х			109
111	Valley Oak	Good	Safety prune	18				111
112	Valley Oak	Good	Safety prune	23				112
114	Valley Oak	Good	Safety prune	30				114
115	Valley Oak	Good	Safety prune	30				115
116	Valley Oak	Good	Safety prune	14				116
117	Valley Oak	Good	Safety prune	12				117
110	Valley Oak	Good	Safety prune	30				110
119	Valley Oak	Good	Safety prune	14				119
121	Valley Oak	Good	Safety prune	20				121
127	Valley Oak	Good	Safety prune	20			fonce intrusion	127
120	Valley Oak	Good	Safety prune	24			Tence intrasion	120
129	Valley Oak	Good	Safety prune	20				120
130	Valley Oak	Good	Safety prune	20				130
132	Valley Oak	Good	Safety prune	16				131
132	Valley Oak	Good	Safety prune	16				132
134	Valley Oak	Good	Safety prune	34				134
135	Valley Oak	Good	Safety prune	16	x			135
141	Valley Oak	Good	Safety prune	12	~			141
142	Vallev Oak	Good	Safety prune	15				142
143	Vallev Oak	Good	Safety prune	18				143
144	Vallev Oak	Good	Safety prune	12				144
145	Vallev Oak	Good	Safety prune	15	х			145
146	Vallev Oak	Good	Safety prune	20	x			146
147	Vallev Oak	Good	Safety prune	41				147
148	Vallev Oak	Good	Safety prune	48	х			148
151	, Valley Oak	Poor	Removal	14				151

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
152	Valley Oak	Good	Safety prune	21			ivy remove	152
154	Valley Oak	Good	Safety prune	65			Safety Hazard - Prune ASAP	154
155	Valley Oak	Good	Safety prune	17				155
156	Valley Oak	Good	Safety prune	9				156
157	Valley Oak	Good	Safety prune	9	х			157
158	Valley Oak	Good	Safety prune	19				158
159	Valley Oak	Good	Safety prune	8				159
160	Valley Oak	Good	Safety prune	10	х			160
161	Valley Oak	Good	Safety prune	18				161
162	Valley Oak	Good	Safety prune	12	х			162
163	Valley Oak	Good	Safety prune	8				163
165	Valley Oak	Good	Safety prune	8				165
166	Valley Oak	Good	Safety prune	11				166
167	Valley Oak	Good	Safety prune	10				167
168	Valley Oak	Good	Safety prune	14				168
169	Valley Oak	Good	Removal	9			fence intrusion	169
170	Valley Oak	Good	Safety prune	28				170
244	Valley Oak	Good	Safety prune	33	х			244
245	Valley Oak	Good	Safety prune	11				245
246	Valley Oak	Good	Safety prune	14	х			246
247	Valley Oak	Good	Safety prune	9				247
267	Valley Oak	Good	Safety prune	10				267
269	Valley Oak	Good	Safety prune	9	х			269
272	Valley Oak	Good	Safety prune	7	х			272
276	Valley Oak	Good	Safety prune	13				276
277	Valley Oak	Good	Safety prune	20				277
278	Valley Oak	Good	Safety prune	22				278
280	Valley Oak	Good	Safety prune	17				280
281	Valley Oak	Good	Safety prune	24				281
282	Valley Oak	Good	Safety prune	13	х			282
283	Valley Oak	Good	Safety prune	16				283
286	Valley Oak	Good	Safety prune	7				286
288	Valley Oak	Good	Safety prune	17				288
289	Valley Oak	Good	Safety prune	9				289
290	Valley Oak	Good	Safety prune	16				290
291	Valley Oak	Good	Safety prune	14				291
293	Valley Oak	Good	Safety prune	10	х			293
294	Valley Oak	Good	Safety prune	22				294
296	Valley Oak	Good	Safety prune	14				296
297	Valley Oak	Good	Safety prune	10				297
298	Valley Oak	Good	Safety prune	10				298
300	Valley Oak	Good	Safety prune	8				300
301	Valley Oak	Good	Safety prune	14				301
302	Valley Oak	Good	Safety prune	16				302
303	Valley Oak	Good	Safety prune	18				303
304	Valley Oak	Good	Safety prune	28			an at all selections for a sub-table	304
305	Valley Oak	Good	Safety prune	21	X		metal plates in crotch	305
306	Valley Oak	Good	Safety prune	22				306
307	Valley Oak	Poor	IBD	11				307
308	Valley Oak		IBD Safatu arma	10				308
310	Valley Oak	Good	Safety prune	12				310
311	Valley Oak	Good	Salety prune	12				311 212
312	Valley Oak	Good	Salety prune	9				312
313	Valley Oak	6000 Fair	Sarety prune	ð o				313
314 215	Valley Oak	Fair	I BD	ð 12	Х	Х		514 215
315	Valley Oak	Good	Salety prune	12				315
310	Valley Oak	Guud	Safety prune	у 10				310
51/	valley Oak	G000	Salety prune	70	х			31/

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
318	Valley Oak	Good	Safety prune	26				318
320	Valley Oak	Poor	TBD	11			old nest	320
321	Valley Oak	Good	Safety prune	19				321
322	Valley Oak	Good	Safety prune	18				322
323	Valley Oak	Good	Safety prune	32				323
327	Valley Oak	Good	Safety prune	21				327
328	Valley Oak	Good	Safety prune	15				328
329	Valley Oak	Good	Safety prune	60				329
330	Valley Oak	Dead	Removal	40	х			330
331	Valley Oak	Good	Safety prune	17				331
334	Valley Oak	Good	Safety prune	19				334
335	Valley Oak	Good	Safety prune	13	х			335
336	Valley Oak	Good	Safety prune	16				336
345	Valley Oak	Good	Safety prune	11				345
346	Valley Oak	Good	Safety prune	6				346
347	Valley Oak	Good	Safety prune	7				347
348	Valley Oak	Good	Safety prune	16	х			348
349	Valley Oak	Fair	Removal	12		х		349
350	Valley Oak	Good	Safety prune	10				350
351	Valley Oak	Good	Safety prune	11				351
352	Valley Oak	Poor	Removal	9				352
354	Valley Oak	Fair	TBD	11	х			354
355	Valley Oak	Fair	IBD	11		X		355
356	Valley Oak	Good	Safety prune	9 12	х			356
357	Valley Oak	Good	Safety prune	13				357
358	Valley Oak	Good	Safety prune	10				358
362	Valley Oak	Good	Safety prune	14				362
303	Valley Oak	Good	Safety prune	24				303
305	Valley Oak	Good		9			fonco intrucion	305
269	Valley Oak	Good	Safoty prupo	6	v			269
369	Valley Oak	Good	Safety prune	7	^			369
370	Valley Oak	Good	Safety prune	13				370
370	Valley Oak	Good	Safety prune	13				370
375	Valley Oak	Good	Safety prune	7				375
379	Valley Oak	Fair	TBD	, 6		x		379
380	Valley Oak	Good	Safety prune	12	x	~		380
384	Valley Oak	Good	Safety prune	9	x			384
385	Valley Oak	Good	Safety prune	12	x			385
386	Valley Oak	Good	Safety prune	9				386
387	Valley Oak	Good	Safety prune	25	х			387
388	Valley Oak	Good	Safety prune	7				388
390	Valley Oak	Good	TBD	7	х		in channel	390
391	Valley Oak	Good	Removal	16	х		in channel	391
392	Valley Oak	Good	Safety prune	13			channel edge	392
393	Valley Oak	Good	Removal	7			in channel	393
394	Valley Oak	Good	Safety prune	8			channel edge	394
395	Valley Oak	Good	Safety prune	10				395
396	Valley Oak	Good	Safety prune	8			channel edge	396
397	Valley Oak	Good	Safety prune	12				397
399	Valley Oak	Good	TBD	7			in channel	399
400	Valley Oak	Good	Safety prune	10	х		channel edge	400
401	Valley Oak	Fair	TBD	10		х		401
406	Valley Oak	Poor	Removal	10		х		406
407	Valley Oak	Good	Safety prune	8	х			407
408	Valley Oak	Good	Safety prune	8				408
409	Valley Oak	Good	Safety prune	8	х			409
410	Valley Oak	Good	Safety prune	12				410

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
411	Valley Oak	Good	TBD	8			fence intrusion	411
412	Valley Oak	Good	Safety prune	6				412
413	Valley Oak	Good	Safety prune	7				413
414	Valley Oak	Good	Safety prune	10			granulated; old nest	414
415	Valley Oak	Good	Safety prune	10				415
416	Valley Oak	Good	Safety prune	16	х			416
418	Valley Oak	Good	Safety prune	12				418
420	Valley Oak	Good	Safety prune	7	х			420
422	Valley Oak	Good	Safety prune	8	х			422
423	Valley Oak	Good	Safety prune	7				423
424	Valley Oak	Good	Safety prune	9	х			424
425	Valley Oak	Good	Safety prune	7				425
428	Valley Oak	Good	Safety prune	9				428
429	Valley Oak	Good	Safety prune	6	х			429
430	Valley Oak	Fair	TBD	12		х		430
431	Valley Oak	Good	Safety prune	10				431
432	Valley Oak	Good	Safety prune	8				432
433	Valley Oak	Good	Safety prune	6				433
434	Valley Oak	Fair	TBD	8	х	х		434
435	Valley Oak	Fair	Safety prune	6		х		435
437	Valley Oak	Good	Safety prune	8	х			437
438	Valley Oak	Good	Safety prune	6	х			438
439	Valley Oak	Good	Safety prune	/	х			439
440	Valley Oak	Good	Safety prune	/				440
441	Valley Oak	Good	Safety prune	8				441
442	Valley Oak	Good	Safety prune	10				442
443	Valley Oak	Good	Safety prune	9	X			443
444	Valley Oak	Good	Safety prune	6	X			444
445	Valley Oak	Good		6		v		445
440	Valley Oak	Good	Safety prupe	8		^		440
448	Valley Oak	Good	Safety prune	10	x			448
449	Valley Oak	Good	Safety prune	7	x			449
450	Valley Oak	Good	Safety prune	, 11	x			450
451	Valley Oak	Good	Removal	6	~			451
452	Valley Oak	Poor	Removal	15	x	x		452
453	Valley Oak	Good	Safety prune	7	x			453
454	, Valley Oak	Good	Safety prune	16				454
456	, Valley Oak	Good	Safety prune	8	х			456
457	Valley Oak	Poor	TBD	14		х		457
458	Valley Oak	Good	Safety prune	7				458
459	Valley Oak	Good	Safety prune	7				459
460	Valley Oak	Good	Safety prune	16				460
461	Valley Oak	Good	Safety prune	6				461
462	Valley Oak	Good	TBD	9			fence intrusion	462
463	Valley Oak	Good	Safety prune	9	х			463
464	Valley Oak	Good	Safety prune	7				464
465	Valley Oak	Good	Safety prune	7				465
466	Valley Oak	Good	Safety prune	7				466
467	Valley Oak	Good	Safety prune	12				467
468	Valley Oak	Fair	TBD	13		Х		468
469	Valley Oak	Fair	TBD	10		Х		469
470	Valley Oak	Good	Safety prune	7	Х			470
471	Valley Oak	Good	Safety prune	7	Х			471
472	Valley Oak	Good	Safety prune	10				472
473	Valley Oak	Good	Safety prune	10	Х			473
4/4	valley Oak	Good	Safety prune	6				4/4
475	Valley Oak	Good	Safety prune	21	Х			475

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
476	Valley Oak	Good	Safety prune	6				476
477	Valley Oak	Good	Safety prune	7				477
478	Valley Oak	Good	Safety prune	12	х			478
479	Valley Oak	Good	Safety prune	12				479
480	Valley Oak	Good	Safety prune	6				480
481	Valley Oak	Good	Safety prune	10				481
482	Valley Oak	Good	Safety prune	10				482
483	Valley Oak	Good	Safety prune	10	х			483
484	Valley Oak	Good	Safety prune	10				484
485	Valley Oak	Good	Safety prune	8				485
486	Valley Oak	Poor	TBD	12	х	х		486
487	Valley Oak	Good	Safety prune	13				487
488	Valley Oak	Good	Safety prune	8				488
489	Valley Oak	Good	Safety prune	7	х			489
490	Valley Oak	Good	Safety prune	7				490
491	Valley Oak	Good	Safety prune	10				491
492	Valley Oak	Good	TBD	13	Х		tence intrusion	492
493	Valley Oak	Good	Satety prune	12				493
494	Valley Oak	Fair	IBD	/		Х		494
495	Valley Oak	Fair	IBD	10		X		495
496	Valley Oak	Fair	I BD	ð o		Х		496
497	Valley Oak	Good	Safety prune	8				497
498	Valley Oak	Good	Safety prune			Х		498
499	Valley Oak	Good	Safety prune	0	X			499
500	Valley Oak	Good	Safety prune	8 7				500
501	Valley Oak	Guua		/				501
502	Valley Oak	Fair	IBD Safety prupe	8 7	v	X		502
504	Valley Oak	Good	Safety prune	/	X			503
504	Valley Oak	Good	Safety prune	10				504
505	Valley Oak	Good	Safety prune	7	v			505
507	Valley Oak	Good	Safety prune	, 11	^			507
508	Valley Oak	Good	Safety prune	11	x			508
509	Valley Oak	Good	Safety prune	10	x		fence intrusion	509
510	Valley Oak	Good	Safety prune	8	^			510
511	Valley Oak	Good	Safety prune	7	x			511
512	Vallev Oak	Good	Safety prune	9	~			512
513	Vallev Oak	Good	Safety prune	11				513
514	Valley Oak	Good	Safety prune	7	х			514
515	Valley Oak	Good	Safety prune	8	х			515
516	Valley Oak	Fair	TBD	10	х	х		516
517	, Valley Oak	Good	Safety prune	9				517
518	Valley Oak	Good	Safety prune	8	х			518
519	Valley Oak	Good	Safety prune	15				519
520	Valley Oak	Good	Safety prune	13	х			520
521	Valley Oak	Good	Safety prune	8	х			521
522	Valley Oak	Good	Safety prune	13	х			522
523	Valley Oak	Good	Safety prune	10				523
524	Valley Oak	Good	Safety prune	10	х	х		524
525	Valley Oak	Good	Safety prune	8	х		good	525
526	Valley Oak	Good	Safety prune	10				526
527	Valley Oak	Good	Safety prune	8				527
528	Valley Oak	Good	Safety prune	10	х		railroad piece at trunk	528
529	Valley Oak	Good	Safety prune	8				529
530	Valley Oak	Good	Safety prune	9				530
531	Valley Oak	Good	Safety prune	6				531
532	Valley Oak	Good	Safety prune	10				532
533	Valley Oak	Good	Safety prune	11				533

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
534	Valley Oak	Good	Safety prune	10				534
535	Valley Oak	Good	Safety prune	7			pavement	535
536	Valley Oak	Good	Safety prune	8				536
537	Valley Oak	Good	Safety prune	7				537
538	Valley Oak	Good	Safety prune	9				538
539	Valley Oak	Good	Safety prune	8				539
540	Valley Oak	Good	Safety prune	8				540
541	Valley Oak	Good	Safety prune	6				541
542	Valley Oak	Good	Safety prune	7				542
543	Valley Oak	Good	Safety prune	9				543
550	Valley Oak	Good	Safety prune	9				550
566	Valley Oak	Good	Safety prune	11				566
568	Valley Oak	Good	Safety prune	8				568
569	Valley Oak	Good	Safety prune	8				569
570	Valley Oak	Good	Safety prune	6				570
573	Valley Oak	Good	Safety prune	8				573
574	Valley Oak	Good	Safety prune	10	х			574
575	Valley Oak	Good	Safety prune	8	х			575
576	Valley Oak	Good	Safety prune	10				576
577	Valley Oak	Good	Safety prune	7				577
578	Valley Oak	Good	Safety prune	10			mistletoe	578
580	Valley Oak	Good	Safety prune	9	х			580
584	Valley Oak	Poor	Removal	22		х		584
585	Valley Oak	Good	Safety prune	25				585
589	Valley Oak	Good	Safety prune	8				589
593	Valley Oak	Good	Safety prune	12				593
595	Valley Oak	Poor	TBD	13		х		595
596	Valley Oak	Fair	IBD	10	X	х		596
600	Valley Oak	Good	Safety prune	16	х	х		600
606	Valley Oak	Good	Safety prune	8				606
607	Valley Oak	Good	Safety prune	12		X		607
608	Valley Oak	Good	Safety prune	0				608
610	Valley Oak	Good		10				617
617	Valley Oak	Fair	IBD Safaty prupa	13		X		610
610	Valley Oak	Good	Safety prune	10				610
620	Valley Oak	Good	Safety prune	15				620
621	Valley Oak	Eair		7	v	v		621
622	Valley Oak	Good	Safety prupe	56	^	^	good architecture	622
623	Valley Oak	Good	Safety prune	29			good architecture	622
624	Valley Oak	Good	Safety prune	13				624
626	Valley Oak	Good	Safety prune	12				626
628	Valley Oak	Good	Safety prune	7				628
631	Valley Oak	Poor	Removal	13	x	x		631
638	Valley Oak	Good	Safety prune	24	~	~		638
639	Valley Oak	Good	Safety prune	24				639
646	Valley Oak	Good	Safety prune	15				646
647	Valley Oak	Good	Safety prune	13				647
648	, Valley Oak	Good	Safety prune	16				648
649	, Valley Oak	Good	Safety prune	14				649
650	Valley Oak	Good	Safety prune	7				650
651	, Valley Oak	Good	Safety prune	9	х			651
652	, Valley Oak	Good	Safety prune	9				652
653	Valley Oak	Poor	Removal	15		х	machinery damage	653
654	Valley Oak	Good	TBD	13		х	machinery damage	654
655	Valley Oak	Good	Safety prune	7		х	machinery damage	655
656	Valley Oak	Good	Safety prune	7		х	machinery damage	656
657	Valley Oak	Good	Safety prune	9		х	machinery damage	657

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
658	Valley Oak	Good	Safety prune	14				658
659	Valley Oak	Good	Safety prune	10		х	machinery damage	659
660	Valley Oak	Good	Safety prune	7				660
669	Valley Oak	Good	Safety prune	27				669
N/A	Valley Oak	Good	TBD	11				AD-1
N/A	Valley Oak	Good	TBD	12				AD-10
N/A	Valley Oak	Good	TBD	24				AD-11
N/A	Valley Oak	Good	TBD	20				AD-12
N/A	Valley Oak	Good	TBD	16				AD-13
N/A	Valley Oak	Good	TBD	8				AD-2
N/A	Valley Oak	Good	TBD	12				AD-26
N/A	Valley Oak	Good	IBD	16				AD-27
N/A	Valley Oak	Good	TBD	16				AD-28
N/A	Valley Oak	Good	TBD	12				AD-32
N/A	Valley Oak	Good	IBD	10				AD-34
N/A	Valley Oak	Good	Removal	0 11				AD-35
N/A	Valley Oak	Cood	TPD	20				AD-30
N/A	Valley Oak	Good		0				
	Valley Oak	Good	Bemoval	0 10				AD-4
N/A N/A	Valley Oak	Good	TBD	10				AD-40
N/A	Valley Oak	Good	TBD	8				AD-42
N/A	Valley Oak	Good	TBD	12				AD-43
N/A	Valley Oak	Good	TBD	8				AD-44
N/A	Valley Oak	Good	TBD	12				AD-45
N/A	Valley Oak	Good	TBD	8				AD-46
, N/A	Valley Oak	Good	TBD	6				AD-47
, N/A	Valley Oak	Good	TBD	8				AD-49
N/A	Valley Oak	Good	TBD	15				AD-5
N/A	Valley Oak	Good	TBD	14				AD-52
N/A	Valley Oak	Good	TBD	15				AD-53
N/A	Valley Oak	Good	TBD	12				AD-6
N/A	Valley Oak	Good	TBD	12				AD-7
N/A	Valley Oak	Good	TBD	12				AD-8
N/A	Valley Oak	Good	TBD	11				AD-9
NT	Valley Oak	Good	Safety prune	7				NT-22
NT	Valley Oak	Good	Safety prune	17				NT-24
NT	Valley Oak	Good	TBD	10	х		fence intrusion	NT-28
NT	Valley Oak	Good	Safety prune	8	х		in channel	NT-29
NT	Valley Oak	Good	Safety prune	10			channel edge	NT-30
801	Valley Oak	Good	Safety prune	54	х			801
803	Valley Oak	Good	Safety prune	6				803
804	Valley Oak	Good	Safety prune	10				804
805	Valley Oak	Good	Safety prune	18				805
806	Valley Oak	Good	Safety prune	36				806
807	Valley Oak	Good	Safety prune	- 22	X			807
808	Valley Oak	Fall	Safety prune	17	X			808
809 810	Valley Oak	Good	Safety prune	1/	×			810
810 812	Valley Oak	Epir	Safety prune	10	v			Q12
81/	Valley Oak	Good	Safety prune	22	X V			81/
815	Valley Oak	Good	Safety prune	12	^			815
817	Valley Oak	Fair	Removal	9	x		fence intrusion	817
818	Vallev Oak	Good	Safety prune	26	x			818
819	Vallev Oak	Fair	Safety prune	7	~			819
822	Vallev Oak	Fair	Safety prune	6				822
823	Valley Oak	Good	Safety prune	37	х			823
824	Valley Oak	Good	TBD	34		х		824

ATTACHMENT B - Barber Yard Table of Surveyed Trees
March, April, October 2023; January 8 30, 2024

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
825	Valley Oak	Fair	TBD	32	Х	Х	fence intrusion	825
826	Valley Oak	Fair	TBD	18	х	х	fence intrusion	826
827	Valley Oak	Good	Safety prune	32	х			827
828	Valley Oak	Fair	TBD	25	х		fence intrusion	828
829	Valley Oak	Good	TBD	20			fence intrusion	829
830	Valley Oak	Fair	TBD	38	х		fence intrusion	830
831	Valley Oak	Good	Safety prune	15				831
832	Valley Oak	Good	Safety prune	7				832
833	Valley Oak	Good	Safety prune	10				833
834	Valley Oak	Good	Safety prune	11				834
835	Valley Oak	Fair	Safety prune	6				835
837	Valley Oak	Fair	Safety prune	13	х			837
840	Valley Oak	Fair	TBD	18	х		fence intrusion	840
841	Valley Oak	Fair	TBD	15		х		841
842	Valley Oak	Good	Safety prune	12				842
843	Valley Oak	Good	Safety prune	12	х			843
847	Valley Oak	Fair	TBD	9				847
848	Valley Oak	Very Poor	Removal	16	х	х	fence intrusion	848
851	Valley Oak	Fair	Safety prune	15	х			851
852	Valley Oak	Good	Safety prune	11				852
853	Valley Oak	Fair	TBD	16	х			853
854	Valley Oak	Fair	TBD	14	х			854
855	Valley Oak	Fair	TBD	10	х			855
856	Valley Oak	Fair	TBD	7				856
857	Valley Oak	Fair	Removal	26	х	х		857
858	Valley Oak	Fair	TBD	32	х			858
859	Valley Oak	Fair	TBD	7				859
860	Valley Oak	Fair	TBD	25	х			860
862	Valley Oak	Good	Safety prune	9				862
863	Valley Oak	Fair	TBD	6				863
865	Valley Oak	Good	Safety prune	14				865
866	Valley Oak	Good	Safety prune	10				866
867	Valley Oak	Fair	TBD	40	х			867
868	Valley Oak	Good	Safety prune	12				868
869	Valley Oak	Good	Safety prune	14				869
870	Valley Oak	Fair	TBD	18	х			870
871	Valley Oak	Fair	Removal	24	х	х		871
872	Valley Oak	Good	Safety prune	15				872
873	Valley Oak	Fair	TBD	11	х			873
874	Valley Oak	Fair	TBD	14				874
875	Valley Oak	Good	Safety prune	9				875
876	Valley Oak	Fair	TBD	22	х			876
877	Valley Oak	Fair	TBD	9				877
878	Valley Oak	Fair	TBD	9				878
882	Valley Oak	Good	Safety prune	19				882
883	Valley Oak	Good	Safety prune	34	х			883
884	Valley Oak	Good	Safety prune	34	х			884
885	Valley Oak	Good	Safety prune	12				885
886	Valley Oak	Good	Safety prune	13				886
887	Valley Oak	Fair	TBD	22		Х	lean	887
888	Valley Oak	Fair	TBD	58	Х			888
889	Valley Oak	Good	Safety prune	15				889
890	Valley Oak	Good	Safety prune	16				890
891	Valley Oak	Good	Safety prune	26				891
892	Valley Oak	Fair	TBD	24	х			892
893	Valley Oak	Good	Safety prune	26	Х			893
895	Valley Oak	Good	Safety prune	22				895
896	Valley Oak	Good	Safety prune	12				896

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
897	Valley Oak	Fair	Safety prune	7				897
898	Valley Oak	Good	Safety prune	37				898
899	Valley Oak	Good	Safety prune	39				899
900	Valley Oak	Good	Safety prune	11				900
901	Valley Oak	Good	Safety prune	30				901
902	Valley Oak	Good	Safety prune	12				902
903	Valley Oak	Fair	TBD	26		х	fence intrusion	903
904	Valley Oak	Good	Safety prune	19				904
905	Valley Oak	Good	Safety prune	24				905
906	Valley Oak	Good	Safety prune	24				906
907	Valley Oak	Good	Safety prune	40				907
908	Valley Oak	Good	Safety prune	24				908
909	Valley Oak	Good	Safety prune	32				909
910	Valley Oak	Good	Safety prune	66	х			910
911	Valley Oak	Good	Safety prune	6				911
912	Valley Oak	Good	Safety prune	42	х			912
913	Valley Oak	Good	Safety prune	36	х			913
914	Valley Oak	Good	Safety prune	26				914
915	Valley Oak	Good	Safety prune	16				915
916	Valley Oak	Fair	TBD	17		х	fence intrusion	916
917	Valley Oak	Good	Safety prune	64	х			917
918	Valley Oak	Good	Safety prune	26	х			918
919	Valley Oak	Good	Safety prune	32	х			919
920	Valley Oak	Fair	TBD	14	х	х	fence intrusion	920
921	Valley Oak	Good	Safety prune	34				921
922	Valley Oak	Good	Safety prune	13				922
923	Valley Oak	Good	Safety prune	15				923
924	Valley Oak	Good	Safety prune	17				924
925	Valley Oak	Good	Safety prune	33	х			925
926	Valley Oak	Good	Safety prune	25				926
927	Valley Oak	Good	Safety prune	20	х			927
928	Valley Oak	Good	Safety prune	10				928
929	Valley Oak	Good	Safety prune	14				929
930	Valley Oak	Good	Safety prune	19	x			930
931	Valley Oak	Good	Safety prune	12				931
932	Valley Oak	Good	Safety prune	20	X			932
933	Valley Oak	Good	Safety prune	11				933
954	Valley Oak	Good	Safety prune	15				954
955	Valley Oak	Good	Safety prune	11	v			955
930	Valley Oak	Good		1/	^	v	bark constrated at tree bace	930
029	Valley Oak	Fair	Safoty prupo	6		^	bark separated at tree base	029
930	Valley Oak	Good	Safety prune	13				930
940	Valley Oak	Good	Safety prune	29	v			940
941	Valley Oak	Good	Safety prune	11	^			941
942	Valley Oak	Good	Safety prune	21	x			942
943	Valley Oak	Good	Safety prune	15	~			943
944	Valley Oak	Fair	TBD	44	x	x	minor fence intrusion	944
945	Valley Oak	Good	Safety prune	35	x	~		945
946	Vallev Oak	Good	Safety prune	10	~			946
948	Vallev Oak	Fair	TBD	9		х	bark separated: lean: fungus	948
949	Valley Oak	Fair	TBD	15		x	bark separated	949
950	Valley Oak	Fair	TBD	32	х	х	bark separated	950
951	Valley Oak	Good	Safety prune	30	х			951
952	, Valley Oak	Fair	Safety prune	88	х	х	fence intrusion	952
953	, Valley Oak	Good	Safety prune	34	х	х	fence intrusion	953
955	, Valley Oak	Fair	Safety prune	26	х	х	bark missing at base	955
956	Valley Oak	Good	Safety prune	10			-	956

ATTACHMENT B - Barber Yard Table of Surveyed Trees March, April, October 2023; January 8 30, 2024

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
957	Valley Oak	Good	Safety prune	14				957
958	Valley Oak	Good	Safety prune	11				958
959	Valley Oak	Good	Safety prune	24	х	х	minor fence intrusion	959
960	Valley Oak	Good	Safety prune	26		х	minor fence intrusion	960
961	Valley Oak	Good	Safety prune	13				961
962	Valley Oak	Fair	Safety prune	14		х	bark separated	962
153	weeping pine	Good	Safety prune	18				153
214	white pine	Good	Safety prune	38				214
215	white pine	Good	Safety prune	40			hazard branch; prune ASAP	215
216	white pine	Good	Safety prune	7				216
217	white pine	Good	Safety prune	23				217
236	white pine	Good	Safety prune	44				236
238	white pine	Good	Safety prune	41				238

To: Gonzales Development Corporation RE: Barber Yard Project Site: Arborist & Preliminary Biological Survey Report- April 2023, Updated as of March 2024



## ATTACHMENT C - SITE PHOTOS





Representative Site Photos PAGE 2 OF 12

# **Healthy Tree Example Photos**







Representative Site Photos PAGE 3 OF 12





Representative Site Photos PAGE 4 OF 12





Representative Site Photos PAGE 5 OF 12





Representative Site Photos PAGE 6 OF 12





# Non-Taggable Tree Example Photos









Barber Yard Area Tree Survey Chico, Butte County, CA - April 2023 -

Representative Site Photos PAGE 7 OF 12





Barber Yard Area Tree Survey Chico, Butte County, CA - January 8, 2024 - Representative Site Photos PAGE 8 OF 12





# Northern Additional Survey Area



**ADEMA** Environmental



Barber Yard Area Tree Survey Chico, Butte County, CA - January 30, 2024 - Representative Site Photos PAGE 9 OF 12





Barber Yard Area Tree Survey Chico, Butte County, CA - February 13, 2024 - Representative Site Photos PAGE 11 OF 12 **ADEMA** Environmental



D.2 - Tree Survey Report

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# Arborist & Preliminary Biological Survey Report: Barber Yard Project Site - Chico, CA

April 2023, Updated as of March 2024



Prepared for:

Gonzales Development Corporation 1811 Concord Avenue, Suite 200 Chico, CA 95928

Prepared by:



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# Arborist & Preliminary Biological Survey Report for the Barber Yard Project Site - Chico, CA April 2023, Updated as of March 2024

As per your request, Certified Arborist Scott McMillan and Principal Biologist Carol Wallen Adema evaluated the approximately 133-acre area which comprises the Barber Yard Specific Plan Area (BYSP Area), Assessor Parcel Numbers (APNs) 039-400-016 (partial), 039-400-024, 039-400-025, 039-400-026, 039-400-050, 039-400-051, 039-400-052, 039-400-053, 005-195-001 (partial), 005-195-005 (partial), and 005-221-001 (partial), located in The City of Chico (COC/City), Butte County, CA in March and April, 2023. In October 2023, Mr. McMillin evaluated an additional approximately 15.86-acre adjacent area located due south of the BYSP Area (Off-Site Improvement Area), upon which a stormwater detention basin and associated storm drain alignment with outfall and related access drive from Estes Road, as well as various other public utility connections and various public roadway/bike path connections would be installed to serve the proposed project.

The Off-Site Improvement Area is located within APNs 039-410-025, 039-410-039, and 039-410-068; portions are located within unincorporated Butte County and the remaining portions are within the City. In January and February of 2024, Ms. Adema evaluated certain portions of the Off-Site Improvement Area that consist of immediately adjacent public rights-of-way and an area to the north of the Barber Yard area with potential to be impacted by project activities. Together, the BYSP Area and the Off-Site Improvement Area constitute the "Project Site" for purposes of this analysis. This review evaluated existing conditions with respect to trees located within the Project Site and summarizes the relevant regulatory framework associated with trees located within the Project Site relative to moving a project forward (Attachment A - Figure 1: Project Site Location Map).

The following report is a summary of our findings based on a review of the current conditions of the Project Site secondary to site surveys conducted in March and April 2023 by Mrs. Adema and Mr. McMillan, a follow-up arborist evaluation of the Off-Site Improvement Area by Mr. McMillan in October 2023, and additional surveys of certain portions of the Off-Site Improvement Area (consisting of COC right-of-way areas) and the above-referenced area to the north of the yard area by Ms. Adema in January and February 2024. A table summarizing species found within the Project Site may be found in Table 1 while a listing of all trees found within the Project Site listed individually by species and including tree health, tag number, diameter at breast height (DBH), and arborist recommendation may be found as **Attachment B**. Representative site and tree photos have been included as **Attachment C**.

### **Project Understanding & Location**

It is our understanding that the proposed project would involve the full buildout of the Barber Yard Specific Plan, including modifications to the Off-Site Improvement Area, resulting in a mixed-use community accommodating a diverse range of housing opportunities with a mix of commercial, recreational/open space and office uses located throughout. With respect to the Off-Site Improvement Area, modifications that may occur include the construction of a stormwater detention basin, installation of a storm drain outfall into the bordering Comanche Creek, the construction of access routes for maintenance activities, as well as various other public utility connections and various public roadway/bike path connections to existing public roadways at 14th, 16th, 18th, 20th and Ivy Streets.

The BYSP Area is located in the southern portion of the COC and is bounded by various individual properties to the northwest, Chestnut Street and Normal Avenue to the northeast, Estes Road to the east, as well as Union Pacific Railroad (UPRR) to the southwest. To the south, the BYSP Area is bounded by a portion of Butte County that is unincorporated, including a decommissioned UPRR spur. Agricultural and rural residential areas lie to the south and west across the UPRR. As stated previously, the BYSP Area falls within COC limits while much of the Off-Site Improvement Area, which is located directly south of the BYSP Area, falls within unincorporated Butte County.



The BYSP Area is generally flat and is fenced to prevent public access. The BYSP Area was the home of a factory operated by the Diamond Match Company in the early twentieth century. The factory closed in 1975. The Louisiana Pacific Corporation purchased the BYSP Area in 1984 and operated its Finished Wood Product Division and a remanufacturing facility until 1989. The BYSP Area was used by other owners for various industrial uses until all such uses terminated in 2004. Currently, uses consist primarily of abandoned structures and roadways in various states of disrepair, as well as existing Recreational Vehicle (RV) storage.

#### Survey Methodology & Regulatory Setting

#### Methodology:

Several site visits were conducted by Ms. Adema and Mr. McMillan in March and April of 2023 for the purposes of identifying, tagging, and geo-locating all trees on-site with a DBH of 6" or greater. A follow up survey by the arborist was conducted in October 2023 to survey the existing conditions within the Off-Site Improvement Area. Evaluations of additional areas of potential impact were conducted by Ms. Adema in January and February 2024.

Prior to and after the site visits, Ms. Adema reviewed current and historical aerial imagery, historical photographs, and current and historical U.S. geological topography maps of the Project Site. Research included information regarding original disturbances and construction activities to the Project Site, original building footprints, and general land use throughout the Project Site's history.

Ms. Adema generated maps of the Project Site designating areas for survey and areas that were to be excluded from the survey as they either did not contain trees or only contained remnant orchard trees. The areas within the Project Site selected for survey (Survey Zones) were traversed by foot, with each applicable tree within a respective Survey Zone being tagged, geo-located, and its health assessed. Additional surveys purposefully included certain portions of the Off-Site Improvement Area consisting of COC public right-of-way (as well as an area to the north of the yard area) where potential impacts may occur secondary to street improvements and the addition of curb, gutter, and sidewalk.

#### **Regulatory Setting:**

As further detailed in the proposed project's biological resources assessment and related section of the Draft EIR, the following agencies or regulations (laws) may be relevant to the existing on-site trees within the Project Site with potential to be impacted by the proposed project, as presented to, and understood by Adema Environmental.

**Federal Endangered Species Act:** The United States Congress passed the federal Endangered Species Act (ESA) in 1973 to protect those species that are endangered or threatened with extinction. The ESA is intended to operate in conjunction with the National Environmental Policy Act (NEPA) to help protect the ecosystems upon which endangered and threatened species depend.

Under the ESA, species may be listed as one of four categories: 1) endangered, 2) threatened, 3) candidate, or 4) proposed. An endangered species is in danger of extinction throughout all or a significant portion of its range. A threatened species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. "Candidate" species are species for which there is enough information to warrant proposing them for listing, but that have not yet been proposed. "Proposed" species are those that have been proposed for listing but have not yet been listed.

Section 9 of the ESA prohibits the "take" of a listed animal without a permit. The term "take" is defined to include harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, or collecting or any attempt to engage in any such conduct. "Harm" is defined as "an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it



actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering." Under Section 7 of the ESA, federal agencies are required to consult with the United States Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS) if their actions, including permit approvals or funding, could adversely affect an endangered plant or wildlife species or its habitat, or could adversely affect designated critical habitat. Through consultation and the issuance of a Biological Opinion (BO), USFWS or NMFS can issue an incidental take statement allowing take of the species, provided the action will not jeopardize the continued existence of any federally listed species or result in the destruction or adverse modification of habitats of those species. If adverse impacts will occur, the purchase of mitigation is typically required. ESA § 10 provides for issuance of incidental take permits to private parties without a federal nexus, provided a Habitat Conservation Plan is developed.

#### **Results**

#### Tree Survey Results:

A total of 935 trees with a DBH of 6 inches or greater were surveyed within the BYSP Area and the Off-Site Improvement Area. A summary of the trees by species, DBH, health and arborist recommendation may be found in Table 1 while a table of individual trees, as presented on the maps in Attachment A may be found in Attachment B.

BARBER YARD TREE SURVEY RESULTS: MAR-APRIL & OCTOBER 2023/JAN & FEB 2024								
Species	DBH	Count	Health	Count	Recommendation	Count	Total	
Almond	≥ 6 and < 12"	13	Good	4	SP/GP	4	18	
	≥ 12 and < 24"	3	Fair	12	Removal	9		
	≥ 36 and < 48"	2	Poor	2	TBD	2		
Black Walnut	≥ 6 and < 12"	7	Good	27	SP/GP	34	-	
	≥ 12 and < 24"	16	Fair	6	Removal	14		
	≥ 24 and < 36"	16	Poor	13	TBD	1	49	
(one dead tree excluded	≥ 36 and < 48"	6	Dead	3				
from DBH)	≥ 48 and < 60"	4						
	≥ 4 and < 12"	6	Good	7	SP/GP	N/A	-	
Blue Elderberry	≥ 36 and < 48"	1	Fair	0	Removal	N/A	/	
CA Fan Palm	≥ 12 and < 24"	29	Good	76	SP/GP	76	76	
	≥ 24 and < 36"	47	Fair	0	Removal			
Canany Island Data	≥ 12 and < 24"	6	Good	9	SP/GP	9	9	
Palm	≥ 24 and < 36"	2	Fair					
	≥ 36 and < 48"	1	Poor					
Chinese Hackberry	≥ 6 and < 12"	8	Fair	2	SP/GP	1	10	
	≥ 12 and < 24"	2	Poor	5	Removal	8		
		•	Dead	1	TBD	1		
Chinese Pistache	≥ 6 and < 12"	20	Good	24	SP/GP	18	34	
	≥ 12 and < 24"	10	Fair	8	Removal	7		
	≥ 24 and < 36"	2	Poor	2	TBD	7		
	≥ 36 and < 48"	2	Dead	0				
Coastal Redwood	≥ 6 and < 12"	3	Good	5	TBD	5	5	
	≥ 12 and < 24"	2	Fair					
Mexican Fan Palm	≥ 12 and < 24"	16	Good	24	SP/GP	24	24	
	≥ 24 and < 36"	6						
	≥ 24 and < 36"	2						

#### TABLE 1. SUMMARY OF SURVEY RESULTS

#### To: Gonzales Development Corporation

RE: Barber Yard Project Site: Arborist & Preliminary Biological



Survey Report- April 2023, Updated as of March 2024

Pecan	≥ 6 and < 12"	9	Good	11	SP/GP	10	19	
	≥ 12 and < 24"	5	Fair	3	Removal	7		
	≥ 24 and < 36"	4	Poor	5	TBD	2		
	≥ 36 and < 48"	1	Dead					
Sycamore	≥ 12 and < 24"	2	Good	3	SP/GP	2	6	
	≥ 24 and < 36"	Х	Fair	х	Removal	2		
	≥ 36 and < 48"	3	Dead	2	TBD	2		
	≥ 48 and < 60"	1	TBD	1				
Tree of Heaven	≥ 6 and < 12"	44	Good	39	Removal	50		
	≥ 12 and < 24"	6	Fair	4			50	
			Poor	7				
Valley Oak	≥ 6 and < 12"	272	Good	457	SP/GP	368	577	
	≥ 12 and < 24"	216	Fair	93	Removal	39		
	≥ 24 and < 36"	67	Poor	25	TBD	92		
	≥ 36 and < 48"	13	Dead	6				
	≥ 48 and < 60"	5						
	≥ 60"	4						
Otherenesies	≥ 6 and < 12"	21	Good	35	SP/GP	21		
Other species	≥ 12 and < 24"	18	Fair	8	Removal	16		
(with total count of 5 individuals or less per species)	≥ 24 and < 36"	8	Poor	6	TBD	14	51	
	≥ 36 and < 48"	2	Dead	3				
	≥ 48 and < 60"	2						
TOTAL OF ALL TREES 6" OR GREATER ON-SITE						935		
*Blue elderberry shrubs with a DBH of >1" and <6" were included due to the federally listed nature of the species and								
associated protection requirements.								

#### Species and Habitat Survey Results:

Special-status species with the potential to occur within existing trees within the Project Site include the valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*). Other species with the potential to occur within the Project Site (but not specific to existing trees) will be addressed in the proposed project's Biological Resources Assessment and related section of the proposed project's Draft Environmental Impact Report.

*Valley Elderberry Longhorn Beetle (VELB):* VELBs occur in the Central Valley of California below 3,000 feet and are distributed primarily within riparian habitats from Shasta to Kern counties. VELB rely solely on blue elderberry shrubs to complete its lifecycle. The adult beetles emerge from the elderberry stems from April to early June and mate; with females laying eggs on the tips of twigs. Once eggs hatch, the larva bore into twigs and feed on the pith. Before the larva pupates, it makes an exit hole in the elderberry stem. These holes serve as an indication of the occurrence of VELB in elderberry shrubs.

In addition to exhibiting a preference for "stressed" shrubs, VELB prefer shrubs with stems of a certain size class. Exit holes have been found more frequently in trunks or branches that are 2-8 inches in diameter, however, stems that are at least 1.0 inch or greater at ground height and less than one meter off the ground are considered suitable. Research also shows that exit holes more consistently occur in clumps or stands more often than in isolated shrubs. (USFWS 1999)

A small elderberry shrub was located within the 133-acre BYSP Area along what appears to be a remnant human-made ditch. Larger shrubs with exit holes were located within the Off-Site Improvement Area along Comanche Creek. The presence of the elderberry shrubs and clusters with exit holes both within the BYSP Area and the Off-Site Improvement Area indicates potential for their occurrence.



If complete avoidance of these shrubs is not feasible, then avoidance measures and/or mitigation may be required per the USFWS, secondary to consultation. Avoidance and minimization measures that may become necessary may include exclusion fencing and avoidance areas, worker education, construction monitoring, timing of work, and regulation of chemical usage (herbicides) near the shrubs.

If construction results in direct impact to (transplant and/or removal of) a shrub(s), then compensatory mitigation may be required at the ratios as seen in Table 2. (USFWS)

Habitat	Compensation Ratio*	If the entire shrub will be removed				
Riparian	2:1	Transplant the shrub + 2:1 compensation though purchase of credit(s)**				
Non-riparian (exit holes present)	1:1	Transplant the shrub + 1:1 compensation though purchase of credit(s)**				

#### TABLE 2. USFWS ELDERBERRY SHRUB MITIGATION RATIOS

\* number of credits: number of shrubs trimmed/relocated/removed

\*\* One credit (unit) = 1800 square feet or 0.041 acre

Please see the Biological Resources Assessment and related section of the proposed project's Draft Environmental Impact Report for discussion of any identified mitigation measures regarding the abovementioned special-status species.

#### **Summary**

Please see the attached information regarding the existing conditions as it relates to trees within the Project Site.

Please feel free to contact Carol at Adema Environmental with any questions at (530) 864-1143 or via email at ademaenviro@gmail.com.

Sincerely,

Carol Wallen Adema Principal Regulatory Biologist

#### **Attachments**

- Attachment A Figures
  - Figure 1 Project Site Location Map
  - o Figure 2 Tree Survey Zone Map
  - o Survey Zone Result Maps:
    - Figure 3a Survey Zone 1 Results
    - Figure 3b Survey Zone 2 Results
    - Figure 3c Survey Zone 3 Results
    - Figure 3d Survey Zone 4 Results
    - Figure 3e Survey Zone 5 Results
- Attachment B Table of Surveyed Trees
- Attachment C Representative Site Photos

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- Figure 3f Survey Zone 6 Results
- Figure 3g Survey Zone 7a & 7b Results
- Figure 3h Survey Zone 7c Results
- Figure 3i Survey Zone 8 Results



#### **References**

- Endangered Species Conservation Act, Public Law 205, U.S. Statutes at Large 87 (1973): 884-903. https://www.law.cornell.edu/uscode/text/16/chapter-35
- Stephens, Kent. 1981. *Matches, flumes, and rails; The Diamond Match Company in the High Sierra*. Trans-Anglo Books, Corona del Mar, CA
- "U.S. Congressional Research Service. *The Endangered Species Act: Overview and Implementation* (R46677; March 4, 2021), by Pervaze Sheikh. Text in: ProQuest<sup>®</sup> Congressional Research Digital Collection; Accessed: December 13, 2023. <u>https://crsreports.congress.gov/product/pdf/R/R46677</u>
- United States Fish and Wildlife Service. 2006. Sacramento Fish and Wildlife Office: *Endangered Species Program, Species and Habitat Information*. Sacramento, CA.
- United States Fish and Wildlife Service. 2017. *Framework of Assessing Impacts to the Valley Elderberry Longhorn Beetle (Desmocerus californicus diphorphus)*. U.S. Fish and Wildlife Service: Sacramento, CA. 28 pp.

To: Gonzales Development Corporation RE: Barber Yard Project Site: Arborist & Preliminary Biological Survey Report- April 2023, Updated as of March 2024



### **ATTACHMENT A - FIGURES**

#### Figures Included in Attachment A:

- Figure 1 Project Site Location Map
- Figure 2 Tree Survey Zone Map
- Survey Zone Result Maps:
  - Figure 3a Survey Zone 1 Results
  - o Figure 3b Survey Zone 2 Results
  - o Figure 3c Survey Zone 3 Results
  - Figure 3d Survey Zone 4 Results
  - o Figure 3e Survey Zone 5 Results
  - Figure 3f Survey Zone 6 Results
  - o Figure 3g Survey Zone 7a & 7b Results
  - o Figure 3h Survey Zone 7c Results
  - o Figure 3i Survey Zone 8 Results





# Figure 2: Tree Survey Zone Map

## Barber Yard Tree Survey Gonzales Development Corps - Chico, Butte County, CA -

0 200 400 800  $\overline{\mathbf{N}}$ 

1 inch = 400 ft (printed at 11 x 17)

**Imagery Sources:** ESRI; Maxar Vivid (9/7/2021) ESRI; USGS Topo

Within Section 35, Township 22N, Range 01E, and Section 2, Township 21N, Range 01E Butte County, CA, CHICO USGS 7.5' Quad APNs: 039-400-031, 039-410-025 & 039

## Legend

**GDC Barber Tree Survey** Areas

- Barber Yard Specific Plan Area (135 ac)
- Off-Site Improvement Area (15.6 ac)

**GDC Barber Tree Survey** Zones

> Survey Zone 1 (18.4 ac) Survey Zone 2 (12.4 ac) Survey Zone 3 (25.9 ac) Survey Zone 4 (28.9 ac Survey Zone 5 (12.4 ac) Survey Zone 6 (13.1 ac) Survey Zone 7 (3 ac) Survey Zone 8 (2.2 ac)

Exclusion Zones (34.7 ac)

## **Barber Trees - All** Surveys (935)

#### **Species**

- ☆ Blue Elderberry (7\*)
- Cottonwood (1)
- Holm Oak (1)
- Live Oak (1)
- Sycamore (6)
- Scrub Oak (1)
- Valley Oak (577)

- Blue spruce (1)
- CA Grey Pine (4)
- CA Incense Cedar (1)
- Deodar Cedar (5)
- Cypress (1)
- Monterey Cypress (2)
- Weeping Pine (1)
- White Pine (6)
- CA Fan Palm (76)
- Canary Island Date Paln (9)
- Mexican Fan Palm (24)
- Almond (18)
- Bastogne Walnut (2)
- Black Walnut (49)
- English Walnut (3)
- Maple (2)
- Myrtle (1)
- Pecan (19)
- Camphor (1)
- Chinese Hackberry (8)
- Chinese Pistache (36)
- Coastal Redwood (5)
- ▲ Crepe Myrtle (1)
- Eucalyptus (5)
- Raywood Ash (3)
- Privet (8)
- Tree of Heaven (50)

Map Date: 4/10/2023; updated 2/29/2024

ADEMA

Environmental

Drawn By: CJWA






Map Date: 4/10/2023; Updated 2/29/2024







453 454

Map Date: 4/10/2023; Updated 2/29/2024



Map Date: 4/10/2023; Updated 2/29/2024







Map Date: 4/10/2023; Updated 2/29/2024





Map Date: 2/29/2024





Map Date: 4/10/2023; Updated 2/29/2024 Drawr

To: Gonzales Development Corporation RE: Barber Yard Project Site: Arborist & Preliminary Biological Survey Report- April 2023, Updated as of March 2024



ATTACHMENT B - Table of Surveyed Trees

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
Where:	REC = Recommendation		Red r	ecords = ne	eds imm	ediate ar	borist attention	AD =
DB	H = Diameter at breast hei	ght	"machinery" = stru	uctural defe	ects cause	ed by pas	t machinery damage evident	added
in in	ches (approx. 54" from gro	ound)	"in channe	l" = tree loc	ated in a	former o	drainage channel area	survey
	CD = Codominant trunk		"in bas	sin" = tree l	ocated in	n former	retention basin / pond area	
	SD = structural defect		"good arch" = tr	ee has uniq	ue archit	ecture; s	hould be considered for preserva	ation
26	Almond	Fair	Removal	11	х		fence intrusion	26
30	Almond	Fair	Removal	18		х	fence intrusion	30
88	Almond	Poor	Removal	8				88
96	Almond	Fair	Safety prune	7			sap suckers	96
105	Almond	Poor	Removal	7				105
279	Almond	Poor	Removal	8	х			279
364	Almond	Fair	Safety prune	8		х	granulated	364
367	Almond	Good	Safety prune	7	х		granulated	367
383	Almond	Good	Safety prune	7	х		channel edge	383
402	Almond	Fair	Removal	8	х			402
N/A	Almond	Fair	Removal	6				AD-14
N/A	Almond	Fair	Removal	6				AD-15
N/A	Almond	Fair	Removal	16			for a taken store	AD-20
838	Almond	Fair	TBD	38	X		fence intrusion	838
839	Almond	Fair	IBD	42	х		concueker	839
047	Almond	Fair		10			sapsucker	047
947	Almond	Fall	I DD Safaty prupa	15			sapsucker	947
954	AIIIIOIIU Deste sue Maluut	Good		0			fores intrusion	954
248	Bastogne Walnut	Good	Removal Sefety prupe	20			tence intrusion	248
637	Bastogne wainut	Good	Safety prune	15				637
9 21	Black Walnut	Good	Safety prune	10	×			9 21
120	Black Walnut	Poor	Bomoval	10	X			120
120	Black Walnut	Poor	Removal	10				120
122	Black Walnut	Poor	Removal	23				122
124	Black Walnut	Fair	Safety prune	29				124
138	Black Walnut	Poor	Removal	9				138
149	Black Walnut	Good	Safety prune	20				149
226	Black Walnut	Poor	Removal	28				226
252	Black Walnut	Poor	Removal	34				252
253	Black Walnut	Good	Safety prune	15	x			253
268	Black Walnut	Poor	Removal	9				268
275	Black Walnut	Good	Safety prune	17	х			275
284	Black Walnut	Poor	Removal	12			fence intrusion	284
292	Black Walnut	Poor	Removal	10	х			292
319	Black Walnut	Dead	Removal	30				319
324	Black Walnut	Dead	Removal	32				324
325	Black Walnut	Dead	TBD	NA				325
333	Black Walnut	Good	Safety prune	32				333
337	Black Walnut	Poor	Removal	14				337
338	Black Walnut	Dead	Removal	28				338
344	Black Walnut	Good	Safety prune	16				344
359	Black Walnut	Good	Safety prune	10	х			359
361	Black Walnut	Good	Safety prune	9	х			361
551	Black Walnut	Good	Safety prune	43				551
552	Black Walnut	Fair	Safety prune	27		Х		552
553	Black Walnut	Poor	Safety prune	20		Х		553
554	Black Walnut	Fair	Safety prune	38		х		554
555	Black Walnut	Fair	Safety prune	37				555
556	Black Walnut	Good	Safety prune	57				556
557	Black Walnut	Good	Safety prune	30	Х		good architecture	557
558	Black Walnut	Good	Satety prune	38				558

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
559	Black Walnut	Good	Safety prune	48				559
560	Black Walnut	Good	Safety prune	30				560
561	Black Walnut	Good	Safety prune	44		х		561
562	Black Walnut	Good	Safety prune	30				562
563	Black Walnut	Good	Safety prune	23				563
564	Black Walnut	Good	Safety prune	32				564
565	Black Walnut	Good	Safety prune	36				565
571	Black Walnut	Good	Safety prune	9			good architecture	571
625	Black Walnut	Good	Safety prune	16				625
629	Black Walnut	Good	Safety prune	7	х			629
630	Black Walnut	Good	Safety prune	13				630
663	Black Walnut	Good	Safety prune	16				663
665	Black Walnut	Good	Safety prune	32				665
666	Black Walnut	Poor	Removal	31	х	х		666
668	Black Walnut	Poor	TBD	48		х	major structure defect	668
N/A	Black Walnut	Fair	TBD	31	Х			AD-3
N/A	Black Walnut	Good	TBD	55				AD-56
N/A	Blue Elderberry	Good		6				ELD-1
N/A	Blue Elderberry	Good		42				ELD-2
N/A	Blue Elderberry	Good		4				ELD-3
N/A	Blue Elderberry	Good		5				ELD-4
N/A	Blue Elderberry	Good		9				ELD-5
N/A	Blue Elderberry	Good		8				ELD-6
N/A	Blue Elderberry	Good		9				ELD-7
212	Blue spruce	Good	Safety prune	32				212
1	CA Fan Palm	Good	Safety prune	26				1
2	CA Fan Palm	Good	Safety prune	28				2
3	CA Fan Palm	Good	Safety prune	28				3
4	CA Fan Palm	Good	Safety prune	28				4
171	CA Fan Palm	Good	Safety prune	29				171
173	CA Fan Palm	Good	Safety prune	27				173
174	CA Fan Palm	Good	Safety prune	24				174
175	CA Fan Palm	Good	Safety prune	24				175
176	CA Fan Palm	Good	Safety prune	27				176
177	CA Fan Palm	Good	Safety prune	24				177
178	CA Fan Palm	Good	Safety prune	26				178
1/9	CA Fan Palm	Good	Safety prune	28				1/9
181	CA Fan Palm	Good	Safety prune	28				181
182	CA Fan Palm	Good	Safety prune	28				182
183	CA Fan Palm	Good	Safety prune	24				183
184	CA Fan Palm	Good	Safety prune	23				184
185	CA Fan Palm	Good	Safety prune	23				185
186	CA Fan Palm	Good	Safety prune	25				186
187	CA Fan Palm	Good	Safety prune	24				187
188	CA Fan Palm	Good	Safety prune	24				188
189	CA Fan Palm	Good	Safety prune	24				189
190	CA Fan Palm	Good	Safety prune	23				190
191	CA Fan Palm	Good	Safety prune	24				191
192	CA Fan Palm	Good	Safety prune	24				192
193	CA Fan Palm	Good	Safety prune	24				104
194	CA Fan Palm	Good	Safety prune	24				194
107	CA Fan Palm	Good	Safety prune	24				190
100	CA Fan Palm	Good	Safety prune	24				100
190	CA Fail Palifi	Good	Safety prune	24				100
199		Good	Safety prune	27				792
200	CA Fail Palifi	Good	Safety prune	20				200
201		Good	Safety prune	22				201
202	CA Fall Palli	000u	Salety plulle	<u> </u>		1		202

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
203	CA Fan Palm	Good	Safety prune	19				203
204	CA Fan Palm	Good	Safety prune	22				204
205	CA Fan Palm	Good	Safety prune	23				205
206	CA Fan Palm	Good	Safety prune	21				206
207	CA Fan Palm	Good	Safety prune	21				207
208	CA Fan Palm	Good	Safety prune	22				208
209	CA Fan Palm	Good	Safety prune	21				209
210	CA Fan Palm	Good	Safety prune	22				210
218	CA Fan Palm	Good	Safety prune	23				218
219	CA Fan Palm	Good	Safety prune	23				219
220	CA Fan Palm	Good	Safety prune	23				220
221	CA Fan Palm	Good	Safety prune	23				221
222	CA Fan Palm	Good	Safety prune	22				222
223	CA Fan Palm	Good	Safety prune	23				223
224	CA Fan Palm	Good	Safety prune	21				224
225	CA Fan Palm	Good	Safety prune	21				225
227	CA Fan Palm	Good	Safety prune	22				227
228	CA Fan Palm	Good	Safety prune	23				228
229	CA Fan Palm	Good	Safety prune	25				229
230	CA Fan Palm	Good	Safety prune	24				230
231	CA Fan Palm	Good	Safety prune	24				231
232	CA Fan Palm	Good	Safety prune	22				232
233	CA Fan Palm	Good	Safety prune	19				233
234	CA Fan Palm	Poor	Removal	23				234
235	CA Fan Palm	Good	Safety prune	22				235
242	CA Fan Palm	Good	Safety prune	24				242
243	CA Fan Palm	Good	Safety prune	26				243
249	CA Fan Palm	Good	Safety prune	26				249
255	CA Fan Palm	Good	Safety prune	24				255
262	CA Fan Palm	Good	Safety prune	26				262
263	CA Fan Palm	Good	Safety prune	26				263
264	CA Fan Palm	Good	Safety prune	26				264
265	CA Fan Palm	Good	Safety prune	24				265
360	CA Fan Palm	Good	Safety prune	28				360
640	CA Fan Palm	Good	Safety prune	24				640
641	CA Fan Palm	Good	Safety prune	24				641
642	CA Fan Palm	Good	Safety prune	24				642
643	CA Fan Palm	Good	Safety prune	24				643
644 645	CA Fan Palm	Good	Safety prune	20				644
661	CA Fan Palm	Good	Safety prune	20				661
662	CA Fan Palm	Good	Safety prune	27				662
NT	CA Fan Palm	Good	Bemoval	27				NT-20
326	CA Grev Pine	Good	Safety prupe	12				326
320	CA Grey Pine	Good	Safety prune	12				320
664	CA Grey Pine	Good	Safety prune	34			heavy lean	664
667	CA Grey Pine	Good	Safety prune	32			ileavy lean	667
N/A	CA Incense Cedar	Good	TBD	42				AD-55
82	camphor	Poor	Removal	7	x			82
180	Canary Island Date	Good	Safety prune	36				180
256	Canary Island Date	Good	Safety prune	24				256
257	Canary Island Date	Good	Safety prune	19				257
258	Canary Island Date	Good	Safety prune	21				258
259	Canary Island Date	Good	Safety prune	23				259
260	Canary Island Date	Good	Safety prune	21				260
261	Canary Island Date	Good	Safety prune	23				261
353	Canary Island Date	Good	Safety prune	27				353
NT	Canary Island Date	Good	Safety prune	18				NT-37

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
50	Chinese hackberry	Poor	Removal	7				50
51	Chinese hackberry	Poor	Removal	8				51
52	Chinese hackberry	Fair	Removal	8				52
53	Chinese hackberry	Fair	Safety prune	11				53
54	Chinese hackberry	Poor	Removal	7				54
55	Chinese hackberry	Poor	Removal	7				55
56	Chinese hackberry	Dead	Removal	11				56
57	Chinese hackberry	Poor	Removal	11		х		57
11	Chinese Pistache	Fair	Removal	10				11
14	Chinese Pistache	Fair	Removal	14	X			14
15	Chinese Pistache	Fair	Removal	22	X	v		15
21	Chinese Pistache	Fall	Safety prupe	22 0	X	X		21
40	Chinese Pistache	Poor	Removal	18	v	v		40
40 92	Chinese Pistache	Good	Safety prupe	10	^	^		92
254	Chinese Pistache	Fair	Safety prune	21	x			254
274	Chinese Pistache	Good	Safety prune	7	x			274
285	Chinese Pistache	Good	Safety prune	9				285
287	Chinese Pistache	Good	Safety prune	8	х			287
295	Chinese Pistache	Good	Safety prune	6	х			295
339	Chinese Pistache	Good	Safety prune	14				339
340	Chinese Pistache	Good	Safety prune	22				340
341	Chinese Pistache	Good	Safety prune	15				341
342	Chinese Pistache	Good	Safety prune	12				342
343	Chinese Pistache	Good	Safety prune	27				343
398	Chinese Pistache	Good	TBD	8			fence intrusion	398
403	Chinese Pistache	Poor	Removal	8	х	х		403
404	Chinese Pistache	Good	Removal	6	х			404
405	Chinese Pistache	Good	Safety prune	6	х			405
417	Chinese Pistache	Good	Safety prune	6	х			417
436	Chinese Pistache	Fair	IBD Sofoty prupo	8		x		436
507	Chinese Pistache	Good	Safety prune	8 7	X			507
594 N/A	Chinese Pistache	Good		/ Q	X			594 AD-18
N/A N/A	Chinese Pistache	Good	TBD	10				AD-18
N/A	Chinese Pistache	Good	TBD	10				AD-33
N/A	Chinese Pistache	Good	Removal	42	х			AD-37
NT	Chinese Pistache	Good	Safety prune	9				NT-21
NT	Chinese Pistache	Good	Safety prune	8	х			NT-23
849	Chinese Pistache	Very Poor	Removal	14	х			849
861	Chinese Pistache	Fair	TBD	18	х			861
879	Chinese Pistache	Fair	Removal	36	Х			879
880	Chinese Pistache	Fair	Removal	7				880
894	Chinese Pistache	Good	TBD	32				94
N/A	Coastal redwood	Good	TBD	20				AD-19
N/A	Coastal redwood	Good	TBD	16				AD-21
N/A	Coastal redwood	Good	TBD	12				AD-31
N/A	Coastal redwood	Good	TBD	10				AD-50
N/A	Coastal redwood	Good	TBD	8				AD-51
	Cottonwood	Fair	Kemoval	11	Х		in basin	NT-26
N/A	Crepe myrtle	Good	IBD	4				AD-22
N/A	Cypress	Good	I BD	8 20				AD-58
211	Deodar Cedar	Good	Safety prune	28				211
213	Deodar Cedar	Good	Safety prune	24 1/				213
237 N/A	Deodar Cedar	Good		10				AD-17
N/A	Deodar Cedar	Good	TBD	38				AD-54
N/A	English walnut	Deceased	Removal	20				AD-29
	0.0						1	

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
N/A	English walnut	Deceased	Removal	32				AD-30
N/A	English walnut	Deceased	Removal	20				AD-48
250	eucalyptus	Poor	Removal	28			invasive	250
251	eucalyptus	Fair	Removal	7			invasive	251
270	eucalyptus	Poor	Removal	10		х	invasive	270
271	eucalyptus	Fair	TBD	58			invasive	271
273	eucalyptus	Fair	Removal	7		х	invasive	273
864	Holm Oak	Fair	TBD	8				864
164	Live Oak	Good	Safety prune	9	х			164
N/A	Maple	Good	TBD	10				AD-59
N/A	Maple	Good	TBD	8				AD-60
NI	Mexican Fan Palm	Good	Safety prune	20				NI-1
NI	Mexican Fan Palm	Good	Safety prune	16				NI-10
	Mexican Fan Palm	Good	Safety prune	1/				NI-11
	Mexican Fan Palm	Good	Safety prune	14				NT-13
	Mexican Fan Palm	Good	Safety prune	32				NT-14
	Mexican Fan Palm	Good	Safety prune	32				NT-15
	Movican Fan Palm	Good	Safety prune	19				NT 17
	Movican Fan Palm	Good	Safety prune	19				NT 10
	Mexican Fan Palm	Good	Safety prune	1/				NT-10
NT	Mexican Fan Palm	Good	Safety prune	20				NT-13
	Mexican Fan Palm	Good	Safety prune	20				NT-2
NT	Mexican Fan Palm	Good	Safety prune	22				NT-31
NT	Mexican Fan Palm	Good	Safety prune	22				NT-32
NT	Mexican Fan Palm	Good	Safety prune	12				NT-33
NT	Mexican Fan Palm	Good	Safety prune	22				NT-34
NT	Mexican Fan Palm	Good	Safety prune	28				NT-35
NT	Mexican Fan Palm	Good	Safety prune	18				NT-36
NT	Mexican Fan Palm	Good	Safety prune	36				NT-4
NT	Mexican Fan Palm	Good	Safety prune	32				NT-5
NT	Mexican Fan Palm	Good	Safety prune	28				NT-6
NT	Mexican Fan Palm	Good	Safety prune	16				NT-7
NT	Mexican Fan Palm	Good	Safety prune	16	х			NT-8
NT	Mexican Fan Palm	Good	Safety prune	16				NT-9
172	Monterey cypress	Good	Safety prune	7				172
NT	Monterey cypress	Good	Safety prune	7		х		NT-12
627	myrtle	Good	Safety prune	7				627
64	pecan	Poor	Removal	11	х			64
65	pecan	Poor	Removal	13				65
110	pecan	Good	Safety prune	11				110
123	pecan	Good	Safety prune	16	х			123
125	pecan	Good	Safety prune	9				125
195	pecan	Poor	Removal	36		х		195
239	pecan	Good	Safety prune	35				239
240	pecan	Good	Safety prune	25				240
241	pecan	Poor	Removal	27				241
266	pecan	Good	Removal	24		х		266
548	pecan	Good	Safety prune	/				548
572	pecan	GOOD	Satety prune	8	X			572
579	pecan	Fair	I BD	8	X			5/9
581	pecan	Good	Safety prune	12	X			581
	pecan	GOOD	Salety prune	11	X			
N/A	pecan	Fall	Safaty prupa	19	X		blackborne	AD-39
	Pecali	Enir	Bomoval	/			DIACKDEITY	020
020 816	Pecan	Fail Very Door	Removal	9 16	v			020 816
802	Drivot	Good	Safety prupo	5010	^			240 202
002	FINEL	000u	Salety prulle	0				002

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
811	Privet	Good	Removal	47	х		fence intrusion	811
812	Privet	Very Poor	Removal	9	х		fence intrusion	812
816	Privet	Fair	Removal	6	х			816
821	Privet	Good	TBD	11	х			821
836	Privet	Good	Removal	10	х			836
845	Privet	Good	TBD	14	х			845
850	Privet	Very Poor	Removal	23	Х	Х	fence intrusion	850
N/A	Raywood Ash	Good	TBD	20				AD-16
N/A	Raywood Ash	Good	TBD	12				AD-23
N/A	Raywood Ash	Good	TBD	14				AD-25
113	scrub oak	Poor	Removal	12				113
632	Sycamore	Good	Safety prune	48				632
633	Sycamore	Dead	Removal	38				633
634	Sycamore	Good	Safety prune	19				634
635	Sycamore	Dead	Removal	36			un auchunte faultuide	635
636	Sycamore	IBD	TBD	43			re-evaluate for buds	636
N/A	Sycamore	Good	IBD	23			in realize	AD-57
136	Tree of Heaven	Good	Removal	12	x		invasive	136
137	Tree of Heaven	Good	Removal	/			invasive	137
139		Good	Removal	8 7			invasive	139
140	Tree of Heaven	Boor	Removal	/ 0				140
200	Tree of Heaven	FUUI	Removal	0 0			invasivo	200
299	Tree of Heaven	Good	Removal		v		invasive	309
303	Tree of Heaven	Good	Removal	, 11	^		invasive	303
372	Tree of Heaven	Good	Removal	13			invasive	372
374	Tree of Heaven	Poor	Removal	16		x	invasive	374
376	Tree of Heaven	Good	Removal	7		~	invasive	376
377	Tree of Heaven	Poor	Removal	7	x	x	in channel: invasive	377
378	Tree of Heaven	Poor	Removal	7	x	~	invasive	378
381	Tree of Heaven	Good	Removal	10	x		basin edge: invasive	381
382	Tree of Heaven	Poor	Removal	16	х	х	basin edge; invasive	382
389	Tree of Heaven	Good	Removal	10	х		in channel	389
419	Tree of Heaven	Fair	Removal	6	х	х	invasive	419
421	Tree of Heaven	Fair	Removal	7		х	invasive	421
426	Tree of Heaven	Poor	Removal	7	х	х	invasive	426
427	Tree of Heaven	Good	Removal	7	х		invasive	427
455	Tree of Heaven	Good	Removal	10	х		invasive	455
544	Tree of Heaven	Good	Removal	8			invasive	544
545	Tree of Heaven	Good	Removal	8			invasive	545
546	Tree of Heaven	Good	Removal	8			invasive	546
547	Tree of Heaven	Good	Removal	8	х		invasive	547
549	Tree of Heaven	Good	Removal	8	х		cluster; invasive	549
582	Tree of Heaven	Good	Removal	11			invasive	582
586	Tree of Heaven	Good	Removal	13			invasive	586
587	Tree of Heaven	Good	Removal	10			invasive	587
588	Tree of Heaven	Good	Removal	10			invasive	588
590	Tree of Heaven	Good	Removal	7			invasive	590
591	Tree of Heaven	Good	Removal	10			invasive	591
592	Tree of Heaven	Good	Removal	8			invasive	592
597	Iree of Heaven	Good	Removal	6	Х		invasive	597
598	Tree of Heaven	Good	Removal	6	X		invasive	598
599	Tree of Heaven	Fair	Removal	8	X	Х	invasive	599
601	Tree of Heaven	Good	Removal	6	Х		invasive	601
602		GOOd	Removal	ð			invasive	602
604		Good	Removal	ŏ		<u> </u>	invasive	604
605		Good	Pomoval	0 7			invasive	605
005	nee of neaven	9000	Removal	/			IIIVasive	005

609Tree of HeavenGoodRemoval8in610Tree of HeavenGoodRemoval6xin611Tree of HeavenGoodRemoval10in612Tree of HeavenGoodRemoval7xin613Tree of HeavenGoodRemoval6in614Tree of HeavenGoodRemoval6in	vasive     609       vasive     610       vasive     611       vasive     612       vasive     613       vasive     614
610Tree of HeavenGoodRemoval6xin611Tree of HeavenGoodRemoval10in612Tree of HeavenGoodRemoval7xin613Tree of HeavenGoodRemoval6in614Tree of HeavenGoodRemoval6in	vasive     610       vasive     611       vasive     612       vasive     613       vasive     614
611Tree of HeavenGoodRemoval10in612Tree of HeavenGoodRemoval7xin613Tree of HeavenGoodRemoval6in614Tree of HeavenGoodRemoval6in	vasive 611 vasive 612 vasive 613
612 Tree of Heaven Good Removal 7 x in   613 Tree of Heaven Good Removal 6 in   614 Tree of Heaven Good Removal 6 in	vasive 612 vasive 613
613 Tree of Heaven Good Removal 6 in	vasive 613
	(acivo 614
ויי וויפט אנס	Vasive 014
615 Tree of Heaven Good Removal 7 x in	vasive 615
NT Tree of Heaven Good Removal 7 x in basi	n; invasive NT-27
844 Tree of Heaven Very Poor Removal 13 leaning	g; invasive 844
5 Valley Oak Good Safety prune 23	5
6 Valley Oak Good Safety prune 17	6
7 Valley Oak Fair Removal 13 fence	intrusion /
8 Valley Oak Fair Removal 19	8
10 Valley Oak Good Safety prune 13	10
12 Valley Oak Poor Removal 10	12
13 Valley Oak Dead Removal 13	13
17 Valley Oak Good Safety prune 25	17
18 Valley Oak Good Salety prule 16 X	18
19 Valley Oak Pool Removal 11   20 Valley Oak Fair Bemoval 21 fance	intrusion 20
20 Valley Oak Fair Safety prupe 19	20
23 Valley Oak Dead Removal 16	22
24 Valley Oak Poor Removal 22 fence	intrusion 24
25 Valley Oak Poor Removal 22 fence	intrusion 25
27 Valley Oak Fair Removal 21 x fence	intrusion 27
28 Valley Oak Fair Safety prune 30	28
29 Valley Oak Good Safety prune 13	20
32 Valley Oak Fair Removal 14 fence	intrusion 32
33 Valley Oak Poor Removal 12 x x fence	intrusion 33
34 Valley Oak Fair Safety prune 21	34
35 Valley Oak Dead Removal 17 fence	intrusion 35
36 Valley Oak Fair Safety prune 17	36
37 Valley Oak Fair Removal 22 fence	intrusion 37
38 Valley Oak Good Safety prune 9	38
39 Valley Oak Fair Removal 12 x	ean 39
41 Valley Oak Good Safety prune 16	41
42 Valley Oak Good Safety prune 23 up ag	ainst wall 42
43 Valley Oak Good Safety prune 27	43
44 Valley Oak Good Safety prune 12 large har	nging branch 44
45 Valley Oak Good Safety prune 21	45
46 Valley Oak Dead Removal 10	46
47 Valley Oak Good Safety prune 8	47
48 Valley Oak Good Safety prune 14 x	48
49 Valley Oak Good Safety prune 8 x	49
58 Valley Oak Good Safety prune 29	58
59 Valley Oak Good Safety prune 17	59
60 Valley Oak Good Safety prune 24	60
bit Valley Uak Fair Safety prune 9   Ca Valley Oak Fair Cafety Cafety	61
b2 valley Oak Fair Safety prune 21   62 Valley Oak Fair Safety prune 2	62
OS Valley Oak Fair Safety prune 8   66 Valley Oak Fair Safety prune 8	63
OD Valley Oak Fair Safety prune b   67 Valley Oak Cood Safety prune 22	66
O/ Valley Oak GOOD Safety prune 23   68 Valley Oak Eair Safety prune 9	b/
Volue Value Value Value   60 Value Door Door	08
U3     Valley Oak     POUL     Refiloval     21       70     Valley Oak     Eair     Safaty prupo     10     v	59 70
70 Valley Oak Fail Safety prune 10 X	70
72 Valley Oak Good Safety prune 1/1 v	71
73 Valley Oak Fair Removal 12 fence	intrusion 73

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
74	Valley Oak	Fair	Safety prune	14				74
75	Valley Oak	Poor	Removal	8	х			75
76	Valley Oak	Fair	TBD	20			fence intrusion	76
77	Valley Oak	Fair	Safety prune	8				77
78	Valley Oak	Fair	Safety prune	28	х		remove half	78
79	Valley Oak	Fair	Safety prune	14				79
80	Valley Oak	Good	Safety prune	6				80
81	Valley Oak	Good	Safety prune	20	х			81
83	Valley Oak	Poor	Removal	24				83
84	Valley Oak	Fair	Safety prune	8	х			84
85	Valley Oak	Good	Safety prune	6				85
86	Valley Oak	Good	Safety prune	6	х			86
87	Valley Oak	Good	Safety prune	8			old nest	87
89	Valley Oak	Good	Safety prune	6				89
90	Valley Oak	Good	Safety prune	14	х			90
91	Valley Oak	Good	Safety prune	9	х			91
93	Valley Oak	Good	Removal	22	х		fence intrusion	93
94	Valley Oak	Good	Safety prune	16	х			94
95	Valley Oak	Good	Safety prune	16	х			95
97	Valley Oak	Poor	Removal	15	х		no growth	97
98	Valley Oak	Good	Safety prune	9				98
99	Valley Oak	Poor	TBD	9	х		fence intrusion	99
100	Valley Oak	Fair	TBD	18	х		fence intrusion	100
101	Valley Oak	Good	Safety prune	13	х			101
102	Valley Oak	Good	Safety prune	9				102
103	Valley Oak	Good	Safety prune	8	х			103
104	Valley Oak	Good	Safety prune	25	х			104
106	Valley Oak	Fair	Safety prune	18	х			106
107	Valley Oak	Poor	TBD	12	х			107
108	Valley Oak	Poor	TBD	16			fence intrusion	108
109	Valley Oak	Good	Safety prune	12	х			109
111	Valley Oak	Good	Safety prune	18				111
112	Valley Oak	Good	Safety prune	23				112
114	Valley Oak	Good	Safety prune	30				114
115	Valley Oak	Good	Safety prune	30				115
116	Valley Oak	Good	Safety prune	14				116
117	Valley Oak	Good	Safety prune	12				117
110	Valley Oak	Good	Safety prune	30				110
119	Valley Oak	Good	Safety prune	14				119
121	Valley Oak	Good	Safety prune	20				121
127	Valley Oak	Good	Safety prune	20			fonce intrusion	127
120	Valley Oak	Good	Safety prune	24			Tence intrasion	120
129	Valley Oak	Good	Safety prune	20				120
130	Valley Oak	Good	Safety prune	20				130
132	Valley Oak	Good	Safety prune	16				131
132	Valley Oak	Good	Safety prune	16				132
134	Valley Oak	Good	Safety prune	34				134
135	Valley Oak	Good	Safety prune	16	x			135
141	Valley Oak	Good	Safety prune	12	~			141
142	Vallev Oak	Good	Safety prune	15				142
143	Vallev Oak	Good	Safety prune	18				143
144	Vallev Oak	Good	Safety prune	12				144
145	Vallev Oak	Good	Safety prune	15	х			145
146	Vallev Oak	Good	Safety prune	20	x			146
147	Vallev Oak	Good	Safety prune	41				147
148	Vallev Oak	Good	Safety prune	48	х			148
151	, Valley Oak	Poor	Removal	14				151

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
152	Valley Oak	Good	Safety prune	21			ivy remove	152
154	Valley Oak	Good	Safety prune	65			Safety Hazard - Prune ASAP	154
155	Valley Oak	Good	Safety prune	17				155
156	Valley Oak	Good	Safety prune	9				156
157	Valley Oak	Good	Safety prune	9	х			157
158	Valley Oak	Good	Safety prune	19				158
159	Valley Oak	Good	Safety prune	8				159
160	Valley Oak	Good	Safety prune	10	х			160
161	Valley Oak	Good	Safety prune	18				161
162	Valley Oak	Good	Safety prune	12	х			162
163	Valley Oak	Good	Safety prune	8				163
165	Valley Oak	Good	Safety prune	8				165
166	Valley Oak	Good	Safety prune	11				166
167	Valley Oak	Good	Safety prune	10				167
168	Valley Oak	Good	Safety prune	14				168
169	Valley Oak	Good	Removal	9			fence intrusion	169
170	Valley Oak	Good	Safety prune	28				170
244	Valley Oak	Good	Safety prune	33	х			244
245	Valley Oak	Good	Safety prune	11				245
246	Valley Oak	Good	Safety prune	14	х			246
247	Valley Oak	Good	Safety prune	9				247
267	Valley Oak	Good	Safety prune	10				267
269	Valley Oak	Good	Safety prune	9	х			269
272	Valley Oak	Good	Safety prune	7	х			272
276	Valley Oak	Good	Safety prune	13				276
277	Valley Oak	Good	Safety prune	20				277
278	Valley Oak	Good	Safety prune	22				278
280	Valley Oak	Good	Safety prune	17				280
281	Valley Oak	Good	Safety prune	24				281
282	Valley Oak	Good	Safety prune	13	х			282
283	Valley Oak	Good	Safety prune	16				283
286	Valley Oak	Good	Safety prune	7				286
288	Valley Oak	Good	Safety prune	17				288
289	Valley Oak	Good	Safety prune	9				289
290	Valley Oak	Good	Safety prune	16				290
291	Valley Oak	Good	Safety prune	14				291
293	Valley Oak	Good	Safety prune	10	х			293
294	Valley Oak	Good	Safety prune	22				294
296	Valley Oak	Good	Safety prune	14				296
297	Valley Oak	Good	Safety prune	10				297
298	Valley Oak	Good	Safety prune	10				298
300	Valley Oak	Good	Safety prune	8				300
301	Valley Oak	Good	Safety prune	14				301
302	Valley Oak	Good	Safety prune	16				302
303	Valley Oak	Good	Safety prune	18				303
304	Valley Oak	Good	Safety prune	28			an at all selections for a sub-table	304
305	Valley Oak	Good	Safety prune	21	X		metal plates in crotch	305
306	Valley Oak	Good	Safety prune	22				306
307	Valley Oak	Poor	IBD	11				307
308	Valley Oak		IBD Safatu arma	10				308
211	Valley Oak	Good	Safety prune	12				310
311	Valley Oak	Good	Salety prune	12				311 212
312	Valley Oak	Good	Salety prune	9				312
313	Valley Oak	6000 Fair	Sarety prune	ð o				313
314 215	Valley Oak	Fair	I BD	ð 12	Х	Х		514 215
315	Valley Oak	Good	Salety prune	12				315
310	Valley Oak	Guud	Safety prune	у 10				310
51/	valley Oak	G000	Salety prune	70	х			31/

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
318	Valley Oak	Good	Safety prune	26				318
320	Valley Oak	Poor	TBD	11			old nest	320
321	Valley Oak	Good	Safety prune	19				321
322	Valley Oak	Good	Safety prune	18				322
323	Valley Oak	Good	Safety prune	32				323
327	Valley Oak	Good	Safety prune	21				327
328	Valley Oak	Good	Safety prune	15				328
329	Valley Oak	Good	Safety prune	60				329
330	Valley Oak	Dead	Removal	40	х			330
331	Valley Oak	Good	Safety prune	17				331
334	Valley Oak	Good	Safety prune	19				334
335	Valley Oak	Good	Safety prune	13	х			335
336	Valley Oak	Good	Safety prune	16				336
345	Valley Oak	Good	Safety prune	11				345
346	Valley Oak	Good	Safety prune	6				346
347	Valley Oak	Good	Safety prune	7				347
348	Valley Oak	Good	Safety prune	16	х			348
349	Valley Oak	Fair	Removal	12		х		349
350	Valley Oak	Good	Safety prune	10				350
351	Valley Oak	Good	Safety prune	11				351
352	Valley Oak	Poor	Removal	9				352
354	Valley Oak	Fair	TBD	11	х			354
355	Valley Oak	Fair	IBD	11		X		355
356	Valley Oak	Good	Safety prune	9 12	х			356
357	Valley Oak	Good	Safety prune	13				357
358	Valley Oak	Good	Safety prune	10				358
362	Valley Oak	Good	Safety prune	14				362
303	Valley Oak	Good	Safety prune	24				303
305	Valley Oak	Good		9			fonco intrucion	305
269	Valley Oak	Good	Safoty prupo	6	v			269
369	Valley Oak	Good	Safety prune	7	^			369
370	Valley Oak	Good	Safety prune	13				370
370	Valley Oak	Good	Safety prune	13				370
375	Valley Oak	Good	Safety prune	7				375
379	Valley Oak	Fair	TBD	, 6		x		379
380	Valley Oak	Good	Safety prune	12	x	~		380
384	Valley Oak	Good	Safety prune	9	x			384
385	Valley Oak	Good	Safety prune	12	x			385
386	Valley Oak	Good	Safety prune	9				386
387	Valley Oak	Good	Safety prune	25	х			387
388	Valley Oak	Good	Safety prune	7				388
390	Valley Oak	Good	TBD	7	х		in channel	390
391	Valley Oak	Good	Removal	16	х		in channel	391
392	Valley Oak	Good	Safety prune	13			channel edge	392
393	Valley Oak	Good	Removal	7			in channel	393
394	Valley Oak	Good	Safety prune	8			channel edge	394
395	Valley Oak	Good	Safety prune	10				395
396	Valley Oak	Good	Safety prune	8			channel edge	396
397	Valley Oak	Good	Safety prune	12				397
399	Valley Oak	Good	TBD	7			in channel	399
400	Valley Oak	Good	Safety prune	10	х		channel edge	400
401	Valley Oak	Fair	TBD	10		х		401
406	Valley Oak	Poor	Removal	10		х		406
407	Valley Oak	Good	Safety prune	8	х			407
408	Valley Oak	Good	Safety prune	8				408
409	Valley Oak	Good	Safety prune	8	х			409
410	Valley Oak	Good	Safety prune	12				410

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
411	Valley Oak	Good	TBD	8			fence intrusion	411
412	Valley Oak	Good	Safety prune	6				412
413	Valley Oak	Good	Safety prune	7				413
414	Valley Oak	Good	Safety prune	10			granulated; old nest	414
415	Valley Oak	Good	Safety prune	10				415
416	Valley Oak	Good	Safety prune	16	х			416
418	Valley Oak	Good	Safety prune	12				418
420	Valley Oak	Good	Safety prune	7	х			420
422	Valley Oak	Good	Safety prune	8	х			422
423	Valley Oak	Good	Safety prune	7				423
424	Valley Oak	Good	Safety prune	9	х			424
425	Valley Oak	Good	Safety prune	7				425
428	Valley Oak	Good	Safety prune	9				428
429	Valley Oak	Good	Safety prune	6	х			429
430	Valley Oak	Fair	TBD	12		х		430
431	Valley Oak	Good	Safety prune	10				431
432	Valley Oak	Good	Safety prune	8				432
433	Valley Oak	Good	Safety prune	6				433
434	Valley Oak	Fair	TBD	8	х	х		434
435	Valley Oak	Fair	Safety prune	6		х		435
437	Valley Oak	Good	Safety prune	8	х			437
438	Valley Oak	Good	Safety prune	6	х			438
439	Valley Oak	Good	Safety prune	/	х			439
440	Valley Oak	Good	Safety prune	/				440
441	Valley Oak	Good	Safety prune	8				441
442	Valley Oak	Good	Safety prune	10				442
443	Valley Oak	Good	Safety prune	9	X			443
444	Valley Oak	Good	Safety prune	6	X			444
445	Valley Oak	Good		6		v		445
440	Valley Oak	Good	Safety prupe	8		^		440
448	Valley Oak	Good	Safety prune	10	x			448
449	Valley Oak	Good	Safety prune	7	x			449
450	Valley Oak	Good	Safety prune	, 11	x			450
451	Valley Oak	Good	Removal	6	~			451
452	Valley Oak	Poor	Removal	15	x	x		452
453	Valley Oak	Good	Safety prune	7	x			453
454	, Valley Oak	Good	Safety prune	16				454
456	, Valley Oak	Good	Safety prune	8	х			456
457	Valley Oak	Poor	TBD	14		х		457
458	Valley Oak	Good	Safety prune	7				458
459	Valley Oak	Good	Safety prune	7				459
460	Valley Oak	Good	Safety prune	16				460
461	Valley Oak	Good	Safety prune	6				461
462	Valley Oak	Good	TBD	9			fence intrusion	462
463	Valley Oak	Good	Safety prune	9	х			463
464	Valley Oak	Good	Safety prune	7				464
465	Valley Oak	Good	Safety prune	7				465
466	Valley Oak	Good	Safety prune	7				466
467	Valley Oak	Good	Safety prune	12				467
468	Valley Oak	Fair	TBD	13		Х		468
469	Valley Oak	Fair	TBD	10		Х		469
470	Valley Oak	Good	Safety prune	7	Х			470
471	Valley Oak	Good	Safety prune	7	Х			471
472	Valley Oak	Good	Safety prune	10				472
473	Valley Oak	Good	Safety prune	10	Х			473
4/4	valley Oak	Good	Safety prune	6				4/4
475	Valley Oak	Good	Safety prune	21	Х			475

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
476	Valley Oak	Good	Safety prune	6				476
477	Valley Oak	Good	Safety prune	7				477
478	Valley Oak	Good	Safety prune	12	х			478
479	Valley Oak	Good	Safety prune	12				479
480	Valley Oak	Good	Safety prune	6				480
481	Valley Oak	Good	Safety prune	10				481
482	Valley Oak	Good	Safety prune	10				482
483	Valley Oak	Good	Safety prune	10	х			483
484	Valley Oak	Good	Safety prune	10				484
485	Valley Oak	Good	Safety prune	8				485
486	Valley Oak	Poor	TBD	12	х	х		486
487	Valley Oak	Good	Safety prune	13				487
488	Valley Oak	Good	Safety prune	8				488
489	Valley Oak	Good	Safety prune	7	х			489
490	Valley Oak	Good	Safety prune	7				490
491	Valley Oak	Good	Safety prune	10				491
492	Valley Oak	Good	TBD	13	Х		tence intrusion	492
493	Valley Oak	Good	Satety prune	12				493
494	Valley Oak	Fair	IBD	/		Х		494
495	Valley Oak	Fair	IBD	10		X		495
496	Valley Oak	Fair	I BD	ð o		Х		496
497	Valley Oak	Good	Safety prune	8				497
498	Valley Oak	Good	Safety prune			Х		498
499	Valley Oak	Good	Safety prune	0	X			499
500	Valley Oak	Good	Safety prune	8 7				500
501	Valley Oak	Guua		/				501
502	Valley Oak	Fair	IBD Safety prupe	8 7	v	X		502
504	Valley Oak	Good	Safety prune	/	X			503
504	Valley Oak	Good	Safety prune	10				504
505	Valley Oak	Good	Safety prune	7	v			505
507	Valley Oak	Good	Safety prune	, 11	^			507
508	Valley Oak	Good	Safety prune	11	x			508
509	Valley Oak	Good	Safety prune	10	x		fence intrusion	509
510	Valley Oak	Good	Safety prune	8	^			510
511	Valley Oak	Good	Safety prune	7	x			511
512	Vallev Oak	Good	Safety prune	9	~			512
513	Vallev Oak	Good	Safety prune	11				513
514	Valley Oak	Good	Safety prune	7	х			514
515	Valley Oak	Good	Safety prune	8	х			515
516	Valley Oak	Fair	TBD	10	х	х		516
517	, Valley Oak	Good	Safety prune	9				517
518	Valley Oak	Good	Safety prune	8	х			518
519	Valley Oak	Good	Safety prune	15				519
520	Valley Oak	Good	Safety prune	13	х			520
521	Valley Oak	Good	Safety prune	8	х			521
522	Valley Oak	Good	Safety prune	13	х			522
523	Valley Oak	Good	Safety prune	10				523
524	Valley Oak	Good	Safety prune	10	х	х		524
525	Valley Oak	Good	Safety prune	8	х		good	525
526	Valley Oak	Good	Safety prune	10				526
527	Valley Oak	Good	Safety prune	8				527
528	Valley Oak	Good	Safety prune	10	х		railroad piece at trunk	528
529	Valley Oak	Good	Safety prune	8				529
530	Valley Oak	Good	Safety prune	9				530
531	Valley Oak	Good	Safety prune	6				531
532	Valley Oak	Good	Safety prune	10				532
533	Valley Oak	Good	Safety prune	11				533

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
534	Valley Oak	Good	Safety prune	10				534
535	Valley Oak	Good	Safety prune	7			pavement	535
536	Valley Oak	Good	Safety prune	8				536
537	Valley Oak	Good	Safety prune	7				537
538	Valley Oak	Good	Safety prune	9				538
539	Valley Oak	Good	Safety prune	8				539
540	Valley Oak	Good	Safety prune	8				540
541	Valley Oak	Good	Safety prune	6				541
542	Valley Oak	Good	Safety prune	7				542
543	Valley Oak	Good	Safety prune	9				543
550	Valley Oak	Good	Safety prune	9				550
566	Valley Oak	Good	Safety prune	11				566
568	Valley Oak	Good	Safety prune	8				568
569	Valley Oak	Good	Safety prune	8				569
570	Valley Oak	Good	Safety prune	6				570
573	Valley Oak	Good	Safety prune	8				573
574	Valley Oak	Good	Safety prune	10	х			574
575	Valley Oak	Good	Safety prune	8	х			575
576	Valley Oak	Good	Safety prune	10				576
577	Valley Oak	Good	Safety prune	7				577
578	Valley Oak	Good	Safety prune	10			mistletoe	578
580	Valley Oak	Good	Safety prune	9	х			580
584	Valley Oak	Poor	Removal	22		х		584
585	Valley Oak	Good	Safety prune	25				585
589	Valley Oak	Good	Safety prune	8				589
593	Valley Oak	Good	Safety prune	12				593
595	Valley Oak	Poor	TBD	13		х		595
596	Valley Oak	Fair	IBD	10	X	х		596
600	Valley Oak	Good	Safety prune	16	х	х		600
606	Valley Oak	Good	Safety prune	8				606
607	Valley Oak	Good	Safety prune	12		X		607
608	Valley Oak	Good	Safety prune	0				608
610	Valley Oak	Good		10				617
617	Valley Oak	Fair	IBD Safaty prupa	13		X		610
610	Valley Oak	Good	Safety prune	10				610
620	Valley Oak	Good	Safety prune	15				620
621	Valley Oak	Eair		7	v	v		621
622	Valley Oak	Good	Safety prupe	56	^	^	good architecture	622
623	Valley Oak	Good	Safety prune	29			good architecture	622
624	Valley Oak	Good	Safety prune	13				624
626	Valley Oak	Good	Safety prune	12				626
628	Valley Oak	Good	Safety prune	7				628
631	Valley Oak	Poor	Removal	13	x	x		631
638	Valley Oak	Good	Safety prune	24	~	~		638
639	Valley Oak	Good	Safety prune	24				639
646	Valley Oak	Good	Safety prune	15				646
647	Valley Oak	Good	Safety prune	13				647
648	, Valley Oak	Good	Safety prune	16				648
649	, Valley Oak	Good	Safety prune	14				649
650	Valley Oak	Good	Safety prune	7				650
651	, Valley Oak	Good	Safety prune	9	х			651
652	, Valley Oak	Good	Safety prune	9				652
653	Valley Oak	Poor	Removal	15		х	machinery damage	653
654	Valley Oak	Good	TBD	13		х	machinery damage	654
655	Valley Oak	Good	Safety prune	7		х	machinery damage	655
656	Valley Oak	Good	Safety prune	7		х	machinery damage	656
657	Valley Oak	Good	Safety prune	9		х	machinery damage	657

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
658	Valley Oak	Good	Safety prune	14				658
659	Valley Oak	Good	Safety prune	10		х	machinery damage	659
660	Valley Oak	Good	Safety prune	7				660
669	Valley Oak	Good	Safety prune	27				669
N/A	Valley Oak	Good	TBD	11				AD-1
N/A	Valley Oak	Good	TBD	12				AD-10
N/A	Valley Oak	Good	TBD	24				AD-11
N/A	Valley Oak	Good	TBD	20				AD-12
N/A	Valley Oak	Good	TBD	16				AD-13
N/A	Valley Oak	Good	TBD	8				AD-2
N/A	Valley Oak	Good	TBD	12				AD-26
N/A	Valley Oak	Good	TBD	16				AD-27
N/A	Valley Oak	Good	TBD	16				AD-28
N/A	Valley Oak	Good	TBD	12				AD-32
N/A	Valley Oak	Good	IBD	10				AD-34
N/A	Valley Oak	GOOD	Removal	b 11				AD-35
N/A	Valley Oak	Deceased	Removal	20				AD-36
N/A	Valley Oak	Good		38 0				AD-38
	Valley Oak	Good	Pomoval	0 10				
N/A N/A	Valley Oak	Good		10				AD-40
	Valley Oak	Good	TBD	2				AD-41
N/A	Valley Oak	Good	TBD	12				AD-43
N/A	Valley Oak	Good	TBD	8				AD-44
N/A	Valley Oak	Good	TBD	12				AD-45
N/A	Valley Oak	Good	TBD	8				AD-46
N/A	Valley Oak	Good	TBD	6				AD-47
N/A	Valley Oak	Good	TBD	8				AD-49
N/A	, Valley Oak	Good	TBD	15				AD-5
N/A	Valley Oak	Good	TBD	14				AD-52
N/A	Valley Oak	Good	TBD	15				AD-53
N/A	Valley Oak	Good	TBD	12				AD-6
N/A	Valley Oak	Good	TBD	12				AD-7
N/A	Valley Oak	Good	TBD	12				AD-8
N/A	Valley Oak	Good	TBD	11				AD-9
NT	Valley Oak	Good	Safety prune	7				NT-22
NT	Valley Oak	Good	Safety prune	17				NT-24
NT	Valley Oak	Good	TBD	10	х		fence intrusion	NT-28
NT	Valley Oak	Good	Safety prune	8	х		in channel	NT-29
NT	Valley Oak	Good	Safety prune	10			channel edge	NT-30
801	Valley Oak	Good	Safety prune	54	х			801
803	Valley Oak	Good	Safety prune	6				803
804	Valley Oak	Good	Safety prune	10				804
805	Valley Oak	Good	Safety prune	18				805
806	Valley Oak	Good	Safety prune	36				806
807	Valley Oak	Good	Safety prune	- 22	X			807
808	Valley Oak	Fall	Safety prune	17	X			808
810	Valley Oak	Good	Safety prune	1/ 1/	X			009 810
810 812	Valley Oak	Epir	Safety prune	10	v			Q12
81/	Valley Oak	Good	Safety prune	22	X V			81/
815	Valley Oak	Good	Safety prune	12	^			815
817	Valley Oak	Fair	Removal	9	x		fence intrusion	817
818	Vallev Oak	Good	Safety prune	26	x			818
819	Vallev Oak	Fair	Safety prune	7	~			819
822	Vallev Oak	Fair	Safety prune	6				822
823	Valley Oak	Good	Safety prune	37	Х			823
824	Valley Oak	Good	TBD	34		х		824

ATTACHMENT B - Barber Yard Table of Surveyed Trees
March, April, October 2023; January 8 30, 2024

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
825	Valley Oak	Fair	TBD	32	Х	Х	fence intrusion	825
826	Valley Oak	Fair	TBD	18	х	х	fence intrusion	826
827	Valley Oak	Good	Safety prune	32	х			827
828	Valley Oak	Fair	TBD	25	х		fence intrusion	828
829	Valley Oak	Good	TBD	20			fence intrusion	829
830	Valley Oak	Fair	TBD	38	х		fence intrusion	830
831	Valley Oak	Good	Safety prune	15				831
832	Valley Oak	Good	Safety prune	7				832
833	Valley Oak	Good	Safety prune	10				833
834	Valley Oak	Good	Safety prune	11				834
835	Valley Oak	Fair	Safety prune	6				835
837	Valley Oak	Fair	Safety prune	13	х			837
840	Valley Oak	Fair	TBD	18	х		fence intrusion	840
841	Valley Oak	Fair	TBD	15		х		841
842	Valley Oak	Good	Safety prune	12				842
843	Valley Oak	Good	Safety prune	12	х			843
847	Valley Oak	Fair	TBD	9				847
848	Valley Oak	Very Poor	Removal	16	х	х	fence intrusion	848
851	Valley Oak	Fair	Safety prune	15	х			851
852	Valley Oak	Good	Safety prune	11				852
853	Valley Oak	Fair	TBD	16	х			853
854	Valley Oak	Fair	TBD	14	х			854
855	Valley Oak	Fair	TBD	10	х			855
856	Valley Oak	Fair	TBD	7				856
857	Valley Oak	Fair	Removal	26	х	х		857
858	Valley Oak	Fair	TBD	32	х			858
859	Valley Oak	Fair	TBD	7				859
860	Valley Oak	Fair	TBD	25	х			860
862	Valley Oak	Good	Safety prune	9				862
863	Valley Oak	Fair	TBD	6				863
865	Valley Oak	Good	Safety prune	14				865
866	Valley Oak	Good	Safety prune	10				866
867	Valley Oak	Fair	TBD	40	х			867
868	Valley Oak	Good	Safety prune	12				868
869	Valley Oak	Good	Safety prune	14				869
870	Valley Oak	Fair	TBD	18	х			870
871	Valley Oak	Fair	Removal	24	х	х		871
872	Valley Oak	Good	Safety prune	15				872
873	Valley Oak	Fair	TBD	11	х			873
874	Valley Oak	Fair	TBD	14				874
875	Valley Oak	Good	Safety prune	9				875
876	Valley Oak	Fair	TBD	22	х			876
877	Valley Oak	Fair	TBD	9				877
878	Valley Oak	Fair	TBD	9				878
882	Valley Oak	Good	Safety prune	19				882
883	Valley Oak	Good	Safety prune	34	х			883
884	Valley Oak	Good	Safety prune	34	х			884
885	Valley Oak	Good	Safety prune	12				885
886	Valley Oak	Good	Safety prune	13				886
887	Valley Oak	Fair	TBD	22		Х	lean	887
888	Valley Oak	Fair	TBD	58	х			888
889	Valley Oak	Good	Safety prune	15				889
890	Valley Oak	Good	Safety prune	16				890
891	Valley Oak	Good	Safety prune	26				891
892	Valley Oak	Fair	TBD	24	х			892
893	, Valley Oak	Good	Safety prune	26	х			893
895	Valley Oak	Good	Safety prune	22				895
896	Valley Oak	Good	Safety prune	12				896

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
897	Valley Oak	Fair	Safety prune	7				897
898	Valley Oak	Good	Safety prune	37				898
899	Valley Oak	Good	Safety prune	39				899
900	Valley Oak	Good	Safety prune	11				900
901	Valley Oak	Good	Safety prune	30				901
902	Valley Oak	Good	Safety prune	12				902
903	Valley Oak	Fair	TBD	26		х	fence intrusion	903
904	Valley Oak	Good	Safety prune	19				904
905	Valley Oak	Good	Safety prune	24				905
906	Valley Oak	Good	Safety prune	24				906
907	Valley Oak	Good	Safety prune	40				907
908	Valley Oak	Good	Safety prune	24				908
909	Valley Oak	Good	Safety prune	32				909
910	Valley Oak	Good	Safety prune	66	х			910
911	Valley Oak	Good	Safety prune	6				911
912	Valley Oak	Good	Safety prune	42	х			912
913	Valley Oak	Good	Safety prune	36	х			913
914	Valley Oak	Good	Safety prune	26				914
915	Valley Oak	Good	Safety prune	16				915
916	Valley Oak	Fair	TBD	17		х	fence intrusion	916
917	Valley Oak	Good	Safety prune	64	х			917
918	Valley Oak	Good	Safety prune	26	х			918
919	Valley Oak	Good	Safety prune	32	х			919
920	Valley Oak	Fair	TBD	14	х	х	fence intrusion	920
921	Valley Oak	Good	Safety prune	34				921
922	Valley Oak	Good	Safety prune	13				922
923	Valley Oak	Good	Safety prune	15				923
924	Valley Oak	Good	Safety prune	17				924
925	Valley Oak	Good	Safety prune	33	х			925
926	Valley Oak	Good	Safety prune	25				926
927	Valley Oak	Good	Safety prune	20	х			927
928	Valley Oak	Good	Safety prune	10				928
929	Valley Oak	Good	Safety prune	14				929
930	Valley Oak	Good	Safety prune	19	х			930
931	Valley Oak	Good	Safety prune	12				931
932	Valley Oak	Good	Safety prune	26	х			932
933	Valley Oak	Good	Safety prune	11				933
934	Valley Oak	Good	Safety prune	15				934
935	Valley Oak	Good	Safety prune	11				935
936	Valley Oak	Good	Safety prune	1/	х			936
937	Valley Oak	Fair	IBD	8		х	bark separated at tree base	937
938	Valley Oak	Good	Safety prune	6				938
939	Valley Oak	Good	Safety prune	13				939
940	Valley Oak	Good	Safety prune	29	x			940
941	Valley Oak	Good	Safety prune	11				941
942	Valley Oak	Good	Safety prune	21	x			942
943	Valley Oak	Good	Safety prune	15			minor fonce intrusion	943
944	Valley Oak	Fair	I BD	44	X	x	minor tence intrusion	944
945	Valley Oak	Good	Safety prune	35 10	X			945
940 070	Valley Odk	Enir		10		~	hark congrated loop function	940 040
948	Valley Oak	Fair	עס ו ריקד	9 15		X	bark separated; rean; rungus	940 0/0
949	Valley Oak	Fair	עס ו חסד	22	~	X	bark separated	949 050
930 051	Valley Oak	Fall	Safety prupo	32	×	X	baik separateu	930 Q51
931	Valley Oak	Enir	Safety prune	00	X	v	fence intrucion	921
952	Valley Odk	Fail	Safety prune	00	X	X	fonce intrusion	322
953	Valley Oak	Epir	Safety prune	54 26	X	X	hark missing at base	905 055
933 0EC	Valley Oak	Fall	Safety prune	10	X	×	naik missilik at nase	933
סכצ	valley Oak	9000	salety prune	10		l I		920

ATTACHMENT B - Barber Yard Table of Surveyed Trees March, April, October 2023; January 8 30, 2024

Tag #	Species	Health	REC	DBH	CD	SD	Notes	Label
957	Valley Oak	Good	Safety prune	14				957
958	Valley Oak	Good	Safety prune	11				958
959	Valley Oak	Good	Safety prune	24	х	х	minor fence intrusion	959
960	Valley Oak	Good	Safety prune	26		х	minor fence intrusion	960
961	Valley Oak	Good	Safety prune	13				961
962	Valley Oak	Fair	Safety prune	14		х	bark separated	962
153	weeping pine	Good	Safety prune	18				153
214	white pine	Good	Safety prune	38				214
215	white pine	Good	Safety prune	40			hazard branch; prune ASAP	215
216	white pine	Good	Safety prune	7				216
217	white pine	Good	Safety prune	23				217
236	white pine	Good	Safety prune	44				236
238	white pine	Good	Safety prune	41				238

To: Gonzales Development Corporation RE: Barber Yard Project Site: Arborist & Preliminary Biological Survey Report- April 2023, Updated as of March 2024



### ATTACHMENT C - SITE PHOTOS





Representative Site Photos PAGE 2 OF 12

## **Healthy Tree Example Photos**







Representative Site Photos PAGE 3 OF 12





Representative Site Photos PAGE 4 OF 12 **ADEMA** Environmental



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Representative Site Photos PAGE 6 OF 12





# Non-Taggable Tree Example Photos









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Representative Site Photos PAGE 7 OF 12





Barber Yard Area Tree Survey Chico, Butte County, CA - January 8, 2024 - Representative Site Photos PAGE 8 OF 12




## Northern Additional Survey Area



**ADEMA** Environmental



Barber Yard Area Tree Survey Chico, Butte County, CA - January 30, 2024 - Representative Site Photos PAGE 9 OF 12





Barber Yard Area Tree Survey Chico, Butte County, CA - February 13, 2024 - Representative Site Photos PAGE 11 OF 12 **ADEMA** Environmental

