Biological Resources Assessment

Valle Vista Properties HAYWARD, ALAMEDA COUNTY, CALIFORNIA

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LIST OF ACRONYMS AND ABBREVIATIONS

ACFCWCD	Alameda County Flood Control and Water Conservation District, Zone 3A		
AWS	Alameda whipsnake		
CCR	California Code of Regulations		
CDFW	California Department of Fish and Wildlife		
CEQA	California Environmental Quality Act		
CFGC	California Fish and Game Code		
CFR	Code of Federal Regulations		
CNDDB	California Natural Diversity Database		
CNPS	California Native Plant Society		
Corps	U.S. Army Corps of Engineers		
DBH	Diameter at Breast Height		
CRLF	California red-legged frog		
Inventory	CNPS Inventory of Rare and Endangered Plants		
MBTA	Migratory Bird Treaty Act		
ISA	International Society of Arboriculture		
Rank	California Rare Plant Rank		
RWQCB	Regional Water Quality Control Board		
USFWS	U.S. Fish and Wildlife Service		
USGS	U.S. Geological Survey		
WBWG	Western Bat Working Group		
WRA	WRA, Inc.		

EXECUTIVE SUMMARY

The purpose of this report is to provide an analysis of potential impacts to sensitive biological resources at the site of the proposed Valle Vista project (Project) located in Hayward, Alameda County, California (Project Area). On April 11, May 11, and May 17, 2016, and June 15, 2017, WRA, Inc. conducted an assessment of biological resources within the Project Area. On June 20, 2017, an International Society of Arboriculture-certified arborist conducted a survey of the Project Area following the City of Hayward Tree Preservation Ordinance, and the results are incorporated into this report. The Project Area consists of approximately 25.76 acres of urban infill land located within a developed portion of the city of Hayward. One sensitive biological community was observed in the Project Area: 0.59 acre of Alameda County Flood Control Channel. Based on a review of relevant resources and the types and condition of biological communities observed at the site, it was determined that no special-status plant species have a moderate or high potential to occur in the Project Area. However, it was determined that three special-status wildlife species have moderate or high potential to occur within the Project Area. These species include pallid bat (Antrozous pallidus), white-tailed kite (Elanus leucurus), and Allen's hummingbird (Selasphorus sasin). In addition, 94 trees protected under the City of Hayward Tree Preservation Ordinance are present in the Project Area.

The proposed Project work involves the construction of a mixed residential and commercial development project consisting of 472 residential units, approximately 20,000 square feet of retail, and landscaped recreational park space. The Project will include the construction of two pedestrian footbridges that span the Alameda Creek Flood Control Channel in order to provide connectivity to Project features located on opposite sides of the channel. The proposed work will result in the removal of 94 protected trees and will require a tree removal permit from the City of Hayward.

With the implementation of proactive Project design elements as well as recommended avoidance, minimization, and mitigation measures, the Project is not expected to adversely effect any sensitive biological communities or listed, candidate, or other special-status plant or wildlife species. In addition, with the implementation of the measures described in the tree removal permit, impacts to protected trees will be mitigated for, resulting in no net tree loss.

1.0 INTRODUCTION

On April 11, May 11, and May 17, 2016, and June 15, 2017, WRA, Inc. (WRA) performed an assessment of biological resources at the site of the proposed Valle Vista project (Project) located in Hayward, Alameda County, California (Project Area, Figure 1). On June 20, 2017, an International Society of Arboriculture (ISA)-certified arborist conducted a survey of the Project Area following the City of Hayward Tree Preservation Ordinance, and the results are incorporated into this report. This report describes the results of the site visits, which assessed the Project Area for the (1) potential to support special-status plant or wildlife species and (2) presence of other sensitive biological resources protected by local, state, or federal laws and regulations. The regulatory framework of this biological resources assessment is provided in Section 2.0 of this report. The methods used in the assessment are described in Section 3.0, and the results of the site visit are presented in Section 4.0. A summary of the sensitive biological resources observed or with potential to occur at the site is provided in Section 5.0. Section 5.0 also includes a summary of the permits that may be necessary for the Project. A description of the proposed Project and an evaluation of potential impacts to special-status species and sensitive biological resources that could occur as a result of the proposed Project, including potential avoidance and minimization measures and recommended mitigation measures, are provided in Section 6.0.

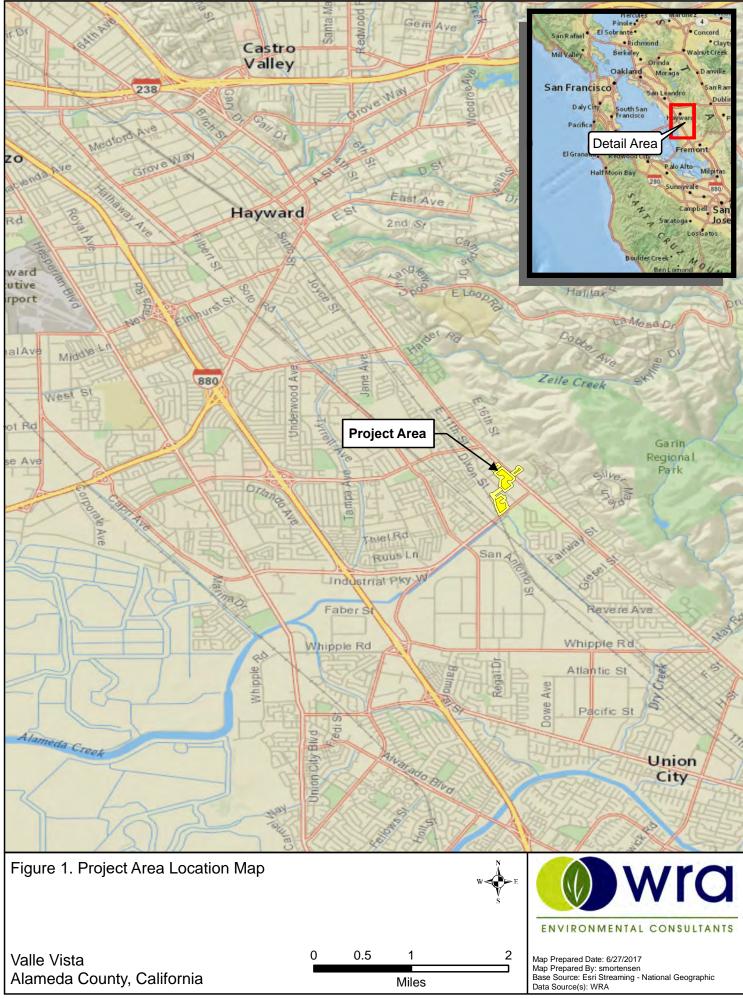
A biological resources assessment provides general information on the potential presence of sensitive species and habitats. The biological assessment is not an official protocol-level survey for listed species; however, if special-status species were observed during the site visit, their presence was recorded. Specific findings on the habitat suitability or presence of special-status species or sensitive habitats may require that protocol-level surveys be conducted for Project approval by local, state, or federal agencies. This assessment is based on information available at the time of the study and on site conditions that were observed on the date of the site visit.

2.0 REGULATORY BACKGROUND

The following sections describe the regulatory context of the biological assessment, including applicable laws and regulations that were applied to the field investigations and analysis of potential Project impacts.

2.1 Sensitive Biological Communities

Sensitive biological communities include habitats that fulfill special functions or have special values, such as wetlands, streams, or riparian habitat. These habitats are protected under federal regulations such as the Clean Water Act; state regulations such as the Porter-Cologne Act, the California Fish and Game Code, and the California Environmental Quality Act (CEQA); or local ordinances and policies such as city or county Tree Ordinances, Special Habitat Management Areas, General Plans, Natural Community Conservation Plans, and Habitat Conservation Plans.



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Waters of the United States

The U.S. Army Corps of Engineers (Corps) regulates "Waters of the United States" under Section 404 of the Clean Water Act. Waters of the U.S. are defined in the Code of Federal Regulations (CFR) as waters susceptible to use in commerce, including interstate waters and wetlands, all other waters (intrastate waterbodies, including wetlands), and their tributaries (33 CFR 328.3). Potential wetland areas, according to the three criteria used to delineate wetlands as defined in the *Corps of Engineers Wetlands Delineation Manual* (Corps Manual; Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual*: Arid *West Region Supplement* (Arid West Supplement; Corps 2008), are identified by the presence of (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. Areas that are inundated at a sufficient depth and for a sufficient duration to exclude growth of hydrophytic vegetation are subject to Section 404 jurisdiction as "other waters" and are often characterized by an ordinary high water mark. Other waters, for example, generally include lakes, rivers, and streams. The placement of fill material into Waters of the U.S generally requires an individual or nationwide permit from the Corps under Section 404 of the Clean Water Act.

Waters of the State

The term "Waters of the State" is defined by the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." The Regional Water Quality Control Board (RWQCB) protects all waters in its regulatory scope and has special responsibility for wetlands, riparian areas, and headwaters. These waterbodies have high resource value, are vulnerable to filling, and are not systematically protected by other programs. RWQCB jurisdiction includes "isolated" wetlands and waters that may not be regulated by the Corps under Section 404. Waters of the State are regulated by the RWQCB under the State Water Quality Certification Program which regulates discharges of fill and dredged material under Section 401 of the Clean Water Act and the Porter-Cologne Water Quality Control Act. Projects that require a Corps permit, or fall under other federal jurisdiction, and have the potential to impact Waters of the State, are required to comply with the terms of the Water Quality Certification determination. If a proposed project does not require a federal permit but does involve dredge or fill activities that may result in a discharge to Waters of the State, the RWQCB has the option to regulate the dredge and fill activities under its state authority in the form of Waste Discharge Requirements.

Streams, Lakes, and Riparian Habitat

Streams and lakes, as habitat for fish and wildlife species, are subject to jurisdiction by the California Department of Fish and Wildlife (CDFW) under Sections 1600-1616 of California Fish and Game Code. Alterations to or work within or adjacent to streambeds or lakes generally require a 1602 Lake and Streambed Alteration Agreement. The term "stream", which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life [including] watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). In addition, the term "stream" can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife (CDFG 1994). The term "riparian" is defined as "on, or pertaining to, the banks of a stream." Riparian vegetation is defined as "vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the

stream itself" (CDFG 1994). Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from the CDFW.

Other Sensitive Biological Communities

Other sensitive biological communities not discussed above include habitats that fulfill special functions or have special values. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by the CDFW. The CDFW ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in its California Natural Diversity Database (CNDDB; CDFW 2017). Vegetation alliances in the CNDDB are ranked 1 through 5 based on NatureServe's (2017) methodology, with those alliances ranked globally (G) or statewide (S) as 1 through 3 considered sensitive. Impacts to sensitive natural communities identified in local or regional plans, policies, or regulations or those identified by the CDFW or the U.S. Fish and Wildlife Service (USFWS) must be considered and evaluated under CEQA. Specific habitats may also be identified as sensitive in city or county general plans or ordinances.

2.2 Special-Status Species

Special-status species include those plant and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the federal Endangered Species Act or the California Endangered Species Act. These acts afford protection to both listed and proposed species. In addition, the CDFW Species of Special Concern, which are species that face extirpation in California if current population and habitat trends continue, USFWS Birds of Conservation Concern, and CDFW special-status invertebrates are all considered special-status species. Although CDFW Species of Special Concern generally have no special legal status, they are given special consideration under CEQA. In addition to regulations for special-status species, most birds in the United States, including non-status species, are protected by the Migratory Bird Treaty Act (MBTA) of 1918. Under this legislation, deliberately destroying active nests, eggs, and young is illegal. Plant species listed in the California Native Plant Society (CNPS) Rare and Endangered Plant Inventory (Inventory; CNPS) 2017a) with California Rare Plant Ranks (Rank) of 1, 2, or 3 are also considered special-status plant species and must be considered under CEQA. Rank 4 species are afforded reduced to no protection under CEQA but are included in this analysis for completeness. A description of the CNPS Ranks and associated threat codes is provided below in Table 1.

California Rare Plant Ranks (formerly known as CNPS Lists)				
Rank 1A	Presumed extirpated in California and either rare or extinct elsewhere			
Rank 1B	Rare, threatened, or endangered in California and elsewhere			
Rank 2A	Presumed extirpated in California, but more common elsewhere			
Rank 2B Rare, threatened, or endangered in California, but more common elsev				
Rank 3	Plants about which more information is needed - A review list			
Rank 4	Plants of limited distribution - A watch list			
Threat Ran	Threat Ranks			
0.1	Seriously threatened in California			
0.2	Moderately threatened in California			
0.3	Not very threatened in California			

 Table 1. Description of CNPS ranks and threat codes

2.3 Relevant Local Policies, Ordinances, Regulations

City of Hayward Tree Preservation Ordinance

The City of Hayward Tree Preservation Ordinance encourages the preservation and avoidance of trees during development projects. The City of Hayward Municipal Code, Chapter 10 Article 15, declares it unlawful to remove, destroy, cut branches over 1 inch diameter, disfigure or cause to be removed or destroyed any protected tree within the City without first obtaining a Tree Removal and Cutting Permit. Protected trees are defined as those with a minimum diameter at breast height (DBH) of 8 inches, street trees, memorial trees dedicated by a City-recognized entity, specimen trees that define a neighborhood or community, and those trees planted to replace a protected tree. In addition, most native trees, such as but not limited to native oaks (*Quercus* spp.) and California bay (*Umbellularia californica*), are protected when they measure at least 4 inches DBH. Trees located on developed single-family residential lots that cannot be further subdivided are exempt from the ordinance, unless such trees have been required or are protected as a condition of previous permit approvals.

3.0 METHODS

On April 11, May 11, and May 17, 2016, the Project Area was traversed on foot to determine (1) the plant communities present within the Project Area, (2) whether existing conditions at the site provide potentially suitable habitat for any special-status plant or wildlife species, and (3) whether sensitive biological communities are present. On June 20, 2017, an ISA-certified arborist conducted a survey of the Project Area following the City of Hayward Tree Preservation Ordinance. All plant and wildlife species encountered were recorded and are summarized in Appendix A. Plant nomenclature follows the Jepson eFlora (Jepson Flora Project 2017), except where noted. For cases in which regulatory agencies, CNPS, or other entities base rarity on older taxonomic treatments, precedence was given to the treatment used by those entities.

3.1 Biological Communities

Prior to the site visit, soil survey data for Alameda County (CSRL 2017, USDA 1981), were examined to determine whether any unique soil types capable of supporting sensitive plant communities or aquatic features have been mapped in the Project Area. Additional sources, such as U.S. Geological Survey (USGS) 7.5-minute quadrangle maps for Hayward quadrangle and three surrounding quadrangles with similar habitat (USGS 2015a-d) and available aerial imagery (Google Earth 2017, NETR 2017) were also reviewed to determine the potential for sensitive biological communities to occur in the Project Area. Biological communities were primarily classified based on existing descriptions found in *A Manual of California Vegetation, Online Edition* (CNPS 2017b). However, in some cases it was necessary to identify variants of community types or to describe non-vegetated areas that are not described in the literature. Biological communities were classified as sensitive or non-sensitive as defined by CEQA and other applicable laws and regulations.

3.1.1 Non-Sensitive Biological Communities

Non-sensitive biological communities are those communities that are not afforded special protection under CEQA, or other state, federal, or local laws, regulations, or ordinances. These communities may, however, provide suitable habitat for some special-status plant or wildlife species. Non-sensitive biological communities observed in the Project Area are described in Section 4.1.1, below.

3.1.2 Sensitive Biological Communities

Sensitive biological communities are defined as those communities that are afforded special protection under CEQA or other applicable federal, state, or local laws, regulations or ordinances. Applicable laws and ordinances are discussed above in Section 2.0. Special methods used to identify sensitive biological communities are discussed below. Descriptions of sensitive biological communities observed in the Project Area are provided in Section 4.1.2

Wetlands and Non-Wetland Waters

The Study Area was assessed for the presence of any wetlands and waters potentially subject to jurisdiction by the Corps, RWQCB, or CDFW. The assessment was based primarily on the presence of wetland plant indicators but may also include any observed indicators of wetland hydrology or wetland soils. Any potential wetland areas were identified as areas dominated by plant species with a wetland indicator status¹ of OBL, FACW, or FAC as given on the Corps National Wetlands Plant List (Lichvar et al. 2016). Evidence of wetland hydrology can include direct evidence (primary indicators), such as visible inundation or saturation, algal mats, and oxidized root channels, or indirect (secondary) indicators, such as a water table within two feet of the soil surface during the dry season. Some indicators of wetland soils include dark colored soils, soils with a sulfidic odor, and soils that contain redoximorphic features as defined by the Corps Manual (Environmental Laboratory 1987) and the Arid West Supplement (Corps 2008).

¹ OBL = Obligate, always found in wetlands (> 99% frequency of occurrence); FACW = Facultative wetland, usually found in wetlands (67-99% frequency of occurrence); FAC = Facultative, equal occurrence in wetland or non-wetlands (34-66% frequency of occurrence).

The preliminary waters assessment was based primarily on the presence of unvegetated, ponded areas or flowing water, or evidence indicating their presence such as a high water mark or a defined drainage course. Collection of additional data will be necessary to prepare a delineation report suitable for submission to the Corps.

Other Sensitive Biological Communities

The Project Area was evaluated for the presence of other sensitive biological communities, including sensitive plant communities recognized by the CDFW. Prior to the site visit, aerial imagery (Google Earth 2017, NETR 2017), soil survey data (CSRL 2017, USDA 1981), and *A Manual of California Vegetation, Online Edition* (CNPS 2017b) were reviewed to assess the potential for sensitive biological communities to occur in the Project Area. All alliances within the Project Area with a ranking of 1 through 3 were considered sensitive biological communities. Sensitive biological communities identified in the Project Area are described in Section 4.1.2, below.

3.2 Special-Status Species

3.2.1 Literature Review

The potential for special-status plant and wildlife species to occur in the Project Area was evaluated by first determining which special-status species have been documented from within the vicinity of the Project Area through a literature and database search. Database searches for known occurrences of special-status species focused on the USGS 7.5-minute maps for the Hayward quadrangle and the three adjacent quadrangles with similar habitats: Newark, Niles, and San Leandro (USGS 2015a-d). The following sources were reviewed to determine which special-status plant and wildlife species have been documented from the referenced quadrangles:

- CNDDB records (CDFW 2017)
- USFWS Information for Planning and Conservation Report (USFWS 2017)
- eBird records (eBird 2017)
- CNPS Inventory records (CNPS 2017a)
- CDFW publication *California Bird Species of Special Concern* (Shuford and Gardali 2008)
- CDFW publication *California's Wildlife, Volumes I-III* (Zeiner et al. 1990)
- CDFW and University of California Press publication *California Amphibian and Reptile Species of Special Concern* (Thomson et al. 2016)
- A Field Guide to Western Reptiles and Amphibians (Stebbins 2003)
- Alameda County Breeding Bird Atlas (Richmond et al 2011)
- Western Bat Working Group (WBWG), species accounts (WBWG 2017)

3.2.2 Site Assessment

Following the database and literature review, a site visit was made to the Project Area to identify the biological communities present and to assess their condition. Habitat conditions observed in the Project Area were used to evaluate the potential for special-status plant or wildlife species to occur there. This assessment was based on conditions observed at the site, the results of the database and literature review, and the professional expertise of the investigating qualified biologists. The potential for each special-status species to occur in the Project Area was ranked based on the following criteria:

- <u>No Potential</u>. Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).
- <u>Unlikely</u>. Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- <u>Moderate Potential</u>. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- <u>High Potential</u>. All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- <u>Present</u>. Species was observed during the site visit or has been recently recorded from the site.

The site assessment is intended to identify the presence or absence of suitable habitat for each special-status species known to occur in the vicinity of the Project Area. The site visit does not constitute a protocol-level survey and is not intended to determine the actual presence or absence of a species; however, if a special-status species was observed during the site visit, its presence was recorded and is discussed in Section 4.3, below. In cases where little information is known about occurrences or habitat requirements of special-status species known to occur in the vicinity, the species evaluation was based on the best professional judgment of gualified WRA biologists with experience working with the species or habitats in question. If necessary, recognized experts in individual species biology were contacted to obtain the most up to date information regarding species biology and ecology. For some species, a site assessment at the level conducted for this report may not be sufficient to determine presence or absence of a species to the specifications required by regulatory agencies. In these cases, a species may be assumed to be present or further protocol-level special-status species surveys may be necessary. Special-status species for which further protocol-level surveys may be necessary are described below in Section 5.0. Any potential effects to special-status species with potential to occur within the Project Area are addressed by the avoidance, minimization, and mitigation measures described below in Section 6.3.

3.3 Protected Trees

An ISA-certified aborist traversed the Project Area on foot to evaluate, identify, and inventory all protected trees as defined by the City of Hayward Tree Protection Ordinance. Locations of surveyed trees within the Project Area were recorded using a handheld GPS unit with sub-meter accuracy, and each surveyed tree was given an aluminum tree tag with a unique identification number. Information including species and DBH was recorded. A survey report that includes more detailed methods is included as Appendix D.

4.0 RESULTS

The following sections present the results of the biological resources assessment within the Project Area. Plant and wildlife species observed in the Project Area during the site visit are listed in Appendix A. Representative photographs of the Project Area are provided in Appendix C.

The Project Area consists of approximately 25.76 acres of urban infill land located within a commercially and residentially developed portion of the City of Hayward, along Mission Boulevard and Industrial Parkway. The Project Area is bounded by Mission Boulevard, residential development, and undeveloped land to the northeast; residential and commercial development and railroad to the northwest and west; and Industrial Boulevard to the south.

The Project Area consists of four lots separated by paved roads. The majority of the Project Area is characterized by weedy, undeveloped areas, though some portions include existing residences, paved and unpaved parking areas, and a small park (Valle Vista Park). Portions of the southernmost parcel are used as a parking lot for the Pacific Truck Driving School and as a materials handling yard by Waste Management. Based on historic aerial imagery (NETR 2017), all of the currently undeveloped areas appear to have historically been used for agriculture or were developed, but the historic structures have since been demolished or have collapsed and agricultural activities have ceased. In the centrally located lot within the Project Area, there is an engineered flood control channel managed by the Alameda County Flood Control and Water Conservation District, Zone 3A (ACFCWCD), that provides drainage to Mission Boulevard and exits the Project Area to the southwest via a culvert under Dixon Street. Based on historic aerial imagery (NETR 2017), this flood control channel was installed sometime between 1960 and 1966. Flood control channels are typically created and maintained to enhance flood control capacity, and during the June 2017 site visits, evidence of weed whacking on the channel's banks was observed.

Elevations in the Project Area range from approximately 15 to 45 feet above sea level, though the site is generally flat, with most of the elevation change resulting from the small slope in the easternmost lot. Scattered volunteer non-native or remnant landscape trees are present, though the majority of the Project Area is characterized by non-native annual species typical of disturbed urban areas. A linear, perennial wetland is present within the flood control channel.

The proposed Project is a mixed residential and commercial development project consisting of 472 residential units, approximately 20,000 square feet of retail, and landscaped recreational park space. The entirety of the Project Area will be developed as part of the Project, with the exception of the Alameda County Flood Control Channel, which will be avoided by locating all ground disturbing utilities and infrastructure improvements outside (landward) of the feature, including the perennial wetland and top of bank locations. However, to provide connectivity between park, residential, and commercial areas on either side of it, the channel top of bank will be spanned by two pedestrian footbridges. The canal bridge improvements would avoid the bed and bank of the flood channel and include design elements to catch debris from the bridge. The Project also includes installation of a 10-inch sanitary sewer line in Village PA2 that will be jack and bored under the flood channel. The bore pit and receiving pit used to install the sanitary sewer line will be sighted in upland locations outside of the channel top of bank location. The jack and bore installation will therefore include construction methods that would avoid any discharges to the flood channel with no ground disturbance to occur within the bed and bank of the flood channel. Additional details of the proposed Project are included in Section 6.1. A land use plan diagram of the proposed Project is included as Appendix E.

4.1 Biological Communities

Non-sensitive biological communities observed in the Project Area included developed land and non-native grassland. Additionally, one sensitive biological community was observed in the Project Area: the Alameda County Flood Control Channel. Descriptions for each biological community are contained in the following sections. Biological communities within the Project Area are summarized in Table 2 and shown in Figure 2.

Community Type	Area (acres)	
Non-Sensitive Biological Communities		
Developed Land	10.83	
Non-Native Grassland	14.34	
Sensitive Biological Communities		
Alameda County Flood Control Channel	0.59	
Total Project Area Size	25.76	

4.1.1 Non-Sensitive Biological Communities

Developed Land

Although not described in *A Manual of California Vegetation, Online Edition* (CNPS 2017b), developed land observed within the Project Area included a mix of areas that are generally lacking in natural vegetation as a result of active or recent anthropogenic activity. Such areas include paved and gravel parking areas, roads, residential houses, Valle Vista Park, a garbage dump, and a large fill mound. Though developed land was generally unvegetated, ornamental landscape plants were present in some areas, particularly around the houses and in Valle Vista Park. In areas where anthropogenic disturbance is less frequent, non-native annual species typical of ruderal conditions are present, including ripgut brome (*Bromus diandrus*), black mustard (*Brassica nigra*), slim oat (*Avena barbata*), Italian thistle (*Carduus pycnocephalus*), rose clover (*Trifolium hirtum*), and California bur clover (*Medicago polymorpha*).

Non-Native Grassland

Non-native grasslands are known throughout California on all aspects and topographic positions underlain by a variety of substrates. In the Project Area, non-native grasslands are composed of several vegetation alliances, though none are large enough to map separately. These alliances include annual brome grasslands (*Bromus* [*diandrus, hordeaceus*] – *Brachypodium distachyon* Herbaceous Alliance), wild oats grasslands (*Avena* [*barbata, fatua*] Herbaceous Alliance), and upland mustards (*Brassica nigra* and other mustards Herbaceous Alliance). Non-native grassland occurs in empty lots that may occasionally be mowed or disced but have not experienced a substantial level of disturbance to prevent the establishment of a continuous vegetative cover.



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Scattered volunteer or remnant landscape trees are present at low cover, including Canary Island date palm (*Phoenix canariensis*), blackwood acacia (*Acacia melanoxylon*), glossy privet (*Ligustrum lucidum*.), Peruvian peppertree (*Schinus molle*), and holly oak (*Quercus ilex*). There is no shrub canopy, although occasional shrub individuals are sparsely present, including coyote brush (*Baccharis pilularis*), Himalayan blackberry (*Rubus armeniacus*), and cotoneaster (Cotoneaster sp.). The herbaceous canopy consists of a dense mix of non-native species, primarily annuals, including ripgut brome, black mustard, slim oat, Italian thistle, chicory (Cichorium intybus), bristly ox-tongue (Helminthotheca echioides), and wild radish (Raphanus sativus).

4.1.2 Sensitive Biological Communities

Alameda County Flood Control Channel

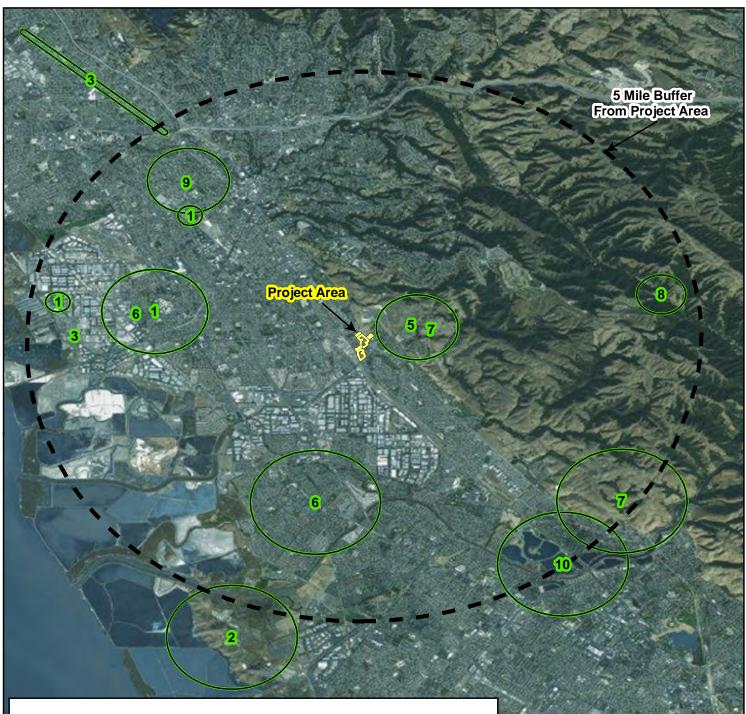
As stated above, the Alameda County Flood Control Channel is an engineered trapezoidal channel managed by the ACFCWCD that is present in the central lot of the Project Area. The channel appears be perennially inundated and/or saturated from the underground storm drain system, but based on the dense vegetation present and lack of scour indicators, flows do not appear to be strong. At the bottom of the channel is a narrow band of dense herbaceous wetland vegetation dominated by watercress (*Nasturtium officinale*), rabbit's foot grass (*Polypogon monspeliensis*), and Italian ryegrass (*Festuca perennis*). Based on the presence of wetland vegetation and perennial inundation and/or saturation, this area would meet the three wetland criteria described in the Corps Manual (Environmental Laboratory 1987) and is potentially subject to jurisdiction by the Corps and RWQCB as a perennial freshwater marsh.

Both banks of the channel above the perennial wetland are characterized by dense, herbaceous, upland vegetation similar to those observed in non-native grassland, including ripgut brome, slim oat, and soft chess (*Bromus hordeaceus*). At the time of the June 2017 site visits, vegetation on the entirety of the southeast bank of the channel had been mowed as part of channel maintenance activity. Although the vegetation between the perennial wetland and the top of bank of the channel do not meet wetland criteria, RWQCB and CDFW jurisdiction typically extends to the top of bank of channelized features absent riparian vegetation extending further into uplands, as in the present case, and therefore the Alameda County Flood Control channel is potentially subject to jurisdiction by the RWQCB and CDFW.

4.2 Special-Status Species

4.2.1 Special-Status Plants

Based upon a review of the resources and databases listed in Section 3.2.1, it was determined that 35 special-status plant species have been documented from within the vicinity of the Project Area. Appendix B summarizes the potential for these species to occur in the Project Area. Based on the resources reviewed and the types and condition of habitats observed at the site, it was determined that no special-status plant species have a moderate to high potential to occur in the Project Area. No special-status plant species were observed in the Project Area during the site visits. Special-status plant species that have been documented in the CNDDB within a 5-mile radius of the Project Area are depicted below in Figure 3.



- 1, alkali milk-vetch
- 2, chaparral ragwort
- 3, Congdon's tarplant
- 4, Contra Costa goldfields
- 5, Diablo helianthella

- 6, hairless popcornflower
- 7, most beautiful jewelflower
- 8, Oregon polemonium
- 9, Santa Cruz tarplant
- 10, slender-leaved pondweed

Figure 3. CNDDB Special Status Plant Species Within a 5-Mile Radius of Project Area

Valle Vista Alameda County, California 1 2 Miles

Map Prepared Date: 6/27/2017 Map Prepared By: smortensen Base Source: Esri Streaming - National Geographic Data Source(s): WRA, CNDDB Jun17

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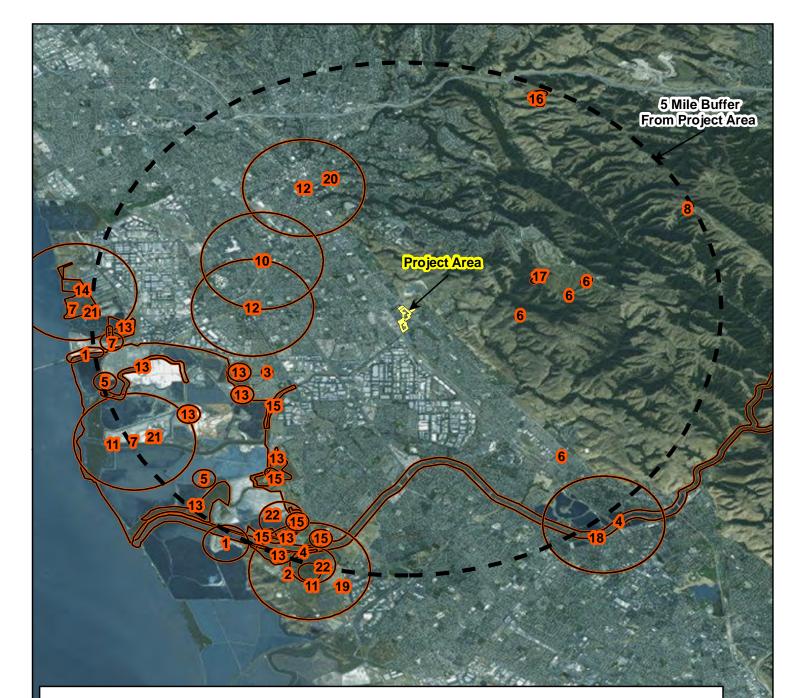
For 24 of the 35 special-status plant species listed in Appendix B, suitable habitat such as cismontane woodland, scrub, and salt marsh habitats or habitats containing serpentine soils were absent from the Project Area. Based on the lack of suitable habitat, it was determined that these species had no potential to occur at the site: alkali milk-vetch (Astragalus tener var. tener, Rank 1B.2), chaparral harebell (Campanula exigua; Rank 1B.2), Congdon's tarplant (Centromadia parryi ssp. congdonii; Rank 1B.1), Point Reyes bird's-beak (Chloropyron maritimum ssp. palustre; Rank 1B.2), robust spineflower (Chorizanthe robusta var. robusta; Federal Endangered, Rank 1B.1), Santa Clara red ribbons (Clarkia concinna ssp. automixa; Rank 4.3), western leatherwood (Dirca occidentalis; Rank 1B.2), Hoover's button-celery (Eryngium aristulatum var. hooveri, Rank 1B.1), Jepson's coyote thistle (E. jepsonii; Rank 1B.2), San Joaquin spearscale (Extriplex joaquinana; Rank 1B.2), dark-eved gilia (Gilia millefoliata; Rank 1B.2), Loma Prieta hoita (Hoita strobilina; Rank 1B.1), Kellogg's horkelia (Horkelia cuneata var. sericea; Rank 1B.1), Contra Costa goldfields (Lasthenia conjugens; Federal Engandered, Rank 1B.1), San Antonio Hills monardella (Monardella antonina ssp. antonina; Rank 3), woodland woollythreads (Monolopia gracilens; Rank 1B.2), Patterson's navarretia (Navarretia paradoxiclara; Rank 1B.3). Michael's rein orchid (Piperia michaelii; Rank 4.2), hairless popcornflower (Plagiobothrys glaber, Rank 1A), Marin knotweed (Polygonum marinense; Rank 1B.2), chaparral ragwort (Senecio aphanactis; Rank 2B.2). most beautiful jewelflower (Streptanthus albidus ssp. peramoenus; Rank 1B.2), California seablite (Suaeda californica: Federal Endangered, Rank 1B.1), saline clover (Triolium hydrophilum; Rank 1B.2).

For other species listed in Appendix B, some elements of preferred habitat, such as grasslands or perennial wetland, were present at the site; however, these habitats were degraded, and in the case of the perennial wetland habitat, too heavily vegetated and shallow. Based on the degraded and/or otherwise unsuitable nature of habitats at the site, it was determined that these species were unlikely to occur there. Such species included: bent-flowered fiddleneck (*Amsinckia lunaris*; Rank 1B.2), big-scale balsamroot (*Balsamorhiza macrolepis*; Rank 1B.2), Oakland star-tulip (*Calochortus umbellatus*; Rank 4.2), johnny-nip (*Castilleja ambigua* var. *ambigua*; Rank 4.2), fragrant fritillary (*Fritillaria liliacea*; Rank 1B.2), Diablo helianthella (*Helianthella castanea*; Rank 1B.2), Santa Cruz tarplant (*Holocarpha macradenia*; Federal Threatened, State Endangered, Rank 1B.1), bristly leptosiphon (*Leptosiphon acicularis*; Rank 4.2), Lobb's aquatic buttercup (*Ranunculus lobbii*; Rank 4.2), adobe sanicle (*Sanicula maritima*; State Rare, Rank 1B.1), and slender-leaved pondweed (*Stuckenia filiformis* ssp. *alpina*, Rank 2B.2).

4.2.2 Special-Status Wildlife

Based upon a review of the resources and databases listed in Section 3.2.1, it was determined that 41 special-status wildlife species have been documented within the vicinity of the Project Area. Special-status wildlife species documented in the CNDDB from within 5 miles of the Project Area and that have publically available location information are shown in Figure 4. Appendix B summarizes the potential for each of these species to occur in the Project Area. Three special-status wildlife species were determined to have a moderate to high potential to occur within the Project Area. No special-status wildlife species were observed in the Project Area during the site assessment.

Of the 41 special-status wildlife species listed in Appendix B, it was determined that 17 have no potential to occur at the site, 21 are unlikely to occur, and three have moderate potential to occur. The 17 species determined to have no potential to occur at the site require habitat elements which are absent from the site such as pickleweed (*Salicornia pacifica*), chaparral, streams, dense riparian vegetation, east-facing slopes, hilltops, open grasslands, woodlands, forests, sandy beaches, salt ponds, or alkali flats. For the 21 species determined to be unlikely to occur at the



- 1, Alameda song sparrow
- 2, bank swallow
- 3, burrowing owl
- 4, California black rail
- 5, California least tern
- 6, California red-legged frog
- 7, California Ridgway's rail
- 8, California tiger salamander

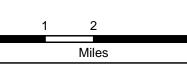
- 9, golden eagle
- 10, hoary bat
- 11, northern harrier
- 12, pallid bat
- 13, salt-marsh harvest mouse
- 14, salt-marsh wandering shrew
- 15, saltmarsh common yellowthroat
- 16, San Francisco dusky-footed woodrat

- 17, sharp-shinned hawk
- 18, steelhead central California coast DPS
- 19, tricolored blackbird
- 20, western mastiff bat
- 21, western snowy plover
- 22, white-tailed kite

4



Valle Vista Alameda County, California





Map Prepared Date: 7/6/2017 Map Prepared By: smortensen Base Source: Esri Streaming - National Geographic Data Source(s): WRA, CNDDB Jun17

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site, some elements of suitable habitat may be present (e.g., perennial wetland); however, the high disturbance levels surrounding the site and the generally degraded condition of habitat within the site generally preclude their presence.

Three special-status wildlife species were identified as having moderate potential to occur within the Project Area. One of these species, pallid bat (Antrozous pallidus), is found in a variety of habitats and may roost on and within buildings such as the building located within the northwest portion of the Project Area. Demolition of this building could disturb potential roosts within the complex. White-tailed kite (*Elanus leucurus*) and Allen's hummingbird (*Selasphorus sasin*) were determined to have a moderate potential to occur within the Project Area due to the presence of ornamental landscaped trees of sufficient size to support nesting and the species' generalist foraging requirements.

Species with Moderate Potential to Occur in the Project Area

As noted above, one bat species and two bird species were determined to have a moderate potential to occur within or immediately adjacent to the Project Area: pallid bat, white-tailed kite, and Allen's hummingbird. These species and their potential to occur in the Project Area are discussed in more detail in the following sections.

Pallid bat (*Antrozous pallidus***); CDFW Species of Special Concern, WBWG High Priority.** Pallid bat is distributed from southern British Columbia and Montana to central Mexico, and east to Texas, Oklahoma, and Kansas. This species occurs in a number of habitats ranging from rocky arid deserts to grasslands and into higher elevation coniferous forests. The species is most abundant in arid Sonoran habitats below 6,000 feet, but has been found up to 10,000 feet in the Sierra Nevada. Pallid bat often roosts in colonies of between 20 to several hundred individuals. Roosts are typically located in rock crevices, tree hollows, mines, caves, and a variety of manmade structures, including vacant and occupied buildings. Tree roosting has been documented in large conifer snags, inside basal hollows of coast redwood (*Sequoia sempervirens*) and giant sequoia (*Sequoiadendron giganteum*), and within bole cavities in oak trees. They have also been reported roosting in stacks of burlap sacks and stone piles. Pallid bat are primarily insectivorous, feeding on large prey that is taken on the ground, or sometimes in flight. Prey items include arthropods such as scorpions, ground crickets, and cicadas (WBWG 2017).

The buildings located in the northwesternmost portion of the Project Area may provide habitat to roosting pallid bats. Entry and egress points to these buildings could not be determined at the time of the June 15 site visit. Demolition of these buildings has potential to impact roosting pallid bats.

White-tailed kite (*Elanus leucurus*). CDFW Fully Protected Species. The white-tailed kite is resident in open to semi-open habitats throughout the lower elevations of California, including grasslands, savannahs, woodlands, agricultural areas and wetlands. Vegetative structure and prey availability seem to be more important habitat elements than associations with specific plants or vegetative communities (Dunk 1995). Nests are constructed mostly of twigs and placed in trees, often at habitat edges. Nest trees are highly variable in size, structure, and immediate surroundings, ranging from shrubs to trees greater than 150 feet tall (Dunk 1995). This species preys upon a variety of small mammals, as well as other vertebrates and invertebrates.

The ornamental landscaped trees within the Project Area provide potential nesting habitat for white-tailed kite. In addition, the grasslands provide potential foraging habitat and access to further foraging to the east of the Project Area. Removal of trees within the Project Area during

the nesting bird season (February 1 through August 15) has the potential to impact white-tailed kite.

Allen's hummingbird (*Selasphorus sasin*). USFWS Bird of Conservation Concern. Allen's hummingbird, common in many portions of its range, is a summer resident along the majority of California's coast and a year-round resident in portions of coastal southern California and the Channel Islands. Breeding occurs in association with the coastal fog belt, and typical habitats used include coastal scrub, riparian, woodland and forest edges, and eucalyptus and cypress groves (Mitchell 2000). It feeds on nectar, as well as insects and spiders.

The ornamental landscaped trees and shrubs within the Project Area provide nesting habitat for Allen's hummingbird. In addition, flowering shrubs and nearby vegetation provide foraging habitat and access to further foraging in surrounding habitat. Removal of trees within the Project Area during the nesting bird season (February 1 through August 15) has the potential to impact Allen's hummingbird.

Listed Species Unlikely to Occur in the Project Area

Federal or state listed species that have been documented from within the vicinity of the Project Area but which are unlikely to occur at the site include: bald eagle (*Haliaeetus leucocephalus*), California red-legged frog (CRLF; *Rana draytonii*), and Alameda whipsnake (AWS; *Masticophis lateralis euryxanthus*). Based on the results of the database and literature review and on habitat conditions observed at the site, it was determined that these species are unlikely to occur within the Project Area. These species are discussed in more detail below.

Bald eagle (*Haliaeetus leucocephalus*), State Endangered, CDFW Fully Protected Species, USFWS Bird of Conservation Concern. The bald eagle occurs primariy as a winter visitor but also as a year-round (breeding) resident throughout most of California. Habitat is somewhat variable, but the species is usually strongly associated with larger bodies of water including lakes, reservoirs, major river systems, estuaries, and the ocean. Breeding occurs primarily in forested areas near water bodies; wintering habitat is more general, though water is usually present. The huge nests are typically built in in the upper portions of large, live trees that provide dominant views of surrounding areas (Buehler 2000). Bald eagles are highly opportunistic foragers; fishes and waterfowl are usually favored, but a variety of live prey and carrion are consumed.

The Project Area is not near any lake or reservoir habitat that could support nesting. However, this species has historically nested and been documented recently within the county and may occasionally forage or disperse through the Project Area (eBird 2017, Richmond et al 2011).

California red-legged frog (*Rana draytonii***), Federal Threatened Species, CDFW Species of Special Concern.** CRLF is dependent on suitable aquatic, estivation, and upland habitat. During periods of wet weather, starting with the first rainfall in late fall, CRLF disperse away from their estivation sites to seek suitable breeding habitat. Aquatic and breeding habitat is characterized by dense, shrubby, riparian vegetation and deep, still or slow-moving water. Breeding occurs between late November and late April. CRLF estivate (period of inactivity) during the dry months in small mammal burrows, moist leaf litter, incised stream channels, and large cracks in the bottom of dried ponds.

The Project Area does not contain suitable ponding aquatic features to support breeding in this species and is not interconnected with other aquatic habitat. The nearest documented occurrence is approximately 2 miles east of the Project Area in marginal habitat where breeding was not observed (CDFW 2017). Furthermore, the Project Area is surrounded on three sides by

development, precluding its use as a movement corridor to other suitable habitats. For these reasons, CRLF is considered unlikely to occur within the Project Area.

Alameda whipsnake (*Masticophis lateralis euryxanthus*). Federal Threatened Species, State Threatened Species. The range of the AWS is restricted to the inner Coast Range in western and central Contra Costa and Alameda Counties (USFWS 2000). The precise locations of AWS occurrences are suppressed by regulatory agencies and are not available to the public. The AWS is associated with shrub communities, including mixed chaparral, chamise-redshank chaparral, coastal scrub, and annual grassland and oak woodlands that lie adjacent to shrub habitats that contain areas of rock outcroppings. Rock outcroppings are important as they are a favored location for lizard prey. AWS frequently venture into adjacent habitats, including grassland, oak savanna, and occasionally oak-bay woodland.

AWS was listed as California State Threatened on June 6, 1971, Federal Threatened December 5, 1997 (62 FR 64306), and critical habitat was designated October 2, 2006 (71 FR 58176). The range of AWS is restricted to the inner Coast Range in western and central Contra Costa and Alameda Counties (USFWS 2006). The historical range of AWS has been fragmented into five disjunct populations: Tilden-Briones, Oakland-Las Trampas, Hayward-Pleasanton Ridge, Sunol-Cedar Mountain, and the Mount Diablo-Black Hills (USFWS 1997).

The physical and biological features for AWS include: scrub/shrub communities with a mosaic of open and closed canopy; woodland or annual grassland plant communities contiguous to lands containing scrub/shrub communities; lands containing rock outcrops, talus, and small mammal burrows within or in proximity to scrub/shrub communities; and accessible dispersal habitat (USFWS 2006). Use of habitats other than scrub/shrub by AWS is now known to be more common, especially for corridor movement. Thus, habitats, including grassland and riparian communities, adjacent to scrub/shrub habitat are considered essential to AWS conservation (USFWS 2006).

The Project Area does not contain permanent chaparral/hardwood mosaic habitat or rocky outcrops required by this species, and the Project Area is surrounded on three sides by suburban development, precluding its use as a movement corridor to other suitable habitats.

4.3 Protected Trees

A total of 94 trees that meet the definition of "protected tree" under the City of Hayward Tree Protection Ordinance were documented within all lots in the Project Area. Protected trees were primarily non-native species and included existing and remnant landscape trees as well as unplanted volunteer trees. Species that commonly met the definition of protected tree within the Project Area include blackwood acacia (*Acacia melanoxylon*), glossy privet, holly oak, and coast redwood. See Appendix D for a more detailed discussion of the results of the arborist survey.

5.0 SUMMARY

One sensitive biological community was identified within the Project Area. No special-status plant species were determined to have moderate or high potential to occur in the Project Area. Three special-status wildlife species were determined to have a moderate to high potential to occur within the Project Area. The following sections discuss potential agency consultation requirements to implement the proposed Project work.

5.1 Biological Communities

The Project Area contains one sensitive biological community comprised of 0.59 acre of Alameda County Flood Control Channel. The Alameda County Flood Control Channel is potentially within the jurisdiction of the Corps under Section 404 of the Clean Water Act and the RWQCB under the Porter-Cologne Act and Section 401 of the Clean Water Act. Because of proactive Project design elements, no impacts to sensitive biological communities are anticipated. Further discussion of the avoidance and minimization of impacts to sensitive biological communities is provided in Section 6.0 of this report.

5.2 Special-Status Plant Species

It was determined that the Project Area does not have moderate or high potential to support any of the 35 special-status plant species documented from within the vicinity of the Project Area. No additional actions concerning special-status plant species are recommended.

5.3 Special-Status Wildlife Species

The Project Area has moderate potential to host three special-status wildlife species including: pallid bat, white-tailed kite, and Allen's hummingbird. In addition, the Project Area has potential to host non-special-status birds protected by the MBTA and California Fish and Game Code (CFGC). Activities that result in the direct removal of active nests or disturbance to nesting birds sufficient to result in the abandonment of active nests may be considered a significant impact under CEQA and a potential violation of the MBTA and CFGC. Recommendations to avoid impacts to breeding birds or roosting bats are include in Section 6.0 of this report.

5.4 Protected Trees

A total of 94 trees that meet the definition of "protected tree" under the City of Hayward Tree Protection Ordinance were documented within all lots in the Project Area in developed and nonnative grassland areas. The Project proposes to remove all of the 94 protected trees. The removal, relocation, cutting, or shaping of protected trees requires an application for a Protected Tree Removal or Cutting permit from the City of Hayward, and the permit must be processed prior to the issuance of any grading, trenching, encroachment, demolition, or building permit. In addition, tree protection measures and appropriate tree replacement will likely be required. Recommendations to avoid and mitigate for impacts to protected trees are included in Section 6.0 of this report.

6.0 POTENTIAL IMPACTS AND RECOMMENDED AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

The Project Area consists of disturbed, degraded, weedy or developed urban infill lots. It provides little to low quality or no habitat value for special-status plant and wildlife species. The one sensitive biological community present is a small, engineered, maintained flood control channel, the primary hydrological source of which is drainage from the surrounding urban areas. Though it is potentially regulated by the Corps and RWQCB and is therefore a sensitive resource, this channel provides little to no habitat value for special-status plant and wildlife species, because it is an engineered flood control channel constructed in uplands for the purpose of conveying stormwater.

The Project proposes to convert the Project Area into residential, commericial, and park spaces. The entirety of the Project Area will be developed as part of the Project, with the exception of the Alameda County Flood Control Channel, which will be avoided. However, because the channel bisects the central portion of the Project Area, two pedestrian footbridges will be created that span the channel and provide connectivity between the Project features present on opposite sides of the channel. To avoid adverse impacts to the Alameda County Flood Control Channel resulting from the construction of the pedestrian bridge, the bridge abutments will be installed a sufficient distance (e.g. approximately 10 feet or greater) away from the channel top of bank such that no discharge of dredged or fill material or transmission of construction-related materials should occur. During installment, erosion control measures such as straw wattles and silt fencing will be placed to ensure that soil or other materials will not enter the channel. The area surrounding the abutments will be compacted and returned to the existing grade to ensure that erosion and sedimentation do not occur after bridge installments are completed. In addition, debris netting will be deployed during construction of the bridges to preclude any construction debris from falling into the engineered flood control channel, and the bridges will be designed such that no debris or runoff will enter the channel from the bridges. The portion of the bridges that spans the channel will be constructed at a sufficient height such that the vegetated wetland at the bottom of the channel will not be converted to unvegetated non-wetland waters as a result of shading from the bridges.

To further minimize impacts to the Alameda County Flood Control Channel, on the northwest side of the channel, several vegetated areas will be established between the top of the channel bank and the buildings and roads to the northwest. These areas will function as a water quality buffer, filtering surface water runoff by capturing it or slowing it down before it enters the channel. They will be sited a minimum of 10 feet from the top of bank of the channel.

As described above, the Project Area contains one biological community considered sensitive under CEQA: 0.59 acre of Alameda County Flood Control Channel. In addition, the Project Area may provide potential habitat for one special-status bat species and two special status bird species: pallid bat, white-tailed kite, and Allen's hummingbird. The Project Area also provides potential habitat for bird species protected by the MBTA. Potential impacts to these habitats (BIO IMPACT), as well as proposed avoidance and minimization (BIO AMM), and recommended mitigation measures (BIO MM), are provided in detail to follow. Potential impacts were analyzed using the framework provided in Appendix G of the CEQA Guidelines. Based on this framework, the Project is determined to have a potentially significant impact to biological resources if it may:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or specialstatus species in local or regional plans, policies, or regulations, or by the CDFW or USFWS
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (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.

The following sections provide an analysis of potential impacts using the framework outlined above, as well as recommended avoidance and minimization measures to reduce potential impacts and mitigation measures for unavoidable impacts.

6.1 General Avoidance and Minimization Measures

To reduce the potential for impacts to sensitive communities and special-status species, the following general best management practices (BMPs) are recommended for implementation. Implementation of these general BMPs, in combination with the species- and habitat-specific measures provided in the subsequent sections, will minimize adverse impacts:

- All access, staging, and work areas shall be delineated with orange construction fencing, or similar, and all work activities shall be limited to these areas.
- All access, staging, and work areas shall be the minimum size necessary to conduct the work.
- All staging, maintenance, and storage of construction equipment shall be performed in a manner to preclude any direct or indirect discharge of fuel, oil, or other petroleum products into the Project Area. No other debris, rubbish,creosote-treated wood, soil, silt, sand, cement, concrete or washings thereof, or other construction-related materials or wastes will be allowed to enter into or be placed where they may be washed by rainfall or runoff into wetland areas. All such debris and waste shall be picked-up daily and shall be properly disposed of at an appropriate facility. If a spill of fluid materials occurs, the area shall be cleaned and contaminated materials disposed of properly. The affected spill area shall be restored to its natural condition.
- Disturbance or removal of vegetation will not exceed the minimum necessary to conduct the work.
- Areas of ground disturbance shall be revegetated using an appropriate erosion control seed mix (for both sensitive and non-sensitive habitats) or will be covered with rock, wood chips, or other suitable erosion control materials as appropriate (for non-sensitive habitats only).
- Appropriate erosion control measures shall be installed around any stockpiles of soil or other materials which could be transported by rainfall or other flows.

- Stockpiles of soil or other materials that can be blown by wind shall be covered when not in active use.
- All trucks hauling soil, sand, and other loose materials shall be covered.

6.2 Candidate, Sensitive, or Special-Status Plant Species

No plant species identified as candidate, sensitive, or special-status in local or regional plans, policies, or regulations, or by the CDFW or the USFWS are expected to occur in the Project Area, and as such, no impacts to such species or their habitats are expected to occur as a result of the project. Therefore, no mitigation for sensitive plant species is proposed.

6.3 Candidate, Sensitive, or Special-Status Wildlife Species

Of the 41 special-status wildlife species documented from within the vicinity of the Project Area, three were determined to have moderate potential to occur in the Project Area: pallid bat, white-tailed kite, and Allen's hummingbird. The Project also has potential to impact common bird species protected by the MBTA and CFGC. Potential impacts to these species and recommended avoidance, minimization, and mitigation measures are provided in the following sections.

6.3.1 Special-Status Bat Species

BIO IMPACT 1:

Based on WRA's assessment of the site, it was determined that pallid bat (CDFW Species of Special Concern, WBWG High Priority) has potential to occur in association with the buildings in the northwesternmost portion of the Project Area. Planned demolition of these buildings has potential to impact any bats roosting within these structures.

BIO AMM 1:

WRA recommends the following measures be implemented to avoid impacts to special-status bat species:

- Pre-construction roost assessment survey: A qualified biologist should conduct a roost assessment survey of buildings located within the Project Area. The survey will assess use of the structure for roosting as well as potential presence of bats. If the biologist finds no evidence of, or potential to support bat roosting, no further measures are recommended. If evidence of bat roosting is present, additional measures described below should be implemented:
 - Work activities outside the maternity roosting season: If evidence of bat roosting is discovered during the pre-construction roost assessment and demolition is planned August 1 throgh February 28 (outside the bat maternity roosting season), a qualified biologist should implement passive exclusion measures to prevent bats from re-entering the structures. After sufficient time to allow bats to escape and a follow-up survey to determine if bats have vacated the roost, demolition may continue and impacts to special-status bat species will be avoided.
 - Work activities during the maternity roosting season: If a pre-construction roost assessment discovers evidence of bat roosting in buildings during the maternity

roosting season (March 1 through July 31), and determines maternity roosting bats are present, demolition of maternity roost structures will be avoided during the maternity roosting season or until a qualified biologist determines the roost has been vacated.

The implementation of the above measures will reduce impacts to special-status bat species to less-than-significant levels.

6.3.2 Special-Status Bird Species

BIO IMPACT 2:

The Project has the potential to impact two special-status bird species: white-tailed kite and Allen's hummingbird. The Project also has potential to impact common bird species protected by MBTA and CFGC. Potential impacts to these species or their habitat could occur during the removal of trees and vegetation and/or other ground disturbance. Removal of vegetation could result in the direct take of these species and/or the direct removal or destruction of active bird nests, including those of white-tailed kite and Allen's hummingbird. Activities that result in the direct removal of active nests or disturbance to nesting birds sufficient to result in the abandonment of active nests would be considered a significant impact under CEQA and a violation of MBTA and CFGC.

BIO AMM 2:

If ground disturbance or vegetation removal is initiated in the non-breeding season (August 16 through January 31), no pre-construction surveys for nesting birds are required and no adverse impact to birds would result. WRA recommends the following measure be implemented to avoid impacts to white-tailed kite, Allen's hummingbird, and nesting birds protected by MBTA and CFGC:

Pre-construction nesting bird survey: If ground disturbance or removal of vegetation occurs in the breeding bird season (February 1 through August 15), pre-construction surveys should be performed by a qualified biologist no more than 14 days prior to commencement of such activities to determine the presence and location of nesting bird species. If active nests are present, establishment of temporary no-work buffers around active nests will prevent adverse impacts to nesting birds. Appropriate buffer distance should be determined by a qualified biologist and is dependent on species, surrounding vegetation, and topography. Once active nests become inactive, such as when young fledge the nest or the nest is subject to predation, work may continue in the buffer area and no adverse impact to birds will result.

The implementation of the above measures will reduce impacts to protected nesting bird species to less-than-significant levels.

6.4 Riparian Habitat or Sensitive Natural Communities

The Project Area does not contain riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations or by the CDFW or USFWS and as such, no impacts to riparian habitat or sensitive natural communities are expected to occur as a result of the project. Therefore, no mitigation for riparian or sensitive natural communities is proposed.

6.5 Potential Federal and State Jurisdictional Wetlands and Non-Wetland Waters

Federal protected wetlands and non-wetland waters potentially subject to jurisdiction by the Corps under Section 404 of the Clean Water Act and the RWQCB under Section 401 of the Clean Water Act within the Project Area are limited to the 0.09-acre perennial wetland portion of the Alameda County Flood Control Channel.

State-protected wetlands and non-wetland waters potentially subject to jurisdiction by the RWQCB under the Porter-Cologne Act within the Project Area are limited to the 0.59-acre Alameda County Flood Control Channel, including both the 0.09-acre perennial wetland portion and the remaining 0.50-acre portion between the edges of the perennial wetlands and the tops of bank.

However, as described above, the Project includes design elements to avoid impacts to the State and Federal jurisdiction within the Alameda County Flood Control Channel, including erosion control measures, appropriate bridge abutment locations and bridge heights, and vegetated water quality buffer areas. The Project as proposed would not require an application for a permit. The Project will not result in a discharge of dredge or fill material to State Waters nor Waters of the United States. The pedestrian bridges would span over the engineered channel from the landward side of channel top of bank to the opposite landward side of channel top of bank that delineates the engineered channel, construction methods applied would involve no temporary construction or appertunant structures within the regulated engineered channel feature, and the Project as proposed includes controls during construction of the bridge spans to ensure no discharge or sediment or untreated stormwater would occur. Therefore, no activities regulated under CWA Sections 404 or 401 would occur as part of the Project. Furthermore, no activities that require a permit under Porter-Cologne Act would occur, because the Project as proposed would include controls during construction of the bridge spans to ensure no discharge of sediment or untreated stormwater would occur, and the completed bridge spans would not alter the chemical, physical, nor biological characteristics of the engineered channel, including the perennial wetlands. Similarly, there will be no discharge of pollutants to State Waters such that the features would be adversely impacted temporarily or permanently by a discharge or by dredging; nor alteration of beneficial uses of State Waters as a result of the Project. Consequently, no permit approvals are required for the Project as proposed. Furthermore, no mitigation for federal- and state-protected wetlands and non-wetland waters would be required. With these project design measures and the incorporation of the general avoidance and measures described in Section 6.1, no impacts to federal and state protected wetlands and non-wetland waters are expected to occur as a result of the Project.

6.6 Wildlife Corridors and Nursery Sites

The Project Area occurs in a developed urban area, and the Project Area itself is highly disturbed. In addition, the Alameda County Flood Control Channel is disconnected from any natural watercourse. Given the location of the site amidst a developed urban area, the high level of disturbance at the site, and the lack of a direct connection to any natural watercourse, the Project Area does not represent a migratory corridor for resident or migratory fish or wildlife species, nor does the site represent a wildlife nursery site. More specifically, the Project Area does not provide habitat for any native fish species. Other aquatic or semi-aquatic wildlife cannot disperse into the Project Area through the highly-marginal and disconnected water feature present on site. As such, the Project will not interfere substantially with the movement wildlife species or with established native resident or migratory wildlife corridors, nor impede the use of native wildlife nursery sites. In addition, no impacts are anticipated to wildlife corridors or nursery sites from the Project activities, and no additional mitigation is necessary.

6.7 Local Policies and Ordinances

The City of Hayward has a Tree Preservation Ordinance that declares it unlawful to remove, destroy, cut branches over one-inch diameter, disfigure or cause to be removed or destroyed any protected tree within the City without first obtaining a Tree Removal and Cutting Permit. The Tree Preservation Ordinance requires that all removed or disfigured trees be replaced with like-size, like-kind trees or an equal value tree or trees as determined by the City's Landscape Architect. In addition, the permit must be accompanied by an arborist's report detailing the results of the survey of the site where trees are proposed to be removed or disfigured.

BIO IMPACT 3

The Project proposes to remove 94 protected trees.

<u>BIO MM 3</u>

In order to satisfy the requirements of the City of Hayward Tree Protection Ordinance, a Tree Removal and Cutting Permit application will be submitted to the City of Hayward. An arborist conducted a survey of the Project Area on June 20, 2017, and a report has been written (see Appendix D) that details the findings of this survey that will be included with the permit application. All of the protected trees identified in the aforementioned Arborist's Report that will be removed as a result of the Project shall be replaced at a one to one ratio with like-size, like-kind trees or an equal value tree or trees. All required measures and conditions of approval included in the permit, including replacement of like-size, like-kind trees or an equal value tree or trees, will be implemented. With the implementation of the mitigation measures associated with BIO IMPACT 3, adverse effects to protected trees will be mitigated to less than significant.

6.8 Local and Regional Conservation Plans

The Project is not located in an area that is covered by any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Therefore, the Project does not pose any impacts on a local or regional level. No additional mitigation related to local or regional conservation plans is necessary.

7.0 CONCLUSION

Based on the Project description, the following permits are anticipated to be necessary:

• City of Hayward Tree Removal and Cutting Permit

The Project Area contains one sensitive biological community: 0.59 acre of Alameda County Flood Control Channel. The proposed Project has been designed to avoid impacts to this biological community.

A total of 94 protected trees are proposed for removal. However, the Project would need to apply for the City of Hayward Tree Removal and Cutting Permit and implement the required measures included in that permit, including replacement of protected trees removed as part of the Project with like-size, like-kind trees or an equal value tree or trees as determined by the City's Landscape

Architect. Impacts to protected trees will therefore be mitigated to less than significant with implementation of the measures included in the City's tree permit, including tree replacement.

No special-status plant species were observed or determined to have potential to occur in the Project Area. Three special-status wildlife species were determined to have the potential to occur within portions of the Project Area including pallid bat, white-tailed kite, and Allen's hummingbird. In addition, common species protected under MBTA and CFGC have potential to nest within the Project Area. With the implementation of the general BMPs listed in Section 6.1 and the species-specific and mitigation measures described in Sections 6.2 through 6.8, the Project is not expected to result in significant impacts to special-status species or sensitive or other protected habitats.

8.0 REFERENCES

- Buehler, D. 2000. Bald Eagle (*Haliaeetus leucocephalus*), The Birds of North America (P. G. Rodewald, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America: https://birdsna.org/Species-Account/bna/species/baleag.
- [CDFG] California Department of Fish and Game. 1994. A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607, California Fish and Game Code. Environmental Services Division, Sacramento, CA.
- [CDFW] California Department of Fish and Wildlife. 2017. California Natural Diversity Database. Sacramento, CA. Available: https://map.dfg.ca.gov/rarefind/Login.aspx?ReturnUrl=%2frarefind%2fview%2fRareFind. aspx; most recently accessed June 2017.
- [CNPS] California Native Plant Society. 2017a. Inventory of Rare and Endangered Plants of California. California Native Plant Society, Sacramento, California. Online at: http://www.rareplants.cnps.org; most recently accessed: June 2017.
- [CNPS] California Native Plant Society. 2017b. A Manual of California Vegetation, Online Edition. Sacramento, California. Online at: http://vegetation.cnps.org/; most recently accessed: June 2017.
- [Corps] U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). September.
- [CSRL] California Soil Resources Lab. 2017. Online Soil Survey. Online at: http://casoilresource.lawr.ucdavis.edu/drupal/; most recently accessed: June 2017.
- Dunk, JR. 1995. White-tailed Kite (*Elanus leucurus*), The Birds of North America Online (A Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/178.
- eBird. 2017. eBird: An online database of bird distribution and abundance [web application]. eBird, Cornell Lab of Ornithology, Ithaca, New York. Available: http://www.ebird.org; most recently accessed: June 2017.

- Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual. Department of the Army, Waterways Experiment Station, Vicksburg, Mississippi 39180-0631.
- Google Earth. 2017. Aerial Imagery 1993-2017. Most recently accessed: June 2017.
- Jepson Flora Project (eds.). 2017. Jepson eFlora. Online at: http://ucjeps.berkeley.edu/IJM.html; most recently accessed June 2017.
- Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016. ISSN 2153 733X.
- Mitchell, D.E. 2000. Allen's Hummingbird (*Selasphorus sasin*), The Birds of North America Online (A Poole, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America Online:http://bna.birds.cornell.edu/bna/species/501.
- NatureServe. 2017. NatureServe Conservation Status. Available online at: http://explorer.natureserve.org/ranking.htm
- [NETR] Nationwide Environmental Title Research. 2017. Historic Aerials. Available online at: http://www.historicaerials.com/; most recently accessed: June 2017.
- Richmond, B., Green, H., and Rice, D.C. 2011. Alameda County Breeding Bird Atlas. Golden Gate and Ohlone Audubon Societies, San Leandro, CA.
- Shuford, W.D., and T. Gardali (eds). 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and CDFG, Sacramento.
- Stebbins, R.C. 2003. A Field Guide to Western Reptiles and Amphibians, third edition. The Peterson Field Guide Series, Houghton Mifflin Company, NY.
- Thomson, R.C., A.N. Wright, and H.B. Shaffer. 2016. California Amphibian and Reptile Species of Special Concern. Co-published by the California Department of Fish and Wildlife and University of California Press. Oakland, California.
- [USDA] United States Department of Agriculture. 1981. Soil Survey of Alameda County, California, Western Part. Soil Conservation Service and Forest Service. In cooperation with the California Agricultural Experiment Station. March.
- [USFWS] United States Fish and Wildlife Service. 1997. Endangered and threatened wildlife and plants; determination of endangered status for the Callipe silverspot butterfly and the Behren's silverspot butterfly and threatened status for the Alameda whipsnake. (62:234 FR December 5, 1997).
- [USFWS] United States Fish and Wildlife Service. 2000. Endangered and threatened wildlife and plants; final determination of critical habitat for the Alameda Whipsnake (*Masticophis lateralis euryxanthus*). (65:192 FR October 3, 2000).

- [USFWS] United States Fish and Wildlife Service. 2006. Alameda Whipsnake Critical Habitat Final Rule. October 2, 2006. Federal Register, Vol. 71, No. 190: 58176-58231.
- [USFWS] United States Fish and Wildlife Service. 2017. Information for Planning and Conservation Report. Sacramento Fish and Wildlife Office. Available: http://www.fws.gov/sacramento; most recently accessed: June 2017.
- [USGS] U.S. Geological Survey. 2015a. Hayward 7.5-minute quadrangle.
- [USGS] U.S. Geological Survey. 2015b. Newark 7.5-minute quadrangle.
- [USGS] U.S. Geological Survey. 2015c. Niles 7.5-minute quadrangle.
- [USGS] U.S. Geological Survey. 2015d. San Leandro 7.5-minute quadrangle.
- [WBWG] Western Bat Working Group. 2017. Species Accounts. Available online at: http://www.wbwg.org/speciesinfo/species_accounts/species_accounts.html; most recently accessed June 2017.
- Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White. 1990. California's Wildlife, Volume I-III: Amphibians and Reptiles, Birds, Mammals. California Statewide Wildlife Habitat Relationships System, California Department of Fish and Game, Sacramento, CA.

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APPENDIX A

LIST OF OBSERVED PLANT AND WILDLIFE SPECIES

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Family	Scientific Name	Common Name	Origin	Form	Rarity Status ¹	CAL-IPC Status ²
Adoxaceae	Sambucus nigra ssp. caerulea	Blue elderberry	native	shrub	-	-
Agavaceae	<i>Agave</i> sp.	Ornamental agave	non-native	perennial herb, shrub	-	-
Alismataceae	Alisma lanceolatum	Water plantain	non-native	perennial herb (aquatic)	-	-
Amaranthaceae	Amaranthus deflexus	Large fruited amaranth	non-native	annual herb	-	-
Anacardiaceae	Schinus molle	Peruvian pepper tree	non-native (invasive)	tree	-	Limited
Apiaceae	Foeniculum vulgare	Fennel	non-native (invasive)	perennial herb	-	High
Apocynaceae	Asclepias fascicularis	Milkweed	native	perennial herb	-	-
Araliaceae	Hedera canariensis	Canary ivy	non-native (invasive)	vine	-	-
Arecaceae	Phoenix canariensis	Canary island date palm	non-native (invasive)	tree	-	Limited
Arecaceae	Washingtonia robusta	Washington fan palm	non-native (invasive)	tree	-	Moderate
Asteraceae	Ambrosia psilostachya	Ragweed	native	perennial herb	-	-

Appendix A-1. Plant species observed within the Project Area.

Family	Scientific Name	Common Name	Origin	Form	Rarity Status ¹	CAL-IPC Status ²
Asteraceae	Anthemis cotula	Dog fennel	non-native (invasive)	annual herb	-	-
Asteraceae	Baccharis pilularis ssp. consanguinea	Coyote brush	native	shrub	-	-
Asteraceae	Carduus pycnocephalus ssp. pycnocephalus	Italian thistle	non-native (invasive)	annual herb	-	Moderate
Asteraceae	Centaurea calcitrapa	Purple star thistle	non-native (invasive)	annual, perennial herb	-	Moderate
Asteraceae	Centaurea solstitialis	Yellow starthistle	non-native (invasive)	annual herb	-	High
Asteraceae	Cichorium intybus	Chicory	non-native	perennial herb	-	-
Asteraceae	Cirsium vulgare	Bullthistle	non-native (invasive)	perennial herb	-	Moderate
Asteraceae	Dittrichia graveolens	Stinkwort	non-native (invasive)	annual herb	-	Moderate
Asteraceae	Erigeron canadensis	Canada horseweed	native	annual herb	-	-
Asteraceae	Helminthotheca echioides	Bristly ox-tongue	non-native (invasive)	annual, perennial herb	-	Limited
Asteraceae	Hypochaeris glabra	Smooth cats ear	non-native (invasive)	annual herb	-	Limited
Asteraceae	Lactuca saligna	Willow lettuce	non-native	annual herb	-	-

Family	Scientific Name	Common Name	Origin	Form	Rarity Status ¹	CAL-IPC Status ²
Asteraceae	Lactuca serriola	Prickly lettuce	non-native (invasive)	annual herb	-	-
Asteraceae	Pseudognaphalium luteoalbum	Jersey cudweed	non-native	annual herb	-	-
Asteraceae	Senecio vulgaris	Common groundsel	non-native	annual herb	-	-
Asteraceae	Silybum marianum	Milk thistle	non-native (invasive)	annual, perennial herb	-	Limited
Asteraceae	Sonchus asper ssp. asper	Sow thistle	non-native (invasive)	annual herb	-	-
Asteraceae	Sonchus oleraceus	Sow thistle	non-native	annual herb	-	-
Asteraceae	Taraxacum officinale	Red seeded dandelion	non-native (invasive)	perennial herb	-	-
Asteraceae	Tragopogon porrifolius	Salsify	non-native	perennial herb	-	-
Asteraceae	Xanthium strumarium	Cocklebur	native	annual herb	-	-
Betulaceae	Alnus rhombifolia	White alder	native	tree	-	-
Bignoniaceae	Catalpa speciosa	Northern catalpa	non-native	tree	-	-
Brassicaceae	Brassica nigra	Black mustard	non-native (invasive)	annual herb	-	Moderate
Brassicaceae	Capsella bursa-pastoris	Shepherd's purse	non-native	annual herb	-	-

Family	Scientific Name	Common Name	Origin	Form	Rarity Status ¹	CAL-IPC Status ²
Brassicaceae	Nasturtium officinale	Watercress	native	perennial herb (aquatic)	-	-
Brassicaceae	Raphanus sativus	Jointed charlock	non-native (invasive)	annual, biennial herb	-	Limited
Brassicaceae	Sinapis arvensis	Charlock	non-native (invasive)	annual herb	-	Limited
Brassicaceae	Sisymbrium officinale	Hedge mustard	non-native	annual herb	-	-
Cactaceae	<i>Opuntia</i> sp.	Prickly pear	non-native	shrub (stem succulent)	-	-
Caryophyllaceae	Polycarpon tetraphyllum var. tetraphyllum	Four leaved allseed	non-native	annual herb	-	-
Caryophyllaceae	Silene gallica	Common catchfly	non-native	annual herb	-	-
Chenopodiaceae	Beta vulgaris ssp. maritima	Sea beet	non-native	perennial herb	-	-
Chenopodiaceae	Chenopodium sp.	goosefoot	non-native	annual herb	-	-
Convolvulaceae	Convolvulus arvensis	Field bindweed	non-native (invasive)	perennial herb, vine	-	-
Cupressaceae	Juniperus chinensis	Hollywood juniper	non-native	tree	-	-
Cupressaceae	Sequoia sempervirens	Coast redwood	native	tree	-	-
Euphorbiaceae	Euphorbia maculata	Spotted spurge	non-native	annual herb	-	-

Family	Scientific Name	Common Name	Origin	Form	Rarity Status ¹	CAL-IPC Status ²
Fabaceae	Acacia dealbata	Silver wattle	non-native (invasive)	tree, shrub	-	Moderate
Fabaceae	Acacia longifolia	Golden wattle	non-native	tree	-	-
Fabaceae	Acacia melanoxylon	Blackwood acacia	non-native (invasive)	tree	-	Limited
Fabaceae	Medicago polymorpha	California burclover	non-native (invasive)	annual herb	-	Limited
Fabaceae	Melilotus indicus	Annual yellow sweetclover	non-native	annual herb	-	-
Fabaceae	Trifolium hirtum	Rose clover	non-native (invasive)	annual herb	-	Limited
Fabaceae	Vicia sativa	Spring vetch	non-native	annual herb, vine	-	-
Fagaceae	Quercus agrifolia var. agrifolia	Coast live oak	native	tree	-	-
Fagaceae	Quercus ilex	Holly oak	non-native	tree	-	-
Fagaceae	Quercus lobata	Valley oak	native	tree	-	-
Flacourtiaceae	Xylosma congestum	Xylosma	non-native	tree	-	-
Geraniaceae	Erodium botrys	Big heron bill	non-native (invasive)	annual herb	-	-
Geraniaceae	Erodium cicutarium	Coastal heron's bill	non-native (invasive)	annual herb	-	Limited

Family	Scientific Name	Common Name	Origin	Form	Rarity Status ¹	CAL-IPC Status ²
Geraniaceae	Erodium moschatum	Whitestem filaree	non-native (invasive)	annual herb	-	-
Geraniaceae	Geranium dissectum	Wild geranium	non-native (invasive)	annual herb	-	Limited
Juglandaceae	Juglans hindsii	Northern california black walnut	native	tree	Rank 1B.1*	-
Juglandaceae	Juglans regia	English walnut	non-native	tree	-	-
Juncaceae	Juncus bufonius	Common toad rush	native	annual grasslike herb	-	-
Lamiaceae	Marrubium vulgare	White horehound	non-native (invasive)	perennial herb	-	Limited
Lauraceae	Cinnamomum camphora	Camphortree	non-native	tree	-	-
Lauraceae	Umbellularia californica	California bay	native	tree	-	-
Lythraceae	Lythrum hyssopifolia	Hyssop loosestrife	non-native	annual, perennial herb	-	-
Malvaceae	Malva parviflora	Cheeseweed	non-native	annual herb	-	-
Malvaceae	Malvella leprosa	Alkali mallow	native	perennial herb	-	-
Moraceae	Ficus carica	Common fig	non-native (invasive)	tree	-	Moderate
Myrsinaceae	Lysimachia arvensis	Scarlet pimpernel	non-native	annual herb	-	-

Family	Scientific Name	Common Name	Origin	Form	Rarity Status ¹	CAL-IPC Status ²
Myrtaceae	Eucalyptus sideroxylon	Red iron bark	non-native	tree	-	-
Myrtaceae	Syzygium paniculatum	Australian brush cherry	non-native	tree	-	-
Oleaceae	Fraxinus velutina	Arizona ash	native	tree	-	-
Oleaceae	Ligustrum lucidum	Glossy privet	non-native (invasive)	tree, shrub	-	Limited
Oleaceae	Olea europaea	Olive	non-native (invasive)	tree, shrub	-	Limited
Onagraceae	Epilobium brachycarpum	Willow herb	native	annual herb	-	-
Onagraceae	Epilobium ciliatum	Slender willow herb	native	perennial herb	-	-
Papaveraceae	Eschscholzia californica	California poppy	native	annual, perennial herb	-	-
Papaveraceae	Fumaria sp.	Fumitory	non-native	annual herb	-	-
Pinaceae	Pinus halepensis	Aleppo pine	non-native	tree	-	-
Pinaceae	Pinus radiata	Monterey pine	native	tree	Rank 1B.1*	-
Plantaginaceae	Kickxia spuria	Fluellin	non-native	perennial herb	-	-
Plantaginaceae	Plantago lanceolata	Ribwort	non-native (invasive)	perennial herb	-	Limited
Plantaginaceae	Plantago major	Common plantain	non-native	perennial herb	-	-

Family	Scientific Name	Common Name	Origin	Form	Rarity Status ¹	CAL-IPC Status ²
Plantaginaceae	Veronica peregrina ssp. xalapensis	Speedwell	native	annual herb	-	-
Platanaceae	Platanus xacerifolia	London plane	non-native	tree	-	-
Poaceae	Arundo donax	Giant reed	non-native (invasive)	perennial grass	-	High
Poaceae	Avena barbata	Slim oat	non-native (invasive)	annual, perennial grass	-	Moderate
Poaceae	Bromus catharticus	Rescue grass	non-native	annual, perennial grass	-	-
Poaceae	Bromus diandrus	Ripgut brome	non-native (invasive)	annual grass	-	Moderate
Poaceae	Bromus hordeaceus	Soft chess	non-native (invasive)	annual grass	-	Limited
Poaceae	Cortaderia selloana	Pampas grass	non-native (invasive)	perennial grass	-	High
Poaceae	Cynodon dactylon	Bermuda grass	non-native (invasive)	perennial grass	-	Moderate
Poaceae	Echinochloa crus-galli	Barnyard grass	non-native	annual grass	-	-
Poaceae	Elymus triticoides	Beardless wild rye	native	perennial grass	-	-

Family	Scientific Name	Common Name	Origin	Form	Rarity Status ¹	CAL-IPC Status ²
Poaceae	Festuca perennis	Italian rye grass	non-native	annual, perennial grass	-	-
Poaceae	Hordeum marinum ssp. gussoneanum	Barley	non-native (invasive)	annual grass	-	Moderate
Poaceae	Hordeum murinum	Foxtail barley	non-native (invasive)	annual grass	-	Moderate
Poaceae	Pennisetum clandestinum	Kikuyu grass	non-native (invasive)	perennial grass	-	Limited
Poaceae	Phalaris aquatica	Harding grass	non-native (invasive)	perennial grass	-	Moderate
Poaceae	Phyllostachys aurea	Golden bamboo	non-native	vine	-	-
Poaceae	Poa annua	Annual blue grass	non-native	annual grass	-	-
Poaceae	Polypogon interruptus	Ditch beard grass	non-native	perennial grass	-	-
Poaceae	Polypogon monspeliensis	Annual beard grass	non-native (invasive)	annual grass	-	Limited
Poaceae	Stipa miliacea var. miliacea	Smilo grass	non-native	perennial grass	-	-
Poaceae	Triticum aestivum	Common wheat	non-native	annual grass	-	-
Podocarpaceae	Podocarpus gracilor	Fern pine	non-native	tree	-	-

Family	Scientific Name	Common Name	Origin	Form	Rarity Status ¹	CAL-IPC Status ²
Polygonaceae	Polygonum aviculare	Prostrate knotweed	non-native	annual, perennial herb	_	-
Folygonaceae			non-native		-	-
Polygonaceae	Rumex crispus	Curly dock	non-native (invasive)	perennial herb	-	Limited
Polygonaceae	Rumex pulcher	Fiddleleaf dock	non-native	perennial herb	-	-
Portulacaceae	Portulaca oleracea	Common purslane	non-native	annual herb	-	-
Proteaceae	Hakea sp.	Pincushion tree	non-native	tree	-	-
Ranunculaceae	Ranunculus muricatus	Buttercup	non-native	annual, perennial herb	_	-
Rosaceae	Cotoneaster sp.	Cotoneaster	non-native	shrub	-	Moderate
Rosaceae	Eriobotrya japonica	Japanese loquat	non-native	tree	-	-
Rosaceae	Heteromeles arbutifolia	Toyon	native	shrub	-	-
Rosaceae	Prunus cerasifera	Cherry plum	non-native (invasive)	tree	-	Limited
Rosaceae	Prunus dulcis	Almond	non-native	tree	-	-
Rosaceae	Pyracantha sp.	Firethorn	non-native	shrub	-	-
Rosaceae	Pyrus calleryana	Callery pear	non-native	tree	-	-
Rosaceae	Rubus armeniacus	Himalayan blackberry	non-native (invasive)	shrub	-	High

Family	Scientific Name	Common Name	Origin	Form	Rarity Status ¹	CAL-IPC Status ²
Rubiaceae	Galium aparine	Cleavers	native	annual herb	-	-
Rubiaceae	Sherardia arvensis	Field madder	non-native	annual herb	-	-
Salicaceae	Populus nigra	Lombardy poplar	non-native	tree	-	-
Sapindaceae	Koelreuteria bipinnata	Chinese flame tree	non-native	tree	-	-
Solanaceae	Nicotiana glauca	Tree tobacco	non-native (invasive)	tree, shrub	-	Moderate
Urticaceae	Urtica urens	Annual stinging nettle	non-native	annual herb	-	-
Zygophyllaceae	Tribulus terrestris	Puncture vine	non-native (invasive)	annual herb	-	-

All species identified using the Jepson eFlora [Jepson Flora Project (eds.) 2017]; nomenclature follows Jepson eFlora [Jepson Flora Project (eds.) 2017]
 *Special-status only within its native range. The Project Area is outside of the native range of this species
 ¹Rare Status: The CNPS Inventory of Rare and Endangered Plants (CNPS 2017a)

Rank 1B: Plants rare, threatened, or endangered in California and elsewhere. Generally regarded as special-status in native stands only. ²Invasive Status: California Invasive Plant Inventory (Cal-IPC 2017)

High: Severe ecological impacts; high rates of dispersal and establishment; most are widely distributed ecologically.

Moderate: Substantial and apparent ecological impacts; moderate-high rates of dispersal, establishment dependent on disturbance; limitedmoderate distribution ecologically

Limited: Minor or not well documented ecological impacts; low-moderate rate of invasiveness; limited distribution ecologically Assessed: Assessed by Cal-IPC and determined to not be an existing current threat

Common Name (status if applicable)	Scientific Name
MAMMALS	
Striped skunk	Mephitis mephitis
Columbian black-tailed deer	Odocoileus hemionus columbianus
Domestic cat	Felis catus
BIRDS	
Ash-throated flycatcher	Myiarchus cinerascens

APPENDIX B

POTENTIAL FOR SPECIAL-STATUS SPECIES TO OCCUR IN THE PROJECT AREA This page intentionally blank.

Appendix B. Potential for special-status plant and wildlife species to occur in the Project Area. List compiled from the U.S. Fish and Wildlife Service Information for Conservation and Planning Database (USFWS 2017), the California Department of Fish and Wildlife California Natural Diversity Database (CDFW 2017), and the California Native Plant Society Inventory of Rare and Endangered Plants (CNPS 2017a) for the San Leandro, Hayward, Newark, and Niles USGS 7.5' quadrangles, as well as a review of historical and current satellite imagery via Google Earth (2017), the Alameda County Breeding Bird Atlas (Richmond et al. 2011), eBird occurrence data (eBird 2017), and other CDFW lists and publications (Zeiner et al. 1990).

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
Plants				
bent-flowered fiddleneck <i>Amsinckia lunaris</i>	Rank 1B.2	Coastal bluff scrub, cismontane woodland, valley and foothill grassland. Elevation ranges from 10 to 1640 feet (3 to 500 meters). Blooms Mar-Jun.	Unlikely. The Project Area does not contain coastal bluff scrub or cismontane woodland habitat. The Project Area contains grassland, but it is highly disturbed and provides low- quality habitat.	No further actions are recommended for this species.
alkali milk-vetch Astragalus tener var. tener	Rank 1B.2	Playas, valley and foothill grassland (adobe clay), vernal pools/alkaline. Elevation ranges from 0 to 200 feet (1 to 60 meters). Blooms Mar-Jun.	No Potential. The Project Area does not contain playa or vernal pool habitat or alkaline substrate.	No further actions are recommended for this species.
big-scale balsamroot Balsamorhiza macrolepis	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland/sometimes serpentine. Elevation ranges from 300 to 5100 feet (90 to 1555 meters). Blooms Mar-Jun.	Unlikely. The Project Area does not contain chaparral or cismontane woodland habitats or serpentine substrate. The Project Area contains grassland, but it is highly disturbed and provides low-quality habitat.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
Oakland star-tulip <i>Calochortus umbellatus</i>	Rank 4.2	Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland/often serpentine. Elevation ranges from 330 to 2300 feet (100 to 700 meters). Blooms Mar-May.	Unlikely. The Project Area does not contain broadleaf upland forest, chaparral, cismontane woodland, or lower montane coniferous forest habitats or serpentine substrate. The Project Area contains grassland, but it is highly disturbed and provides low-quality habitat.	No further actions are recommended for this species.
chaparral harebell <i>Campanula exigua</i>	Rank 1B.2	Chaparral (rocky, usually serpentine). Elevation ranges from 900 to 4100 feet (275 to 1250 meters). Blooms May-Jun.	No Potential. The Project Area does not contain chaparral habitat or rocky or serpentine substrates.	No further actions are recommended for this species.
johnny-nip Castilleja ambigua var. ambigua	Rank 4.2	Coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, valley and foothill grassland, vernal pool margins. Elevation ranges from 0 to 1430 feet (0 to 435 meters). Blooms Mar- Aug.	Unlikely. The Project Area does not contain coastal bluff scrub, coastal prairie, coastal scrub, marshes and swamps, or vernal pool habitats. The Project Area contains grassland, but it is highly disturbed and provides low-quality habitat.	No further actions are recommended for this species.
Congdon's tarplant Centromadia parryi ssp. congdonii	Rank 1B.1	Valley and foothill grassland (alkaline). Elevation ranges from 0 to 750 feet (0 to 230 meters). Blooms May-Oct (Nov).	No Potential. The Project Area does not contain alkaline substrate.	No further actions are recommended for this species.
Point Reyes bird's-beak Chloropyron maritimum ssp. palustre	Rank 1B.2	Marshes and swamps (coastal salt). Elevation ranges from 0 to 30 feet (0 to 10 meters). Blooms Jun- Oct.	No Potential. The Project Area does not contain coastal salt marsh or swamp habitat.	No further actions are recommended for this species.

SPECIES	STATUS*	НАВІТАТ	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
robust spineflower Chorizanthe robusta var. robusta	FE, Rank 1B.1	Chaparral (maritime), cismontane woodland (openings), coastal dunes, coastal scrub/sandy or gravelly. Elevation ranges from 10 to 980 feet (3 to 300 meters). Blooms Apr- Sep.	No Potential. The Project Area does not contain chaparral, cismontane woodland, coastal dunes, or coastal scrub habitats.	No further actions are recommended for this species.
Santa Clara red ribbons <i>Clarkia concinna ssp. automixa</i>	Rank 4.3	Chaparral, cismontane woodland. Elevation ranges from 300 to 4920 feet (90 to 1500 meters). Blooms (Apr), May-Jun (Jul).	No Potential. The Project Area does not contain chaparral or cismontane woodland habitats.	No further actions are recommended for this species.
western leatherwood <i>Dirca occidentalis</i>	Rank 1B.2	Broadleafed upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, north coast coniferous forest, riparian forest, riparian woodland/mesic. Elevation ranges from 80 to 1390 feet (25 to 425 meters). Blooms Jan-Mar (Apr).	No Potential. The Project Area does not contain forest or woodland habitats.	No further actions are recommended for this species.
Hoover's button-celery Eryngium aristulatum var. hooveri	Rank 1B.1	Vernal pools. Elevation ranges from 10 to 150 feet (3 to 45 meters). Blooms (Jun), Jul (Aug).	No Potential. The Project Area does not contain vernal pool habitat.	No further actions are recommended for this species.
Jepson's coyote thistle <i>Eryngium jepsonii</i>	Rank 1B.2	Valley and foothill grassland, vernal pools/clay. Elevation ranges from 1 to 985 feet (3 to 300 meters). Blooms Apr-Aug.	No Potential. The Project Area does not contain vernal pool habitat. The Project Area contains clay substrate and grassland, but it is it is highly disturbed and provides low-quality habitat.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
San Joaquin spearscale <i>Extriplex joaquinana</i>	Rank 1B.2	Chenopod scrub, meadows and seeps, playas, valley and foothill grassland/alkaline. Elevation ranges from 0 to 2740 feet (1 to 835 meters). Blooms Apr-Oct.	No Potential. The Project Area does not contain chenopod scrub, meadows and seeps, playas, or grassland on alkaline substrate.	No further actions are recommended for this species.
fragrant fritillary <i>Fritillaria liliacea</i>	Rank 1B.2	Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland/often serpentine. Elevation ranges from 10 to 1350 feet (3 to 410 meters). Blooms Feb-Apr.	Unlikely. The Project Area does not contain cismontane woodland, coastal prairie, or coastal scrub habitats or serpentine substrate. The Project Area contains grassland, but it is it is highly disturbed and provides low- quality habitat.	No further actions are recommended for this species.
dark-eyed gilia <i>Gilia millefoliata</i>	Rank 1B.2	Coastal dunes. Elevation ranges from 10 to 100 feet (2 to 30 meters). Blooms Apr-Jul.	No Potential. The Project Area does not contain coastal dune habitat.	No further actions are recommended for this species.
Diablo helianthella <i>Helianthella castanea</i>	Rank 1B.2	Broadleafed upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland/usually rocky, azonal soils. often in partial shade. Elevation ranges from 200 to 4270 feet (60 to 1300 meters). Blooms Mar- Jun.	Unlikely. The Project Area does not contain broadleafed upland forest, chaparral, woodland, coastal scrub, or riparian woodland habitats or rocky, azonal soils. The Project Area contains grassland, but it is it is highly disturbed and provides low- quality habitat.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
Loma Prieta hoita <i>Hoita strobilina</i>	Rank 1B.1	Chaparral, cismontane woodland, riparian woodland/usually serpentine, mesic. Elevation ranges from 100 to 2820 feet (30 to 860 meters). Blooms May-Jul (Aug), (Oct).	No Potential. The Project Area does not contain chaparral, cismontane woodland, or riparian woodland habitats or serpentine substrate.	No further actions are recommended for this species.
Santa Cruz tarplant <i>Holocarpha macradenia</i>	FT, SE, Rank 1B.1	Coastal prairie, coastal scrub, valley and foothill grassland/often clay, sandy. Elevation ranges from 30 to 720 feet (10 to 220 meters). Blooms Jun-Oct.	Unlikely. The Project Area does not contain coastal prairie or coastal scrub habitats or sandy substrate. The Project Area contains clay substrate and grassland, but it is it is highly disturbed and provides low- quality habitat.	No further actions are recommended for this species.
Kellogg's horkelia <i>Horkelia cuneata var. sericea</i>	Rank 1B.1	Closed-cone coniferous forest, chaparral (maritime), coastal dunes, coastal scrub/sandy or gravelly, openings. Elevation ranges from 30 to 660 feet (10 to 200 meters). Blooms Apr- Sep.	No Potential. The Project Area does not contain closed-cone coniferous forest, chaparral, coastal dunes, or coastal scrub habitats.	No further actions are recommended for this species.
Contra Costa goldfields <i>Lasthenia conjugens</i>	FE, Rank 1B.1	Cismontane woodland, playas (alkaline), valley and foothill grassland, vernal pools/mesic. Elevation ranges from 0 to 1540 feet (0 to 470 meters). Blooms Mar-Jun.	No Potential. The Project Area does not contain vernal pool or swale habitats, which is where this species is known to occur (CDFW 2017).	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
bristly leptosiphon Leptosiphon acicularis	Rank 4.2	Chaparral, cismontane woodland, coastal prairie, valley and foothill grassland. Elevation ranges from 180 to 4920 feet (55 to 1500 meters). Blooms Apr-Jul.	Unlikely. The Project Area does not contain chaparral, cismontane woodland, or coastal prairie habitats. The Project Area contains grassland, but it is it is highly disturbed and provides low- quality habitat.	No further actions are recommended for this species.
San Antonio Hills monardella Monardella antonina ssp. antonina	Rank 3	Chaparral, cismontane woodland. Elevation ranges from 1050 to 3280 feet (320 to 1000 meters). Blooms Jun-Aug.	No Potential. The Project Area does not contain chaparral or cismontane woodland habitats.	No further actions are recommended for this species.
woodland woollythreads <i>Monolopia gracilens</i>	Rank 1B.2	Broadleafed upland forest (openings), chaparral (openings), cismontane woodland, north coast coniferous forest (openings), valley and foothill grassland/serpentine. Elevation ranges from 330 to 3940 feet (100 to 1200 meters). Blooms (Feb), Mar-Jul.	No Potential. The Project Area does not contain broadleaf upland forest, chaparral, cismontane woodland, north coast coniferous forest, or serpentine, sandy, or rocky substrates (CDFW 2017).	No further actions are recommended for this species.
Patterson's navarretia <i>Navarretia paradoxiclara</i>	Rank 1B.3	Serpentinite, openings, vernally mesic, often drainages, meadows and seeps. Elevation ranges from 490 to 1410 feet (150 to 430 meters). Blooms May-Jun (Jul)	No Potential. The Project Area does not contain serpentine substrate.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
Michael's rein orchid <i>Piperia michaelii</i>	Rank 4.2	Coastal bluff scrub, closed- cone coniferous forest, chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest. Elevation ranges from 10 to 3000 feet (3 to 915 meters). Blooms Apr- Aug.	No Potential. The Project Area does not contain scrub, chaparral, forested, or wooded habitats.	No further actions are recommended for this species.
Marin knotweed Polygonum marinense	Rank 1B.2	Marshes and swamps (coastal salt or brackish). Elevation ranges from 0 to 30 feet (0 to 10 meters). Blooms (Apr), May-Aug (Oct).	No Potential. The Project Area does not contain coastal salt or brackish marsh or swamp habitats.	No further actions are recommended for this species.
hairless popcornflower Plagiobothrys glaber	Rank 1A	Meadows and seeps (alkaline), marshes and swamps (coastal salt). Elevation ranges from 50 to 590 feet (15 to 180 meters). Blooms Mar-May.	No Potential. The Project Area does not contain alkaline meadow and seep or coastal salt marsh or swamp habitats.	No further actions are recommended for this species.
Lobb's aquatic buttercup <i>Ranunculus lobbii</i>	Rank 4.2	Cismontane woodland, north coast coniferous forest, valley and foothill grassland, vernal pools/mesic. Elevation ranges from 50 to 1540 feet (15 to 470 meters). Blooms Feb-May.	Unlikely. The Project Area does not contain areas that pond for a sufficient duration to support this species.	No further actions are recommended for this species.

SPECIES	STATUS*	НАВІТАТ	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
adobe sanicle <i>Sanicula maritima</i>	1B.1, SR, Rank 1B.1	Chaparral, coastal prairie, meadows and seeps, valley and foothill grassland/clay, serpentine. Elevation ranges from 100 to 790 feet (30 to 240 meters). Blooms Feb-May.	Unlikely. The Project Area does not contain chaparral, coastal prairie, or meadows and seeps habitats or serpentine substrate. The Project Area contains grassland on clay substrate, but it is it is highly disturbed and provides low-quality habitat.	No further actions are recommended for this species.
chaparral ragwort Senecio aphanactis	Rank 2B.2	Chaparral, cismontane woodland, coastal scrub/sometimes alkaline. Elevation ranges from 50 to 2620 feet (15 to 800 meters). Blooms Jan-Apr.	No Potential. The Project Area does not contain chaparral, cismontane woodland, or coastal scrub habitats.	No further actions are recommended for this species.
most beautiful jewelflower <i>Streptanthus albidus ssp. peramoenus</i>	Rank 1B.2	Chaparral, cismontane woodland, valley and foothill grassland/serpentine. Elevation ranges from 310 to 3280 feet (95 to 1000 meters). Blooms (Mar), Apr-Sep (Oct).	No Potential. The Project Area does not contain serpentine substrate.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
slender-leaved pondweed <i>Stuckenia filiformis ssp. alpina</i>	Rank 2B.2	Marshes and swamps (assorted shallow freshwater). Elevation ranges from 980 to 7050 feet (300 to 2150 meters). Blooms May-Jul.	Unlikely. The Project Area contains perennial wetland habitat in the Alameda County Flood Control Channel, but it is very shallow, generally densely vegetated, and appears to be fed entirely by urban runoff; as such it provides low quality habitat and is likely too shallow to support this species.	No further actions are recommended for this species.
California seablite Suaeda californica	FE, Rank 1B.1	Marshes and swamps (coastal salt). Elevation ranges from 0 to 50 feet (0 to 15 meters). Blooms Jul- Oct.	No Potential. The Project Area does not contain coastal salt marsh or swamp habitat.	No further actions are recommended for this species.
saline clover Trifolium hydrophilum	Rank 1B.2	Marshes and swamps, valley and foothill grassland (mesic, alkaline), vernal pools. Elevation ranges from 0 to 980 feet (0 to 300 meters). Blooms Apr-Jun.	No Potential. The Project Area does not contain alkaline substrate.	No further actions are recommended for this species.
Mammals			·	
salt-marsh harvest mouse <i>Reithrodontomys raviventris</i>	FE, SE, CFP, SSC	Found only in the saline emergent wetlands of San Francisco Bay and its tributaries. Pickleweed is primary habitat, but may use other thick wetland vegetation. Does not burrow, builds loosely organized nests. Requires higher areas for flood escape.	No Potential. The Project Area is outside of this species' known range which is limited to saltwater marsh habitats around San Francisco Bay.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
salt-marsh wandering shrew Sorex vagrans halicoetes	SSC	Salt marshes of the south arm of San Francisco Bay. Medium high marsh 6 to 8 feet above sea level where abundant driftwood is scattered among <i>Salicornia</i> .	No Potential. The Project Area is outside of this species' known range which is limited to saltwater marsh habitats around San Francisco Bay.	No further actions are recommended for this species.
Alameda Island mole <i>Scapanus latimanus parvus</i>	SSC	Only known from Alameda Island. Found in a variety of habitats, especially annual and perennial grasslands. Prefers moist, friable soils. Avoids flooded soils.	No Potential. The Project Area is outside of this species' known range on Alameda Island.	No further actions are recommended for this species.
San Francisco dusky-footed woodrat Neotoma fuscipes annectens	SSC	Found in both chaparral and forest habitats with a moderate canopy and moderate to dense understory. Constructs nests of shredded grass, leaves, and other material. May be limited by availability of nest-building materials.	No Potential. The Project Area lacks the forest or chaparral habitat and canopy required by this species.	No further actions are recommended for this species.
pallid bat <i>Antrozous pallidus</i>	SSC, WBWG: High	Occupies a variety of habitats at low elevation including grassland, shrubland, woodland, and forest. Most common in open, dry habitats and commonly roosts in fissures in cliffs, abandoned buildings, and under bridges	Moderate Potential. The Project Area contains buildings that may provide adequate roosting habitat for pallid bat.	See Section 6.3.1 for impact mitigation measures for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
hoary bat <i>Lasiurus cinereus</i>	WBWG: Medium	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	Unlikely. The ornamental landscaped trees within and adjacent to the Project Area are not of sufficient size to provide thermal protection to this species. This species may occasionally forage or disperse through the Project Area.	No further actions are recommended for this species.
Townsend's big-eared bat Corynorhinus townsendii	SC, SSC, WBWG: High	Primarily found in rural settings in a wide variety of habitats including oak woodland and mixed coniferous-deciduous forest. Day roosts highly associated with caves and mines. Building roost sites must be cave like. Very sensitive to human disturbance.	Unlikely. Typical undisturbed cavernous roost sites are not present in the Project Area; however, the species may occasionally forage or disperse through the Project Area.	No further actions are recommended for this species.
western mastiff bat <i>Eumops perotis californicus</i>	SSC, WBWG: High	Found in a wide variety of open, arid and semi-arid habitats. Distribution appears to be tied to large rock structures which provide suitable roosting sites, including cliff crevices and cracks in boulders.	Unlikely. The Project Area does not contain rock structures typically associated with this species. This species may occasionally forage or disperse through Project Area.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
Birds	·		•	
golden eagle <i>Aquila chrysaetos</i>	CFP, EPA, BCC, EACCS	Resident in rolling foothills, mountain areas, sage- juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also nests in large trees in open areas.	Unlikely. The Project Area does not contain cliff or canyon to provide nesting habitat for this species. Additionally, ornamental landscaped trees within the Project Area are not of sufficient size to support nesting. This species may occasionally forage or disperse through the Project Area.	No further actions are recommended for this species.
bald eagle <i>Haliaeetus leucocephalus</i>	FD, SE, CFP, BCC	Occurs year-round in California, but primarily a winter visitor. Nests in large trees in the vicinity of larger lakes, reservoirs and rivers. Wintering habitat somewhat more variable but usually features large concentrations of waterfowl or fish.	Unlikely. The Project Area is not near any lake or reservoir habitat that could support nesting. This species has been documented recently within the county and may occasionally forage or disperse through the Project Area (eBird 2017).	No further actions are recommended for this species.
northern harrier <i>Circus cyaneus</i>	SSC	Nests and forages in grassland habitats, usually in association with coastal salt and freshwater marshes. Nests on ground in shrubby vegetation, usually at marsh edge; nest built of a large mound of sticks in wet areas. May also occur in alkali desert sinks.	Unlikely. While the Project Area provides highly marginal freshwater marsh habitat, the high amount of current and historical human disturbance make previous and future nesting unlikely. This species may occasionally forage or disperse through the Project Area.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
white-tailed kite <i>Elanus leucurus</i>	CFP	Year-round resident in coastal and valley lowlands with scattered trees and large shrubs, including grasslands, marshes and agricultural areas. Nests in trees, of which the type and setting are highly variable. Preys on small mammals and other vertebrates.	Moderate Potential. The ornamental landscaped trees within the Project Area provide moderate nesting habitat. Additionally, the Project Area contains highly marginal marsh habitat that may be utilized by this species.	See Section 6.3.2 for impact mitigation measures for this species.
American peregrine falcon <i>Falco peregrinus anatum</i>	FD, SD, CFP, BCC	Year-round resident and winter visitor. Occurs in a wide variety of habitats, though often associated with coasts, bays, marshes and other bodies of water. Nests on protected cliffs and also on man-made structures including buildings and bridges. Preys on birds, especially waterbirds. Forages widely.	Unlikely. The Project Area and surrounding areas do not provide high-altitude habitats near water to support nesting. This species may occasionally forage or disperse through the Project Area.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
burrowing owl Athene cunicularia	BCC, SSC, EACCS	Inhabits, dry annual or perennial grassland, desert and scrubland characterized by low- growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably California ground squirrel.	Unlikely. The grassland within the Project Area was above the six inch length threshold preferred by burrowing owl during the June 15 site visit, and the Project Area is largely unmanaged and has high levels of human disturbance. Additionally, recent occurrences of burrowing owl within and around Alameda County are largely concentrated in Bay adjacent habitat approximately 5 miles west of the Project Area (CNDDB 2017, eBird 2017).	No further actions are recommended for this species.
California Ridgway's (clapper) rail <i>Rallus obsoletus obsoletus</i>	FE, SE, CFP	Year-round resident in tidal marshes of the San Francisco Bay estuary. Requires tidal sloughs and intertidal mud flats for foraging, and dense marsh vegetation for nesting and cover. Typical habitat features abundant growth of cordgrass and pickleweed. Feeds primarily on molluscs and crustaceans.	No Potential. The Project Area is outside of this species' known range and does not contain tidal marsh habitat.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
California black rail <i>Laterallus jamaicensis coturniculus</i>	ST, CFP	Year-round resident in marshes (saline to freshwater) with dense vegetation within four inches of the ground. Prefers larger, undisturbed marshes that have an extensive upper zone and are close to a major water source. Extremely secretive and cryptic.	No Potential. The Project Area is outside of this species' known range and does not contain marsh habitat.	No further actions are recommended for this species.
California least tern <i>Sternula antillarum browni</i>	FE, SE, CFP	Summer resident along the coast from San Francisco Bay south to northern Baja California; inland breeding also very rarely occurs. Nests colonially on barren or sparsely vegetated areas with sandy or gravelly substrates near water, including beaches, islands, and gravel bars. In San Francisco Bay, has also nested on salt pond margins.	No Potential. The Project Area does not contain coastal habitat or inland sandy/gravelly habitat required by this species for foraging or nesting.	No further actions are recommended for this species.
western snowy plover Charadrius nivosus (alexandrines) nivosus	FT, SSC, BCC, RP	Federal listing applies only to the Pacific coastal population. Year-round resident and winter visitor. Occurs on sandy beaches, salt pond levees, and the shores of large alkali lakes. Nests on the ground, requiring sandy, gravelly or friable soils.	No Potential. The Project Area does not contain the sandy coastal habitat required for this species.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
long-billed curlew <i>Numenius americanus</i>	BCC	(Nesting) breeds in upland shortgrass prairies and wet meadows in northeastern California. Habitats on gravelly soils and gently rolling terrain are favored over others	Unlikely. The Project Area does not contain rural or undeveloped grassland of sufficient size to support nesting habitat for this species. This species may occasionally forage or disperse through the Project Area.	No further actions are recommended for this species.
Allen's hummingbird <i>Selasphorus sasin</i>	BCC	Summer resident along the California coast, breeding in a variety of woodland and forest habitats, including parks and gardens with abundant nectar sources. Nest in shrubs and trees with dense vegetation.	Moderate Potential. Ornamental landscaped trees and other vegetation within the Project Area provide a small amount of nesting and foraging habitat for this species.	See Section 6.3.2 for impact mitigation measures for this species.
Costa's hummingbird <i>Calypte costae</i>	BCC	Summer resident. Uses xeric habitats, especially California coastal scrub or sage scrub and dry open areas of chaparral in the coast ranges, and is occasionally found in oak savannah. Builds nest in shrub or tree living or dead, on branch, stem, or leaves, usually 1–2 m above ground.	No Potential. The Project Area does not provide the coastal scrub, sage scrub, or chaparral or other habitats used by this species.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
Alameda song sparrow <i>Melospiza melodia pusillula</i>	BCC, SSC	Year-round resident of salt marshes bordering the south arm of San Francisco Bay. Inhabits primarily pickleweed marshes; nests placed in marsh vegetation, typically shrubs such as gumplant.	No Potential. The Project Area does not provide the salt marsh habitat required by this species.	No further actions are recommended for this species.
bank swallow <i>Riparia riparia</i>	ST	Summer resident in riparian and other lowland habitats near rivers, lakes and the ocean in northern California. Nests colonially in excavated burrows on vertical cliffs and bank cuts (natural and manmade) with fine-textured soils. Historical nesting range in southern and central areas of California has been eliminated by habitat loss. Currently known to breed in Siskiyou, Shasta, and Lassen Cos., portions of the north coast, and along Sacramento River from Shasta Co. south to Yolo Co.	No Potential. The Project Area does not provide the riparian or riparian corridor habitat required by this species for nesting. Occurrences within Alameda County are concentrated to Bay adjacent habitat located five or more miles west of the Project Area (CNDDB 2017, eBird 2017).	No further actions are recommended for this species.
black skimmer <i>Rynchops niger</i>	BCC, SSC	Found primarily in southern California; South San Francisco Bay has a small resident population. Nests colonially on gravel bars, low islets, and sandy beaches.	No Potential. The Project Area does not contain the sandy or coastal habitat required by this species.	No further actions are recommended for this species.

SPECIES	STATUS*	НАВІТАТ	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
San Francisco (saltmarsh) common yellowthroat <i>Geothlypis trichas sinuosa</i>	BCC, SSC	Resident of the San Francisco Bay region, in fresh and salt water marshes. Requires thick, continuous cover down to water surface for foraging; tall grasses, tule patches, willows for nesting.	No Potential. The Project Area does not contain the salt marsh habitat or thick marsh-adjacent vegetation required by this species.	No further actions are recommended for this species.
Bell's sage sparrow <i>Amphispiza belli belli</i>	BCC, DFG:WL	Year-round resident, though shows seasonal movements. Prefers dense chaparral and scrub habitats for breeding; strongly associated with chamise. Also occurs in more open habitats during winter.	Unlikely. The Project Area does not contain the chaparral or scrub habitats preferred by this species. This species may occasionally forage or disperse through the Project Area.	No further actions are recommended for this species.
olive-sided flycatcher <i>Contopus cooperi</i>	SSC, BCC	Summer resident. Typical breeding habitat is montane coniferous forests. At lower elevations, also occurs in wooded canyons and mixed forests and woodlands. Often associated with forest edges. Arboreal nest sites located well off the ground.	Unlikely. The Project Area does not contain the coniferous forest habitats that typically support this species. This species may occasionally forage or disperse through the Project Area.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
Lewis's woodpecker <i>Melanerpes lewis</i>	BCC	Uncommon resident in California occurring on open oak savannahs, broken deciduous and coniferous habitats. Breeds primarily in ponderosa pine forests, riparian woodlands and disturbed pine forests but is also known to nest in orchards and oak woodlands. Rare nester in the San Francisco Bay Area.	Unlikely. This species is uncommon in the region and is primarily a winter visitor. It is not known to nest in the east bay hills near Pleasanton (Richmond et al 2011).	No further actions are recommended for this species.
tricolored blackbird <i>Agelaius tricolor</i>	BCC, SSC, RP, EACCS	Usually nests over or near freshwater in dense cattails, tules, or thickets of willow, blackberry, wild rose or other tall herbs. Nesting area must be large enough to support about 50 pairs.	Unlikely. This species is uncommon in the region, and does not frequently nest in Alameda County (eBird 2017; Richmond et al 2011, CNDDB 2017). Furthermore, the Project Area does not contain the emergent wetland habitat to support this species.	No further actions are recommended for this species.
black-chinned sparrow <i>Spizella atrogularis</i>	BCC	Prefers sloping ground in mixed chaparral, chamise- redshank chaparral, sagebrush, and similar brushy habitats. Often on arid, south-facing slopes with ceanothus, manzanita, sagebrush, and chamise.	Unlikely. This species is uncommon in the region, and is only known to nest in southeastern Alameda County (eBird 2017; Richmond et al 2011). Furthermore, the Project Area does not contain the scrub/chaparral habitats to support this species.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
yellow warbler Setophaga (Dendroica) petechia brewsteri	BCC, SSC	Frequents riparian plant associations. Prefers willows, cottonwoods, aspens, sycamores and alders for nesting and foraging. Also nests in montane shrubbery in open conifer forests.	Unlikely. The Project Area does not contain the dense riparian habitat, montane shrubbery, or conifer forests typically used by this species. This species may occasionally forage or disperse through the Project Area.	No further actions are recommended for this species.
yellow-billed magpie <i>Pica nuttalli</i>	BCC	Oak savanna with large trees and large expanses of open ground. The Central Valley floor, gentle slopes, and open park-like areas including along stream courses. Grasslands, pasture, or cultivated fields are needed for foraging.	Unlikely. This species is only known to occur in the far eastern portion of Alameda County (Richmond et al 2011). Furthermore, the Project Area does not contain the oak savannah habitat, gentle slopes, and/or park habitat typically used by this species.	No further actions are recommended for this species.
oak titmouse Baeolophus inornatus	BCC	Oak woodland and savannah, open broad- leaved evergreen forests containing oaks, and riparian woodlands. Associated with oak and pine-oak woodland and arborescent chaparral.	Unlikely. The Project Area only contains ornamental landscaped trees concentrated around its perimeter and does not contain the oak woodland or arborescent chaparral typically used by this species. This species may occasionally forage or disperse through the Project Area.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
Lawrence's goldfinch <i>Spinus (= Carduelis) lawrencei</i>	BCC	Nests in open oak or other arid woodland and chaparral, near water. Nearby herbaceous habitats used for feeding. Closely associated with oaks.	Unlikely. The ornamental landscaped trees within and around the perimeter of the Project Area do not constitute an oak woodland typically used by this species. This species may occasionally forage and disperse through the Project Area.	No further actions are recommended for this species.
Reptiles and Amphibians	-			
Pacific (western) pond turtle <i>Actinemys marmorata</i>	SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches with aquatic vegetation. Require basking sites such as partially submerged logs, vegetation mats, or open mud banks, and suitable upland habitat (sandy banks or grassy open fields) for egg-laying.	Unlikely. The freshwater marsh habitat within the Project Area is extremely marginal and disturbed and is not interconnected with other freshwater habitat required by this species. Additionally, the nearest occurrence is over 5 miles southeast of the Project Area and the species is highly unlikely to disperse over the heavily-developed area in between occupied habitat and the Project Area.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
California red-legged frog Rana draytonii	FT, SSC, RP, EACCS	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11 to 20 weeks of permanent water for larval development. Must have access to estivation habitat.	Unlikely. The Project Area does not contain suitable ponding aquatic features to support breeding in this species and is not interconnected with other suitable habitat. The nearest documented occurrence is approximately 2 miles east of the Project Area in marginal habitat where breeding was not observed (CNDDB 2017). In Addition, the freshwater marsh within the Project Area only provides very marginal habitat that has a high level of human disturbance. Furthermore, the Project Area is surrounded on three sides by development, precluding its use as a movement corridor to other suitable habitats. However, dispersing juvenile frogs in search of permanent habitat may rarely enter the Project Area from the potential habitat to the east.	No further actions are recommended for this species.

SPECIES	STATUS*	HABITAT	POTENTIAL FOR OCCURRENCE	RECOMMENDATIONS
California tiger salamander <i>Ambystoma californiense</i>	FE/FT, ST, RP, EACCS	Populations in Santa Barbara and Sonoma Counties are currently listed as endangered, and the Central Valley populations are listed as threatened. Inhabits grassland, oak woodland, ruderal and seasonal pool habitats. Seasonal ponds and vernal pools are crucial to breeding. Adults utilize mammal burrows as estivation habitat.	No Potential. The Project Area does not contain suitable ponding aquatic features to support breeding in this species. The nearest documented occurrence of this species is over 7 miles southeast of the Project Area (CNDDB 2017) and is separated from the Project Area by several major highways that act as permanent dispersal barriers (Google Earth 2017).	No further actions are recommended for this species.
Alameda whipsnake Masticophis lateralis euryxanthus	FT, ST, RP EACCS	Inhabits chaparral and foothill-hardwood habitats in the eastern Bay Area. Prefers south-facing slopes and ravines with rock outcroppings where shrubs form a vegetative mosaic with oak trees and grasses.	Unlikely. The Project Area does not contain permanent chaparral/hardwood mosaic habitat or rocky outcrops required by this species, and the Project Area is surrounded on three sides by suburban development, precluding its use as a movement corridor to other suitable habitats. However, dispersing snakes in search of permanent habitat may rarely enter the Project Area from the potential habitat to the north and east.	No further actions are recommended for this species.

Fishes				
steelhead - central CA coast DPS Oncorhynchus mykiss irideus	FT, NMFS, EACCS	Occurs from the Russian River south to Soquel Creek and Pajaro River. Also in San Francisco and San Pablo Bay Basins. Adults migrate upstream to spawn in cool, clear, well- oxygenated streams. Juveniles remain in fresh water for 1 or more years before migrating downstream to the ocean.	No Potential. The Project Area does not contain the anadromous riparian habitat required by this species.	No further actions are recommended for this species.
longfin smelt Spirinchus thaleichthys	FC, ST, SSC, RP	Euryhaline, nektonic and anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15 to 30 ppt, but can be found in completely freshwater to almost pure seawater.	No Potential. The Project Area does not contain the anadromous estuarine habitat required by this species.	No further actions are recommended for this species.
Invertebrates				
vernal pool tadpole shrimp <i>Lepidurus packardi</i>	FE, SSI, RP	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.	No Potential. The Project Area does not contain the vernal pool habitat required by this species. Additionally, the nearest documented occurrence is over 9 miles south of the Project Area (CNDDB 2017).	No further actions are recommended for this species.

* Key to status codes:

FT Federal Threatened

BCC	USFWS Birds of Conservation Concern
SE	State Endangered
ST	State Threatened
SC	State Candidate
SSC	CDFW Species of Special Concern
SSI	CDFW Special-Status Invertebrate
CFP	CDFW Fully Protected Animal
WBWG	Western Bat Working Group (High or Medium) Priority species
RP	Species included in a USFWS Recovery Plan or Draft Recovery Plan
Rank 1A	California Rare Plant Rank 1A: Presumed extirpated in California and either rare or extinct elsewhere
Rank 1B	California Rare Plant Rank 1B: Plants rare, threatened, or endangered in California and elsewhere
Rank 2B	California Rare Plant Rank 2B: Plants rare, threatened, or endangered in California, but more common elsewhere
Rank 3	California Rare Plant Rank 3: Plants about which more information is needed (a review list)
Rank 4	California Rare Plant Rank 4: Plants of limited distribution - a watch list

Species Evaluations:

See evaluation definitions in Section 3.2.2 of the report.

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APPENDIX C

SITE PHOTOGRAPHS

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Photograph 1. The Alameda County Flood Control Channel location within the central portion of the Project Area. Photo taken from the culvert outlet at the southwest end of the channel. View facing northeast. Photograph taken June 15, 2017.



Photograph 2. An example of the Developed biological community. The image shows the small materials handling yard at the southern end of the Project area. View facing southeast. Photograph taken June 15, 2017.



Appendix C. Site Photographs



Photograph 3. An example of the Developed biological community. The image shows a paved parking lot and perimeter fence lines of single family residences in the northwest portion of the Project Area. View facing northeast. Photograph taken June 15, 2017.



Photograph 4. An example of the Developed biological community. The image shows the existing Valle Vista Park in the northwestern portion of the Project area. View facing south. Photograph taken June 15, 2017.





Photograph 5. An example of the Developed biological community. The image shows the flat, gravel parking and turnaround area in the small parcel northeast of Mission Blvd. Non-native grassland is visible in the background. View facing north. Photograph taken June 15, 2017.



Photograph 6. An example of the non-native grassland biological community located in the central portion of the Project Area northwest of the Alameda County Flood Control Channel. View facing southwest. Photograph taken June 15, 2017.



Appendix C. Site Photographs



Photograph 7. An example of the non-native grassland biological community located in the southern portion of the Project Area. The Pacific Truck Driving School area is visible in the background. View facing southwest. Photograph taken June 15, 2017.



APPENDIX D

ARBORIST SURVEY REPORT

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June 28, 2017

Mr. Scott Roylance William Lyon Homes, Inc. 2603 Camino Ramon, Suite 450 San Ramon, California 94583

Re: Arborist Survey and Protected Tree Appraisal Report, Valle Vista Properties, Hayward, California

Dear Mr. Roylance:

The purpose of this letter is to inform you of the results of an arborist survey and tree appraisal performed on June 20, 2017 at the site of the proposed Valle Vista Properties development project (Project), in Hayward, Alameda County, California (Study Area). The survey was conducted by WRA's ISA-Certified Arborist (#WE-9300A) and Tree Risk Assessment Qualified (TRAQ) arborist for the purpose of identifying the presence, and appraising the value of all protected trees per the City of Hayward Tree Preservation Ordinance (Tree Ordinance) within the limit of grade of the proposed project. The comprehensive arborist survey also included a survey of all existing non-protected "trees" as defined by the Tree Ordinance. This report was prepared in direct response to the City of Hayward request for a comprehensive arborist report on all existing trees within the limit of grade of the Project, and an appraisal of the value of each "protected" tree as defined by the Tree Ordinance.

The Study Area consists of approximately 25.76 acres of urban infill land located within a commercially and residentially developed portion of the City of Hayward, along Mission Boulevard and Industrial Parkway. The Study Area is bounded by Mission Boulevard, residential development, and undeveloped land to the northeast; residential and commercial development and railroad to the northwest and west; and Industrial Boulevard to the south. The predominate land uses adjacent to the Study Area include high-density, urban residential development commercial development.

The Study Area consists of four lots separated by paved roads. The majority of the Study Area is characterized by weedy, undeveloped areas, though some portions include existing residences, paved and unpaved parking areas, and a small park. Trees within the Study Area are predominantly planted non-native ornamental species, and weedy volunteer trees.

Regulatory Background

City of Hayward Tree Preservation Ordinance

The City of Hayward Tree Preservation Ordinance encourages the preservation and avoidance of trees during development projects. The City of Hayward Municipal Code, Section 10-15.20 declares it unlawful to "remove, destroy, cut branches over one-inch diameter, disfigure or cause to be removed or destroyed any protected tree within the City without first obtaining a Tree Removal and Cutting Permit." Protected trees are defined in Section 10-5.13 as those with a minimum diameter at breast height (DBH) of 8 inches, street trees, memorial trees dedicated by a City-recognized entity, specimen trees that define a neighborhood or community, and those trees planted to replace a protected tree. In addition, 13 native tree species are protected at 4 inches DBH and above. The native species protected at 4 inches DBH and above include:



- big leaf maple (*Acer macrophyllum*)
- California buckeye (Aesculus californica)
- madrone (Arbutus menziesii)
- western dogwood (Cornus nuttallii)
- California sycamore (*Platanus racemosa*)
- coast live oak (Quercus agrifolia)
- canyon live oak (*Quercus chrysolepis*)
- blue oak (Quercus douglasii)
- Oregon oak (Quercus garryana)
- California black oak (Quercus kelloggii)
- valley oak (Quercus lobata)
- interior live oak (Quercus wislizeni)
- California bay (Umbellularia californica)

As per Section 10-15.13, when measuring multi-trunk trees to determine protected status, the diameters of the largest three trunks shall be added together. For instance, a multi-trunk tree of the 13 native species listed above must have an aggregate diameter of the three largest trunks that equals 4 inches DBH, and any other tree species must have an aggregate diameter of the three three largest trunks that equals 8 inches in DBH to be considered protected.

The Tree Ordinance defines a non-protected "tree" as: "any woody perennial plant characterized by having a single trunk or multi-trunk structure at least ten feet high and having a major trunk with a caliper of at least four inches measured 54 inches above the ground level. It shall also include those species of plants generally designated as trees."

As per section 10-15.20, the City requires a permit for the removal, relocation, cutting or reshaping of protected trees. Replacement of removed protected trees with like-size, like-kind trees, or equal-value trees, is often required as a condition of approval. In cases where like-size, like-kind trees are not available, the value of protected trees shall be determined using *Guide for Plant Appraisal, 9th Edition* (Council of Tree and Landscape Appraisers "CTLA" 2000).

Methods

On June 20, 2017 the Study Area was traversed on foot to inventory all protected trees per the City of Hayward Tree Preservation Ordinance within and directly adjacent to the limit of grade of the Study Area. WRA's ISA-Certified Arborist traversed the Study Area and recorded relevant information for each protected tree including tree species, DBH (as measured 4.5 feet above grade), condition rating, approximate dripline radius, and estimated height. In addition to protected trees, all "trees" as defined previously were surveyed.

Diameter at breast height (DBH) was calculated for surveyed trees by measuring the trunk diameter at 54 inches above grade. For multi-trunk trees, DBH was calculated by measuring each individual trunk (of the five largest significant trunks) and calculating the sum total of trunk diameters. Dripline radii were measured at the largest extent of the tree's dripline where possible, using a measuring tape from the trunk to the edge of dripline. In cases where there was an enclosed canopy and radii measurements where not feasible, dripline radii were estimated. All heights of protected trees were estimated in feet. Protected tree locations within the Study Area were recorded using a GPS unit, and tagged with an aluminum tree tag with a unique identifying number. Non-protected trees that met the definition of "tree" within the Tree Ordinance (having



at least one trunk measuring 4 inches diameter or more) were recorded similarly, using a GPS unit but were not given a tree tag. The survey included are areas within the Study Area where access was permitted. The survey did not include trees within the gated portions of the developed residential lots at 29115 and 29131 Mission Blvd, as locked gates precluded access, and trees within the backyards of single family residences are also typically exempt from the Tree Ordinance. Additionally, street trees along City right-of-ways were not surveyed as they were presumed to be outside of the limit of disturbance of the proposed Project.

General notes on the condition of non-protected trees were taken, including health, structure, and overall condition. Assessment of the health, structure, and overall condition of each non-protected tree was conducted according to the narratives listed in Table 1.

Health	· ·
Good	Tree is free from symptoms of disease and stress
Fair	Tree shows some symptoms of disease or stress including twig and small branch dieback, evidence of fungal / parasitic infection, thinning of crown, or poor leaf color
Poor	Tree shows symptoms of severe decline
Structure	
Good	Tree is free from major structural defects
Fair	Tree shows some structural defects in branches but overall structure is stable
Poor	Tree shows structural failure of a major branch or co-dominant trunk
General C	ondition
Good	Tree shows condition of foliage, bark, and overall structure characteristic of the species and lacking obvious defect, or disease
Fair	Tree shows condition of foliage, bark, and overall structure characteristic of the species with some evidence of stress, defect, or disease
Poor	Tree shows condition of foliage, bark, and overall structure uncharacteristic of the species with obvious evidence of stress, defect, or disease.

Table 1. Rating narratives for tree assessment

A more detailed assessment of tree condition was conducted for protected trees following the guidelines outlined in the *Guide for Plant Appraisal, 9th Edition* (CTLA), as described below.

Appraisal Methodology

The "Trunk Formula Method" described in *Guide for Plant Appraisal, 9th Edition* (CTLA) was used to appraise the value of the protected trees within the Study Area. This method is commonly used to appraise the value of landscaped trees that are larger than the largest commercially available transplantable nursery specimen, or 24"-box tree (WC-ISA 2004). The Trunk Formula Method begins by considering the cost to buy and install a 24"-box replacement tree (Installed Tree Cost; determined by Western Chapter-ISA (WC-ISA) as twice the average wholesale cost of a 24"-box tree \$345.46), and calculates a cost per square-inch trunk area (Unit Tree Cost) for replacement trees. The Basic Tree Cost of an appraised tree is determined by subtracting the trunk area of the 24"-box replacement tree, multiplying the difference



by the unit tree cost, and adding the installed tree cost. The Basic Tree Cost is then reduced by three depreciation factors, including species, condition, and location ratings to determine the Appraised Value.

Species ratings rank overall desirability of the species for landscaping purposes, based on site suitability, hardiness, structural integrity, and longevity. Species ratings range from 10 percent to 90 percent as determined by the Northern California Regional Plant Appraisal Subcommittee (WC-ISA 2004). Species present within the Study Area are listed in Table 2 below, along with associated ratings. *Species Classification and Group Assignment* (WC-ISA 2004), allows the appraiser to add or deduct 10 percent from individual species ratings based on local considerations. As such, species listed on the California Invasive Plant Council (Cal-IPC) Invasive Plant Inventory Database, and species that were observed to be locally invasive, were reduced by 10 percent due to their potentially negative ecological impact.

Species	Common Name	Species Rating	Comments
Acacia longifolia	Sydney golden wattle	30%	Non-native, ornamental.
Acacia melanoxylon	Black acacia	20%	Reduced rating 10% due to Cal-IPC invasive species rating.
Alnus rhombifolia	White alder	10%	Native to CA.
Catalpa speciosa	Western catalpa	50%	Non-native, ornamental.
Eucalyptus sideroxylon 'Rosea'	Red ironbark	10%	Non-native, ornamental.
Fraxinus velutina 'Modesto'	Modesto ash	30%	Non-native, ornamental.
Juglans hindsii	California black walnut	50%	Native to CA.
Juglans regia	English walnut	30%	Non-native, ornamental.
Ligustrum lucidum	Glossy privet	20%	Reduced rating 10% due to Cal-IPC invasive species rating.
Olea europaea	Olive	60%	Reduced rating 10% due to Cal-IPC invasive species rating.
Phoenix canariensis	Canary Island date palm	70%	Non-native, ornamental.
Pinus halepensis	Aleppo pine	50%	Non-native, ornamental.
Podocarpus gracilior	Fern pine	70%	Non-native, ornamental.
Populus nigra	Black poplar	30%	Non-native, ornamental.
Prunus cerasifera	Cherry plum	20%	Reduced rating 10% due to Cal-IPC invasive species rating.
Pyrus calleryana	Callery pear	50%	Non-native, ornamental.
Quercus ilex	Holly oak	60%	Reduced rating 10% due to observed invasive potential.
Quercus lobata	Valley oak	90%	Native to CA.
Sambucus nigra ssp. caerulea	Blue elderberry	30%	Native to CA.
Schinus molle	Peruvian pepper tree	40%	Reduced rating by 10% due to Cal-IPC invasive species rating.
Sequoia sempervirens	Coast redwood	90%	Native to CA.
Syzygium paniculatum	Australian brush cherry	30%	Non-native, ornamental.
Washingtonia robusta	Mexican fan palm	50%	Non-native, ornamental.

Table 2. Species Ratings of Appraised Trees within Study Area



Overall condition ratings for each tree were determined following "Table 4.3: Guide to Judging Plant Condition" from *Guide for Plant Appraisal, 9th Edition*. Condition rating is determined by rating the structure and health of the roots, trunk, and scaffold branches, and health of small branches and foliage for each appraised tree. Each of the eight attributes was given a score of 1 to 4, with 1 signifying "extreme problems" and 4 signifying "no apparent problems". The total score was divided by the total number of available points to arrive at a percentage condition score.

Location ratings for each tree are determined by the placement of the appraised tree, functional and aesthetic contribution, and the overall rating of the property compared to similar properties in the same city, county, or region. The site rating, contribution rating, and placement rating are averaged to obtain a location rating for each tree. Site ratings are predicated on the overall appearance of the site from an anthropocentric perspective, in regards to the quality of buildings, landscape structures, and plantings on site. For example, a site with a well-maintained house and a meticulously designed landscape may receive a high rating, while a vacant or abandoned property, or an unmaintained, naturally occurring woodland may receive a low rating. Contribution rating refers to the functional and aesthetic benefits (e.g. shading, wind control, erosion control, or visual screening) the appraised tree has on the site overall and placement rating rates the effectiveness of realizing the appraised tree's benefits based on its placement within the site.

The majority of the Study Area is undeveloped, with the exception of Valle Vista Park, residential lots at 29115 and 29131 Mission Blvd. As stated above, the general appearance of the site in which the appraised plant is located is an important factor in rating a site. For this reason, developed portions of the site were given higher site ratings than vacant, undeveloped portions of the site. Vacant, open field portions of the Study Area were given a "very low" rating of 50%, due to the ruderal and disturbed appearance of these portions of the site, the lack of buildings, and maintained landscapes, as well as the evidence of homeless encampments, and trash covering portions of the site. By contrast, the developed, landscaped and maintained Valle Vista Park was given a "high" site rating of 80%.

Contribution ratings for each tree were based mainly on size and aesthetic appearance of the tree as well as whether the tree appeared to be purposefully planted in its current location, or if it was an obvious volunteer that had never been cared for or maintained. For example, the majority of the black acacia (Acacia melanoxylon), and cherry plum (Prunus cerasifera) trees in the Study Area, site were obvious "volunteers". The weedy, volunteer black acacia trees were typically found in overcrowded, multi-trunk clusters with several of these multi-trunk trees exhibiting poor growth forms or catastrophic failure of one or more major trunks. Overcrowded, and sporadic volunteer trees received a "very low" to "low" rating (30% to 60%), where as stand-alone specimen trees, or trees which were obviously planted and maintained as part of a maintained landscape received a higher contribution rating up to 80% ("high") (Appendix B, Figure 2). Placement ratings range from 30% (very low) to 80% (high) and are based on the perceived benefits they provide due to their location and proximity to existing structures, roads, and/or fences and hardscape (Appendix B, Figure 3). For example, volunteer trees in the in vacant lots, away from any structures received a low to very low placement rating, whereas coast redwood and white alder trees planted along the perimeter of Valle Vista Park, that provide shade and screening to the neighboring apartment complex, and accentuate the park improvements received a higher rating.

Palm trees within the Study Area, including Canary Island palms (*Phoenix canariensis*), and Mexican fan palms (*Washingtonia robusta*) were appraised using the Replacement Cost Method. The Unit Tree Cost for palms is based on trunk-feet, as opposed to basal area. The average



price per trunk-foot for Canary Island date palms in the Northern California region is \$375, and the average price per trunk foot for Mexican fan palms is \$50 per foot (WC-ISA 2004). Installation cost for a replacement palm of a similar size was estimated by contacting a palm broker (Golden Gate Palms and Exotics 2017, pers. comm.). Installation costs, which would involve a crane and heavy equipment operator, were estimated at \$200 per hour. Installation was estimated at one half work day for each palm; therefore, the installation cost was estimated at \$1,600.

Results

A total of 94 trees protected per the City of Hayward Tree Ordinance were appraised within the Study Area (Appendix B, Figure 1). The results and appraisal calculations are shown in Appendix A-1. The total value of protected trees was appraised at \$220,240. A total of four additional non-protected trees were surveyed in the Study Area. Pertinent information regarding non-protected trees in the Study Area is provided in Appendix A-2. Representative photographs of the Study Area and of appraised trees are provided in Appendix C.

Impact Assessment

Implementation of the proposed project would result in the removal of 94 protected trees, and four non-protected trees. This impact assessment is based on preliminary project plans and is subject to revision. A tree removal permit shall be obtained from the City of Hayward Planning Division for removal of any existing protected trees in addition to a grading permit, and appropriate tree replacement will likely be required. In addition, a tree pruning permit shall be obtained from the City of Hayward Planning Division prior to pruning any existing protected trees unless pruning shall be done by an Annual Pruning Certification holder.

Limitations

This assessment is based upon conditions observed during the date of the site visit. Tree condition assessments were based on visual observations from the ground level. The arborist did not conduct any root excavation, coring, or aerial inspection to assess above ground conditions. Arborists cannot detect every condition that could possibly contribute to the structural failure or decline in the health of a tree and therefore affect the appraised value. There is no warranty or guarantee, expressed or implied, that problems or deficiencies in surveyed trees may not arise in the future.

The tree appraisal of protected trees within the Study Area followed the Trunk Formula Method outlined in *Guide for Plant Appraisal, 9th Edition*. Factors affecting the appraised value of appraised trees are based on the arborist's knowledge, training, and experience to inspect and assess tree health and condition, as well the arborist's experience in tree appraisal methods and best professional judgement regarding site condition, tree contribution and placement factors.

Please feel free to contact me or Mark Kalnins, Project Manager, if you have any questions or concerns.

Sincerely yours,



Scott Yarger ISA Certified Arborist #WE-9300A Tree Risk Assessment Qualified (TRAQ) yarger@wra-ca.com



REFERENCES

- California Invasive Plant Council (Cal-IPC). 2017. California Invasive Plant Inventory Database. California Invasive Plant Council: Berkeley, CA. Available online at: http://www.calipc.org/paf/. Most recently accessed: June 2017.
- Council of Tree and Landscape Appraisers (CTLA). 2000. Guide for Plant Appraisal. 9th Ed. International Society of Arboriculture. Chicago, Illinois.
- Hatch, C. R. 2007. Trees of the California Landscape: A Photographic Manual of Native and Ornamental Trees. University of California Press, Berkeley, CA.
- Purcell, L. 2012. Tree Appraisal. Purdue University Department of Forestry and Natural Resources; FNR-473-W.. Available online at: https://www.extension.purdue.edu/extmedia/fnr/fnr-473-w.pdf. Most recently accessed: June 2017.
- Western Chapter of the International Society of Arboriculture (WC-ISA). 2004. Species Classification and Group Assignment: A Regional Supplement to the CTLA Guide for Plant Appraisal, 9th Ed. January, 2004.

Appendix A -

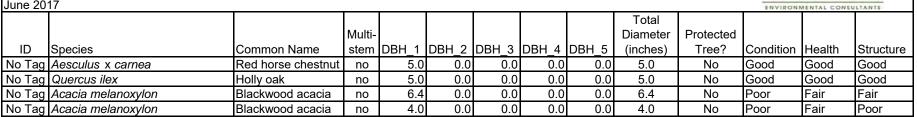
Protected Tree Appraisal and Non-Protected Tree Information

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Appendix A-1. Protected Tree Appraisal, Valle Vista Project, Hayward, California														NIQ										
Appendix A-1. Protected Tree Appraisal, Tree Tag # Species	Valle Vista Project, Hayward, Califor	nia Species Rating	Protected (Yes/No)	Multi- stem (Yes/No	_	DBH_ DBH_	_ DBH.	_ DBH_	Total DBH	Estimated Height (Ft.)	Estimated Crown Radius (Ft.)	s Condition Rating	Site Rating	Contribution Rating	Placement Rating	Location Rating	Installed Tree Cost U	ait Tree Cost	Protected Tree Trunk Adjusted Area (Sq. Trunk At In.) (Sq. In.)		(Protected Tre Trunk Area - nt Replacement Tree Trunk	e Basic Tree Cost e (Appraised Tree Trunk Increase X Unit Tree Cost + Installed	Appraised Value (Basic Tree Cost X Species Rating X Condition X	Appraised Value Rounded (to nearest \$100 if >\$5000; to \$10 if <\$5000)
585 Acacia melanoxylon	Blackwood acacia	20.00%	6 Yes	Yes	9.1	2 3 7 0	4 0	5	16.1	30	(FL) 17	69%	50%	60%	60%	56.67%	\$345.46 \$	45.46	/ (* 1 /		3.8 99	,	\$379.96	\$380.00
586 Juglans hindsii	Northern California black walnut	30.00%	6 Yes	No	23.1	0 0	0	0	23.1	35	28	59%	50%	60%	60%	56.67%	\$345.46 \$	45.46			3.8 415	1 /	\$1,939.53	\$1,940.00
587 Acacia melanoxylon	Blackwood acacia	20.00%	6 Yes	No	22.1	0 0	0	0	22.1	60	16	69%	50%	60%	60%	56.67%	\$345.46 \$	45.46			3.8 379		\$1,371.50	\$1,370.00
588 Juglans hindsii	Northern California black walnut	50.00%	6 Yes	Yes	17.4	8.6 8.1	-	0	34.1	25	22	56%	50%	60%	60%	56.67%	\$345.46 \$	45.46			3.8 343		\$2,543.27	\$2,540.00
589 Syzygium paniculatum 590 Syzygium paniculatum	Australian brush cherry Australian brush cherry	30.00% 30.00%	6 Yes	Yes	10.2	7.5 6.2 0 0	0	0	23.9	20	10	72%	50% 50%	60% 60%	60% 60%	56.67% 56.67%	\$345.46 \$ \$345.46 \$	77.04 77.04			3.8 152 2.24 156		\$1,474.95 \$1,576.84	\$1,470.00 \$1,580.00
590 Syzygium paniculatum 591 Acacia melanoxylon	Blackwood acacia	20.00%	6 Yes 6 Yes	No No	14.2	0 0	0	0	14.2	40	21	75%	50%	60%	60%	56.67%	\$345.46 \$	45.46			3.8 244		\$1,576.64	\$1,020.00
592 Schinus molle	Peruvian pepper tree	40.00%	6 Yes	Yes	4	4.1 0	-	0	8.1	15	12	75%	50%	40%	30%	40.00%	\$345.46 \$	36.30			4.75 21		\$133.11	\$130.00
593 Pyrus calleryana	Callery pear	50.00%	6 Yes	Yes	7	3 0	0	0	10.0	12	8	59%	50%	40%	30%	40.00%	\$345.46 \$	77.04			2.24 43		\$437.06	\$440.00
594 Prunus cerasifera	Cherry plum	20.00%	% Yes	Yes	4.4	4.6 3	0	0	12.0		8	34%	50%	40%	30%	40.00%	\$345.46 \$	77.04			2.24 36		\$87.11	\$90.00
595 Acacia melanoxylon	Blackwood acacia	20.00%	6 Yes	Yes	12.5	12.3 11.2	-		52.0	40	30	75%	50%	40%	30%	40.00%	\$345.46 \$	45.46			3.8 442		\$1,228.64	\$1,230.00
596 Acacia melanoxylon	Blackwood acacia	20.00%	6 Yes 6 Yes	Yes	8.8 9.5	11.2 12.3 8 8	3 12.3 4	0	51.6 29.5	35 30	30	69%	50% 50%	40% 40%	30% 30%	40.00%	\$345.46 \$ \$345.46 \$	45.46			3.8 431 3.8 180		\$1,097.76 \$447.94	\$1,100.00 \$450.00
597 Acacia melanoxylon 598 Prunus cerasifera	Blackwood acacia Cherry plum	20.00%	6 Yes 6 Yes	Yes Yes	9.5	3 2		0	29.5	8	10	66% 41%	50%	40%	30%	40.00%	\$345.46 \$	45.46			3.8 180 2.24 15		\$447.94	\$450.00
599 Acacia melanoxylon	Blackwood acacia	20.00%	6 Yes	Yes	12.8	15 11	-	7.2	54.0	35	30	41%	50%	30%	30%	36.67%	\$345.46 \$	45.46			3.8 487		\$670.34	\$50.00
600 Acacia melanoxylon	Blackwood acacia	20.00%		No	10.9	0 0			10.9		15	72%	50%	40%	30%	40.00%	\$345.46 \$	45.46			3.8 89		\$253.72	\$250.00
601 Phoenix canariensis	Canary island date palm	50.00%	% Yes	No	30	0 0		0	30.0		20	72%	50%	60%	50%	53.33%		375 (Trunk Foot		691	N/A N		\$1,384.79	\$1,400.00
603 Pyrus calleryana	Callery pear	50.00%	6 Yes	No	12.5	0 0	-		12.5		14	56%	70%	80%	70%	73.33%	\$345.46 \$	77.04			2.24 120		\$1,984.61	\$1,980.00
604 Pyrus calleryana	Callery pear	50.00%	-	No	12.7	0 0	-	0	12.7		14	56%	70%	80%	70%	73.33%	\$345.46 \$	77.04			2.24 124		\$2,047.47	\$2,050.00
605 Pinus halepensis	Aleppo pine	50.00%	6 Yes	No	26.7	0 0	- v	0	26.7		22	72%	70%	80%	70%	73.33%	\$345.46 \$	45.46			3.8 555		\$6,750.09	\$6,800.00
606 Podocarpus gracilior 607 Pinus halepensis	Fern pine	30.00% 50.00%	6 Yes 6 Yes	Yes No	9.6 19.1	11.9 0 0 0	-	0	21.5		16 25	75% 63%	70%	80% 80%	70%	73.33%	\$345.46 \$ \$345.46 \$	77.04 45.46			2.24 181 3.8 282		\$2,361.23 \$3,023.02	\$2,360.00 \$3,020.00
608 Podocarpus gracilior	Aleppo pine Fern pine	70.00%	6 Yes	No	9.5	0 0	- v	0	9.5	25	12	81%	70%	80%	70%	73.33%	\$345.46 \$	77.04			2.24 68		\$2,348.55	\$3,020.00
609 Pinus halepensis	Aleppo pine	50.00%		No	14.7	0 0	-	0	14.7	-	15	63%	70%	80%	70%	73.33%	\$345.46 \$	45.46			3.8 165		\$1.806.78	\$1,810.00
610 Pinus halepensis	Aleppo pine	50.00%		No	19.5	0 0	0	0	19.5		19	69%	70%	80%	70%	73.33%	\$345.46 \$	45.46			3.8 294		\$3,464.22	\$3,460.00
611 Quercus ilex	Holly oak	60.00%	6 Yes	Yes	4.4	4.1 2.6	0	0	11.1	15	10	91%	70%	80%	70%	73.33%	\$345.46 \$	77.04			2.24 31		\$1,104.20	\$1,100.00
612 Catalpa speciosa	Western catalpa	50.00%	6 Yes	No	10.8	0 0	-	0	10.8	25	17	84%	70%	80%	70%	73.33%	\$345.46 \$	45.46			3.8 87	÷.,••••	1 / -	\$1,340.00
613 Quercus lobata	Valley oak	90.00%	6 Yes	No	23.7	0 0	-	0	23.7	35	34	88%	50%	80%	60%	63.33%	\$345.46 \$	77.04			2.24 438			\$17,000.00
615 Quercus ilex 616 Quercus ilex	Holly oak Holly oak	60.00% 60.00%	6 Yes 6 Yes	Yes Yes	7.1	5.5 4.4 3.5 2		0	21.2		<u>15</u> 9	<u>81%</u> 81%	50% 50%	60% 60%	60% 60%	56.67% 56.67%	\$345.46 \$ \$345.46 \$	77.04 77.04			2.24 <u>90</u> 2.24 23		\$2,013.46 \$590.73	\$2,010.00 \$590.00
617 Acacia melanoxylon	Blackwood acacia	20.00%	6 Yes	Yes		2 2	0	0	10.1	10	8	69%	50%	60%	60%	56.67%	\$345.46 \$	45.46			3.8 31		\$139.17	\$140.00
618 Quercus lobata	Valley oak	90.00%		No	6.5	0 0		0	6.5	20	10	72%	50%	60%	60%	56.67%	\$345.46 \$	77.04			2.24 30		\$999.99	\$1,000.00
619 Acacia longifolia	Sydney golden wattle	30.00%	6 Yes	Yes	4.6	4.5 6	6	4	25.1	10	20	56%	50%	60%	60%	56.67%	\$345.46 \$	77.04	4 101.6		2.24 99		\$764.92	\$760.00
620 Eucalyptus sideroxylon 'Rosea'	Red ironbark	10.00%	6 Yes	No	18	0 0	0	0	18.0		18	69%	50%	60%	60%	56.67%	\$345.46 \$	77.04			2.24 252		\$770.10	\$770.00
621 Juglans hindsii	Northern California black walnut	50.00%		Yes		8.3 7.6	-				25	28%	50%	50%	50%	50.00%	\$345.46 \$	45.46	-		3.8 240		\$793.50	\$790.00
622 Juglans regia 623 Prunus cerasifera	English walnut Cherry plum	30.00% 20.00%	6 Yes 6 Yes	Yes Yes	6 10.8	4.9 4.6 5 5.5	-	4.3	24.4		20	63% 47%	50% 50%	50% 30%	50% 30%	50.00% 36.67%	\$345.46 \$ \$345.46 \$	45.46			3.8 91 2.24 189		\$420.40 \$512.96	\$420.00 \$510.00
624 Prunus cerasifera	Cherry plum	20.00%	6 Yes	Yes		3 2	2	2	15.0		8	56%	50%	30%	30%	36.67%	\$345.46 \$	77.04			2.24 103		\$149.33	\$150.00
625 Populus nigra	Black poplar	30.00%	6 Yes	Yes	9.5	15.3 12	9	0	45.8		28	38%	50%	50%	50%	50.00%	\$345.46 \$	36.36			4.75 426		\$891.69	\$890.00
626 Quercus ilex	Holly oak	60.00%	6 Yes	Yes	13	14 0	0	0	27.0	35	20	91%	50%	50%	50%	50.00%	\$345.46 \$	77.04	4 286.5	287	2.24 284	.3 \$22,246.78	\$6,048.34	\$6,000.00
627 Fraxinus velutina 'Modesto'	Modesto ash	30.00%	6 Yes	No	16	0 0	0	0	16.0		15	72%	50%	50%	50%	50.00%	\$345.46 \$	36.36		-	4.75 196		\$806.40	\$810.00
628 Phoenix canariensis	Canary island date palm	70.00%		No	38	0 0	0	0	38.0		15	75%	50%	50%	50%	50.00%		375 (Trunk Foot		063	N/A N/	÷-,	\$1,404.38	\$1,400.00
629 Olea europaea 630 Acacia melanoxylon	Olive Disclosured associa	60.00%		Yes	6	6 6 0 0	0	0	18.0		10	72%	50%	30%	30%	36.67%		45.46		85	3.8 80.9 3.8 118.8		\$636.74	\$640.00
630 Acacia melanoxylon 631 Sambucus nigra ssp. caerulea	Blackwood acacia Blue elderberry	20.00%		No Yes	12.5 14.2	8.2 8.2	-		12.5		18	75% 63%	50% 50%	50% 50%	50% 50%	50.00% 50.00%	\$345.46 \$ \$345.46 \$	45.46			3.8 118.8 2.24 274.1			\$430.00 \$2,010.00
632 Phoenix canariensis	Canary island date palm	70.00%		No	36	0 0			36.0		15	78%	50%	60%	50%	53.33%		375 (Trunk Foot			N/A N			\$2,100.00
633 Phoenix canariensis	Canary island date palm	70.00%	6 Yes	No	36	0 0			36.0	15	15	78%	50%	60%	50%	53.33%	\$1,600.00 \$3	375 (Trunk Foot	t) 973.6	974	N/A N	A \$7,225.00	\$2,107.29	\$2,100.00
634 Washingtonia robusta	Mexican fan palm	50.00%		No	20	0 0	-		20.0		8	78%	50%	60%	50%	53.33%		\$50 (Trunk Foo	/		N/A N	1 1	\$593.75	\$600.00
635 Acacia melanoxylon	Blackwood acacia	20.00%		No	33.3	0 0	-		33.3		25	59%	50%	40%	40%	43.33%	\$345.46 \$	45.46			3.8 845.4		\$1,995.45	\$2,000.00
636 Acacia melanoxylon 637 Acacia melanoxylon	Blackwood acacia Blackwood acacia	20.00%		No Yes	15.5 13.5	0 0			15.5 26.2		20	59% 59%	50% 50%	40%	40%	43.33% 43.33%	\$345.46 \$ \$345.46 \$	45.46			3.8 184.8 3.8 265.8		\$450.07 \$639.75	\$450.00 \$640.00
637 Acacia melanoxylon 638 Acacia melanoxylon	Blackwood acacia Blackwood acacia	20.00%	6 Yes 6 Yes	Yes		3 3	-		10.0		18	69%	50%	40%	40%	43.33%	\$345.46 \$	45.46			3.8 265.8		\$639.75	\$640.00 \$80.00
639 Acacia melanoxylon	Blackwood acacia	20.00%		Yes		7.5 6.5	-		26.1		18	72%	50%	40%	40%	43.33%	\$345.46 \$	45.46			3.8 188.4			\$560.00
640 Acacia melanoxylon	Blackwood acacia	20.00%		No		0 0		-	10.3		10	75%	50%	40%	40%	43.33%	\$345.46 \$	45.46			3.8 79.4		\$257.31	\$260.00
641 Quercus ilex	Holly oak	60.00%		Yes		4 0			8.0		8	72%	50%	40%	40%	43.33%	\$345.46 \$	77.04			2.24 22.8		\$393.96	\$390.00
642 Ligustrum lucidium	Glossy privet	20.00%		Yes		3.8 2			15.0		8	69%	50%	50%	50%	50.00%	\$345.46 \$	45.46			3.8 52.9		\$189.21	\$190.00
643 Ligustrum lucidium 644 Ligustrum lucidium	Glossy privet	20.00%		Yes		4.3 4.3 5.6 2			16.9		8	69%	50%	50%	50%	50.00%	\$345.46 \$	45.46			3.8 46.0 3.8 49.1		\$167.59 \$177.22	\$170.00
644 Ligustrum lucidium 645 Ligustrum lucidium	Glossy privet Glossy privet	20.00%	6 Yes 6 Yes	Yes Yes		5.6 2 5 3	- v	-	15.4		8	69% 69%	50% 50%	50% 50%	50% 50%	50.00% 50.00%	\$345.46 \$ \$345.46 \$	45.46			3.8 49.1 3.8 52.1		\$177.23 \$186.58	\$180.00 \$190.00
646 Ligustrum lucidium	Glossy privet	20.00%			6.7	4 4			20.7		8	69%	50%	50%	50%	50.00%	\$345.46 \$	45.46			3.8 72.2		\$180.58	\$190.00
647 Ligustrum lucidium	Glossy privet	20.00%		Yes			0	_	11.5		6	44%	50%	50%	50%	50.00%	\$345.46 \$	45.46			3.8 31.7		\$78.20	\$80.00
648 Ligustrum lucidium	Glossy privet	20.00%	6 Yes	Yes	5	4 1.5	1.5	0	12.0		6	44%	50%	50%	50%	50.00%	\$345.46 \$	45.46	6 35.7	36	3.8 31.9	\$1,796.43	\$78.59	\$80.00
649 Ligustrum lucidium	Glossy privet	20.00%			6.7	6.7 2			19.4		10	41%	50%	50%	50%	50.00%		45.46			3.8 76.2			\$150.00
650 Ligustrum lucidium	Glossy privet	20.00%		Yes			0		8.1		6	66%	50%	50%	50%	50.00%		45.46			3.8 20.0		\$82.55	\$80.00
651 Ligustrum lucidium	Glossy privet	20.00%			6.5	6.5 2		2.5	18.3		8	66%	50%	50%	50%	50.00%	\$345.46 \$	45.46	-		3.8 70.6 3.8 38.7			\$230.00 \$140.00
652 Ligustrum lucidium 653 Ligustrum lucidium	Glossy privet Glossy privet	20.00%		Yes Yes		2 2 2 2 2.7			14.5		0	66% 66%	50% 50%	50% 50%	50% 50%	50.00% 50.00%		45.46			3.8 38.7 3.8 20.9			\$140.00
654 Ligustrum lucidium	Glossy privet	20.00%		Yes	-		2		12.4		6	66%	50%	50%	50%	50.00%	\$345.46 \$	45.46			3.8 32.3			\$90.00
655 Ligustrum lucidium	Glossy privet	20.00%		Yes	3.3	3.3 3	2	2	13.6	-	8	66%	50%	50%	50%	50.00%		45.46			3.8 26.6			\$100.00
656 Juglans hindsii	Northern California black walnut	50.00%	6 Yes	Yes	10.7	9.4 10	10.2		49.3		18	53%	50%	50%	50%	50.00%	\$345.46 \$	45.46	6 383.0	383	3.8 379.1	9 \$17,583.60	\$2,335.32	\$2,340.00
657 Prunus cerasifera	Cherry plum	20.00%		Yes		6 5			24.0		12	53%	50%	30%	30%	36.67%	\$345.46 \$	77.04			2.24 90.3		\$284.75	\$280.00
658 Ligustrum lucidium	Glossy privet	20.00%	6 Yes	Yes	5.8	5.8 3	3	3	20.6	18	9	53%	50%	30%	30%	36.67%	\$345.46 \$	45.46	6 74.0	74	3.8 70.2	\$3,537.20	\$137.80	\$140.00

Tree Tag # Species	Common Name	Species Rating	Protected (Yes/No)	Multi- stem (Yes/No)	DBH_ 1	DBH_ DBI 2 3	H_ DBF 4	I_ DBH 5	(In.)	Estimated Height (Ft.)	Estimated Crown Radius (Ft.)	Condition Rating	Rating	Contribution Rating	Rating	Rating	Tree Cost U	nit Tree Cost	ln.) (Sq	nk Area	Tree Trunk	(Protected Tree Trunk Area - Replacement Tree Trunk Area) (Sq. In.)	· · · · · · · · · · · · · · · · · · ·	Species Rating X Condition X Location Rating)	Appraised Value Rounded (to nearest \$100 if >\$5000; to \$10 if <\$5000)
659 Ligustrum lucidium	Glossy privet	20.00%		Yes	4.5	4.5 3.	8 0	0	12.8	12	9	53%	50%	30%	30%	36.67%	\$345.46 \$	45.46	43.1	43	3.8	39.33	<i>+</i> =,		\$80.00
660 Prunus cerasifera	Cherry plum	20.00%	6 Yes	Yes	4.5	4.5 3	3 3	3	18.0	15	15	63%	50%	30%	30%	36.67%	\$345.46 \$	77.04		53	2.24		1 / 2 2 2		\$200.00
661 Schinus molle	Peruvian pepper tree	40.00%		No	40.5	0 () 0	0	40.5	35	30	69%	80%	80%	80%	80.00%	\$345.46 \$	45.46		1170	3.8		\$53,368.47	<i> </i>	\$11,700.00
662 Alnus rhombifolia	White alder	50.00%		No	16.5	0 0	0 0	0	16.5	30	15	72%	80%	70%	70%	73.33%	\$345.46 \$	45.46		214	3.8		1.7	. ,	\$2,610.00
663 Alnus rhombifolia	White alder	10.00%		No	12.6	0 () 0	0	12.6	35	12	72%	80%	70%	70%	73.33%	\$345.46 \$	45.46		125	3.8	120.83			\$310.00
664 Sequoia semperivens	Coast redwood	90.00%		No	22.5	0 0) 0	0	22.5	50	13	94%	80%	70%	70%	73.33%	\$345.46 \$	36.36		397	4.75		1 1 2	1 - 1	\$9,000.00
665 Sequoia semperivens	Coast redwood	90.00%	6 Yes	No	23.5	0 () 0	0	23.5	65	18	94%	80%	70%	70%	73.33%	\$345.46 \$	36.36	433.5	434	4.75		\$15,935.40	++,+++++	\$9,900.00
666 Sequoia semperivens	Coast redwood	90.00%	Yes	No	25	0 () 0	0	25.0	65	16	94%	80%	70%	70%	73.33%	\$345.46 \$	36.36	490.6	491	4.75	485.88	\$18,011.88		\$11,100.00
667 Alnus rhombifolia	White alder	10.00%		No	12.8	0 0) 0	0	12.8	35	17	94%	80%	70%	70%	73.33%	\$345.46 \$	45.46		129	3.8	. = • .			\$410.00
668 Sequoia semperivens	Coast redwood	90.00%	6 Yes	No	19.8	0 0) 0	0	19.8	65	17	94%	80%	70%	70%	73.33%	\$345.46 \$	36.36		308	4.75	303.00			\$7,000.00
669 Sequoia semperivens	Coast redwood	90.00%	6 Yes	No	21	0 0) 0	0	21.0	65	17	94%	80%	70%	70%	73.33%	\$345.46 \$	36.36		346	4.75	341.44	\$12,760.04		\$7,900.00
670 Sequoia semperivens	Coast redwood	90.00%		No	24	0 0) 0	0	24.0	65	17	94%	80%	70%	70%	73.33%	\$345.46 \$	36.36		452	4.75	447.41	\$16,613.29		\$10,300.00
671 Alnus rhombifolia	White alder	10.00%		No	9.8	0 0) 0	0	9.8	35	15	69%	80%	70%	70%	73.33%	\$345.46 \$	45.46	75.4	75	3.8		1.7	\$181.50	\$180.00
672 Sequoia semperivens	Coast redwood	90.00%	6 Yes	No	27.6	0 0) 0	0	27.6	65	16	94%	80%	70%	70%	73.33%	\$345.46 \$	36.36	598.0	598	4.75	593.23	\$21,915.36	\$13,560.13	\$13,600.00
673 Sequoia semperivens	Coast redwood	90.00%		No	22.9	0 0) 0	0	22.9		16	94%	80%	70%	70%	73.33%	\$345.46 \$	36.36		412	4.75		\$15,140.77	\$9,368.35	\$9,400.00
674 Sequoia semperivens	Coast redwood	90.00%		No	21.3	0 0) 0	0	21.3	65	16	94%	80%	70%	70%	73.33%	\$345.46 \$	36.36		356	4.75	351.40			\$8,100.00
675 Sequoia semperivens	Coast redwood	90.00%	6 Yes	No	16.5	0 0) 0	0	16.5	45	12	91%	80%	70%	70%	73.33%	\$345.46 \$	36.36		214	4.75	208.97	\$7,943.47	1 /	\$4,750.00
676 Sequoia semperivens	Coast redwood	90.00%	6 Yes	No	17.7	0 0) 0	0	17.7	45	12	91%	80%	70%	70%	73.33%	\$345.46 \$	36.36	245.9	246	4.75	241.18		\$5,451.83	\$5,500.00
677 Sequoia semperivens	Coast redwood	90.00%	6 Yes	No	19.9	0 0) 0	0	19.9	45	15	91%	80%	70%	70%	73.33%	\$345.46 \$	36.36		311	4.75	306.12		++,++	\$6,900.00
678 Sequoia semperivens	Coast redwood	90.00%	6 Yes	No	20.2	0 0) 0	0	20.2	45	13	81%	80%	70%	70%	73.33%	\$345.46 \$	36.36	320.3	320	4.75	315.56	1 /	1.7	\$6,300.00
679 Acacia melanoxylon	Blackwood acacia	20.00%		No	30.5	0 0) 0	0	30.5	35	20	50%	80%	60%	60%	66.67%	\$345.46 \$	45.46	715.0	715	3.8	711.22	\$32,677.35		\$2,180.00
680 Alnus rhombifolia	White alder	10.00%	6 Yes	No	8	0 0) 0	0	8.0	15	9	75%	80%	60%	70%	70.00%	\$345.46 \$	45.46	50.2	50	3.8	46.44	\$2,456.62	2 \$128.97	\$130.00
																							Total Tree	e Values	\$220,240.00

Appendix A-2. Arborist Survey, Non-Protected Trees,Valle Vista Project, Hayward, California June 2017



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Appendix B -

Figures

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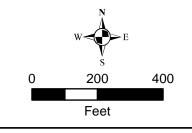




Valle Vista Alameda County, California



Placement Ratings



Map Prepared Date: 6/28/2017 Map Prepared By: czumwalt Base Source: Esri Streaming - NAIP 2016 Data Source(s): WRA

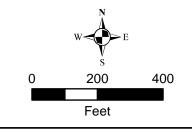




Valle Vista Alameda County, California



Contribution Ratings



Map Prepared Date: 6/28/2017 Map Prepared By: czumwalt Base Source: Esri Streaming - NAIP 2016 Data Source(s): WRA THIS PAGE INTENTIONALLY LEFT BLANK

Appendix C -

Site Photographs

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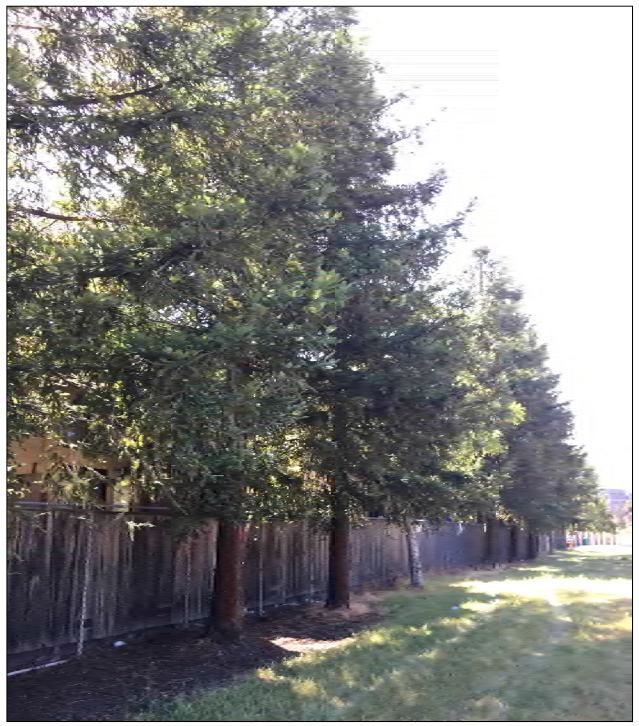


Photograph 1. Photograph depicting a vacant open lot at 380 Valle Vista Avenue, containing ruderal vegetation and volunteer trees. This area is typical of vacant portions of the site which were given a "very low" site rating.



Photograph 2. Photograph depicting Valle Vista Park, a landscaped and maintained City Park, which was given a "high" site rating.





Photograph 3. Photograph depicting protected coast redwood trees, #670 and #669. These trees were assessed in good condition, were given good contribution and placement ratings, and were appraised at \$10,300 and \$7,900, respectively.





Photograph 4. Photograph depicting protected tree #625, an overmature, declining, multi-trunk black poplar tree. This tree was assessed in poor health and structure due to presence of multiple trunks with included bark and significant dieback of major trunks and scaffold branches. The appraised value was determined to be \$890.





Photograph 5. Photograph depicting protected tree #587, a 22.1-inch DBH blackwood acacia. The major trunk cavity shown in the photograph was assessed as a significant structural defect. Despite the defect, the overall appraised value was determined to be \$1,370.





Photograph 6. Photograph depicting protected tree #594, a 12-inch aggregate DBH cherry plum. This tree was assessed in poor condition due to presence of multiple trunks with included bark, poor structure, and significant dieback of major scaffold branches. The appraised value was determined to be \$90.





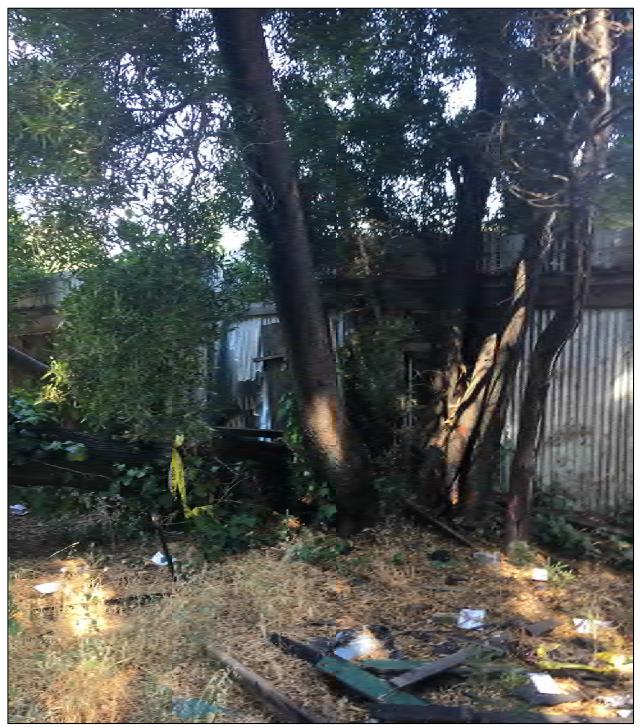
Photograph 7. Photograph depicting protected tree #613, a 23.7-inch DBH valley oak. This tree was assessed in good condition, with good health and vigor, and good structure exemplary of the species. The appraised value was determined to be \$17,000.





Photograph 8. Photograph depicting protected tree #628, a 38-inch DBH Canary island palm. Palms were appraised based on trunk height, using the Replacement Cost Method. The appraised value of this tree was determined to be \$1,400.





Photograph 9. Photograph depicting protected tree #599, a multi-trunk blackwood acacia located in a former homeless encampment. This tree was assessed in poor condition due to numerous defects, including catastrophic failure of one major trunk. The failure caused structural damage to the adjacent fence, and was given a very low contribution rating due to the damage it caused. The appraised value was determined to be \$670.



APPENDIX E

PROJECT AREA LAND USE PLAN

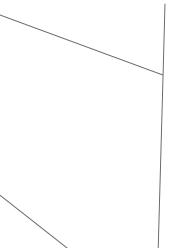
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CONTACTS:

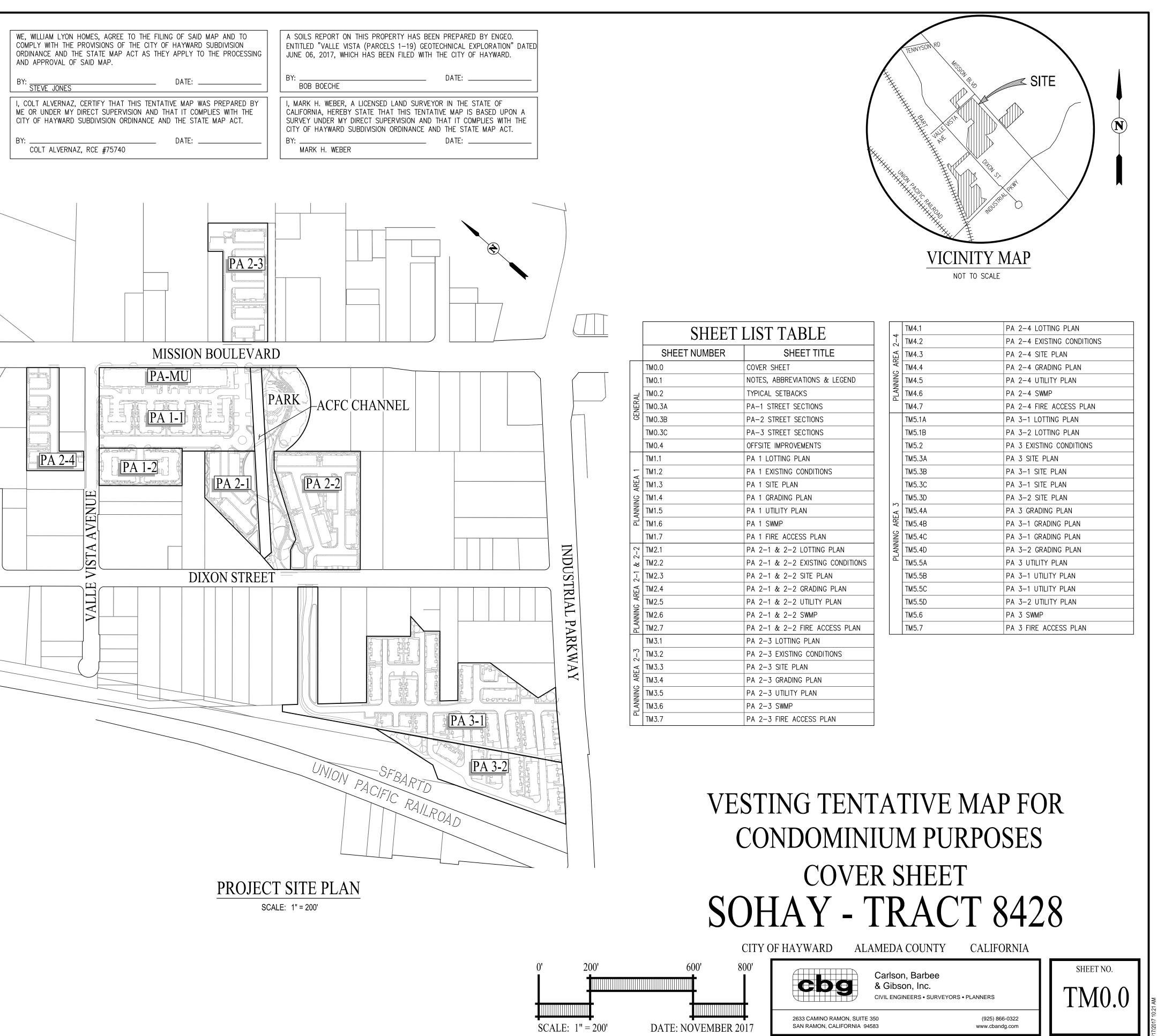
OWNER/DEVELOPER:	CITY OF HAYWARD C/O WILLIAM LYON HOMES 2603 CAMINO RAMON, SUITE 450 SAN RAMON, CALIFORNIA 94583 (925)-543-5544 SCOTT ROYLANCE/STEVE JONES
CIVIL ENGINEER:	CARLSON, BARBEE & GIBSON, INC. 2633 CAMINO RAMON, SUITE 350 SAN RAMON, CALIFORNIA 94583 (925) 866–0322 COLT ALVERNAZ, RCE 75740 LEE ROSENBLATT, RCE 65469
GEOTECHNICAL ENGINEER:	ENGEO CROW CANYON PLACE, SUITE 250 SAN RAMON, CALIFORNIA 94583 (925) 866–9000 BOB BOECHE

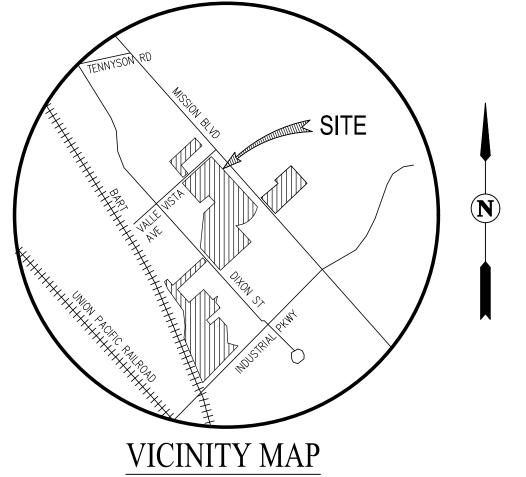
GENERAL NOTES

	BENCHMARK:	THE BENCHMARK FOR THIS SURVEY IS A CAST AND GEODETIC SURVEYS (CGS) DISC SET IN TOP OF A LARGE BOULDER APPROXIMATELY 700 FEET EAST OF MISSION BOULEVARD AND 280 FEET SOUTH OF TENNYSON ROAD. NGS PID 'HT0202' HAVING AN ELEVATION OF 124.41 FEET NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD).	
<u>2</u> .	BASIS OF BEARINGS:	THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CENTERLINE BEARING OF MISSION BOULEVARD BEING N41°21'19"W AS SHOWN ON THE RECORD OF SURVEY NO. 2604 (SHEETS 13 AND 14), FILED NOVEMBER 17, 2014 IN BOOK 40 OF SURVEYS, PAGES 8 THROUGH 22.	
3.	OVERALL PROJECT AREA:	GROSS: 25.4± AC NET: 25.0± AC (LESS PARK PARCEL, ACFC PARCEL, VALLE VISTA BOULEVARD & DIXON STREET R/W DEDICATIONS)	7/
4.	TOTAL DWELLING UNITS:	NET: 472	
).	OVERALL PROJECT DENSITY:	18.6 DU/AC (GROSS) 18.9 DU/AC (NET)	/
5.	EXISTING STRUCTURES:	ALL EXISTING BUILDINGS WITHIN THE PROJECT BOUNDARY TO BE REMOVED.	
7.	EXISTING UTILITIES:	EXISTING UTILITIES WITHIN THE PROJECT BOUNDARY TO BE REMOVED AS NOTED.	
3.	EXISTING TREES:	EXISTING TREES WITHIN THE PROJECT BOUNDARY TO BE REMOVED OR RELOCATED.	
9.	STREETS:	ALL DRIVE AISLES WITHIN THE PROJECT WILL BE PRIVATE AND WILL BE PRIVATELY MAINTAINED BY THE HOMEOWNER'S ASSOCIATION. ALL PRIVATE STREETS WILL BE WITHIN PUE'S. (MINIMUM LONGITUDINAL SLOPE=0.5%)	-
10.	STREET TREES:	STREET TREES SHALL BE INSTALLED PER CITY DETAIL SD-122.	
1.	WALLS AND FENCING:	ALL WALLS AND FENCING WILL BE PRIVATELY OWNED AND PRIVATELY MAINTAINED.	
2.	STORM DRAIN:	PROPOSED STORM DRAIN FACILITIES WILL BE PRIVATE FACILITIES AND WILL BE PRIVATELY MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.	
3.	PUBLIC UTILITIES:	PROPOSED ONSITE WATER AND SANITARY SEWER FACILITIES ARE PUBLIC AND WILL BE WITHIN A SANITARY AND/OR WATER EASEMENT. PROPOSED WATER AND SANITARY SEWER FACILITIES WILL BE CONSTRUCTED PER CITY OF HAYWARD STANDARDS AND DEDICATED TO THE CITY.	
4.	LANDSCAPING:	ALL LANDSCAPING WITHIN PROJECT BOUNDARY WILL BE PRIVATELY OWNED AND MAINTAINED.	
5.	WELLS ONSITE:	NONE	
16.	UTILITIES: WATER: SEWER: GAS: ELECTRIC: TELEPHONE: CABLE TV:	CITY OF HAYWARD CITY OF HAYWARD PG&E PG&E SBC COMCAST	
17.	DIMENSIONS:	ALL DIMENSIONS ARE PRELIMINARY AND SUBJECT TO FINAL MAP	
18.	GRADING:	PROPOSED GRADING AS SHOWN IS PRELIMINARY AND SUBJECT TO FINAL DESIGN.	
19.	MAINTENANCE:	A HOMEOWNERS ASSOCIATION WILL BE FORMED TO OWN AND MAINTAIN PRIVATE STREETS, DRIVE AISLES, PRIVATE UTILITIES, STORM DRAINAGE FACILITIES AND LANDSCAPE WITHIN ALL RESIDENTIAL AREAS. RETAIL SITE OWNER SHALL BE RESPONSIBLE TO MAINTAIN ALL PRIVATE AMENITIES ON THE RETAIL SITE.	
20.	FINAL MAP:	THIS PROJECT MAY BE PHASED. MULTIPLE FINAL MAPS MAY BE FILED UPON APPROVAL OF THE TENTATIVE SUBDIVISION MAP.	
21.	CONDOMINIUM MAP:	A CONDOMINIUM MAP WILL BE RECORDED FOR THE RESIDENTIAL LOTS. THE SUBDIVISION IS A CONDOMINIUM PROJECT AS DEFINED IN SECTIONS 4125 AND 4285 OF THE CIVIL CODE OF THE STATE OF CALIFORNIA AND FILED PURSUANT TO THE SUBDIVISION MAP ACT.	







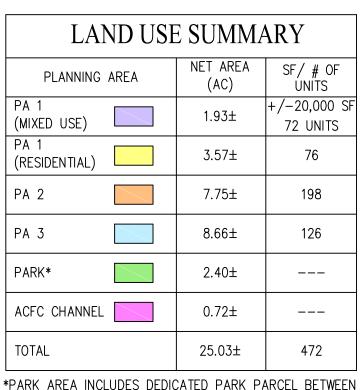


SHEET TITLE
COVER SHEET
NOTES, ABBREVIATIONS & LEGEND
TYPICAL SETBACKS
PA-1 STREET SECTIONS
PA-2 STREET SECTIONS
PA-3 STREET SECTIONS
OFFSITE IMPROVEMENTS
PA 1 LOTTING PLAN
PA 1 EXISTING CONDITIONS
PA 1 SITE PLAN
PA 1 GRADING PLAN
PA 1 UTILITY PLAN
PA 1 SWMP
PA 1 FIRE ACCESS PLAN
PA 2-1 & 2-2 LOTTING PLAN
PA 2-1 & 2-2 EXISTING CONDITIONS
PA 2-1 & 2-2 SITE PLAN
PA 2-1 & 2-2 GRADING PLAN
PA 2-1 & 2-2 UTILITY PLAN
PA 2-1 & 2-2 SWMP
PA 2-1 & 2-2 FIRE ACCESS PLAN
PA 2–3 LOTTING PLAN
PA 2-3 EXISTING CONDITIONS
PA 2–3 SITE PLAN
PA 2-3 GRADING PLAN
PA 2-3 UTILITY PLAN
PA 2-3 SWMP
PA 2–3 FIRE ACCESS PLAN

AREA 2-4	TM4.1	PA 2-4 LOTTING PLAN
	TM4.2	PA 2-4 EXISTING CONDITIONS
	TM4.3	PA 2-4 SITE PLAN
	TM4.4	PA 2-4 GRADING PLAN
INING	TM4.5	PA 2-4 UTILITY PLAN
PLANNING	TM4.6	PA 2-4 SWMP
ш.	TM4.7	PA 2-4 FIRE ACCESS PLAN
	TM5.1A	PA 3-1 LOTTING PLAN
	TM5.1B	PA 3-2 LOTTING PLAN
	TM5.2	PA 3 EXISTING CONDITIONS
	TM5.3A	PA 3 SITE PLAN
	ТМ5.3В	PA 3-1 SITE PLAN
	TM5.3C	PA 3-1 SITE PLAN
	TM5.3D	PA 3–2 SITE PLAN
E A 3	TM5.4A	PA 3 GRADING PLAN
AREA	TM5.4B	PA 3-1 GRADING PLAN
NING	TM5.4C	PA 3-1 GRADING PLAN
PLANNING	TM5.4D	PA 3-2 GRADING PLAN
Ы	TM5.5A	PA 3 UTILITY PLAN
	TM5.5B	PA 3-1 UTILITY PLAN
	TM5.5C	PA 3-1 UTILITY PLAN
	TM5.5D	PA 3-2 UTILITY PLAN
	TM5.6	PA 3 SWMP
L	TM5.7	PA 3 FIRE ACCESS PLAN
		·



*BICYCLE PARKING IS PROVIDED IN ACCORDANCE TO TABLE A1: BICYCLE PARKING REQUIREMENTS IN SECTION 10-25.400 OF THE CITY OF HAYWARD'S MUNICIPAL CODE (SEE LANDSCAPE DRAWINGS FOR LOCATIONS)



*PARK AREA INCLUDES DEDICATED PARK PARCEL BETWEEN MISSION BOULEVARD AND DIXON STREET, DEDICATED PARK PARCEL AND DEDICATED TRAIL EASEMENTS IN PA 3-1.

PROJECT SITE PLAN

SCALE: 1" = 200'

	TOTAL PARKING SUMMARY						
PLANNING AREA	USE	# UNITS	# COVERED	# DRIVEWAY	# ON-STREET*	TOTAL PROVIDED	
PA 1							
PA 1-1	RETAIL	N/A	N/A	N/A	89	89	
PA 1-1	APARTMENTS	72	72			72	
PA 1-1	CLUSTER TOWNS	48	80	11	15	106	
PA 1-2	CLUSTER TOWNS	28	48	11	10	69	
PA 2							
PA 2-1	ROW TOWNS	34	44	0	2	46	
PA 2-2	ROW TOWNS	88	116	0	13	129	
PA 2-3	ROW TOWNS	46	56	0	10	66	
PA 2-4	ROW TOWNS	30	30	0	5	35	
PA 3							
PA 3-1	ROW TOWNS	93	186	0	22	208	
PA 3-2	ROW TOWNS	33	66	0	4	70	
TOTAL		472				890	

*ASSUMES PARKING ON ONE SIDE OF THE STREET WHERE APPLICABLE. RETAIL PARKING INCLUDES 12 SPACES ALONG MISSION BLVD. PA 1-1 AND PA 1-2 INCLUDE 10 SPACES ALONG VALLE VISTA AVENUE

RESIDENTIAL UNIT MIX

	HOME SIZE (NET SF)	UNIT COUNT
PA 1 – MIXED USE		
PLAN A1	601	6
PLAN A2	511	12
PLAN B2	748	12
PLAN C1	1,050	24
PLAN C2	964	12
PLAN C3	1,058	6
SUBTOTAL		72
PA 1 – CLUSTERS		
PLAN 1	964	12
PLAN 2	1,038	12
PLAN 3	1,202	12
PLAN 4	1,250	6
PLAN 5	1,357	12
PLAN 6	1,505	12
PLAN 7	1,684	10
SUBTOTAL		76
PA-2		
PLAN 1	477	50
PLAN 2	1,351	50
PLAN 3	1,563	50
PLAN 4	2,018	26
PLAN 5	2,105	27
SUBTOTAL		198
PA-3		
PLAN 1	1,482	31
PLAN 2	1,703	39
PLAN 3	1,742	28
PLAN 4	1,857	28
SUBTOTAL		126
TOTAL		472

PA-MU AREA SUMMARY

UNIT A1 GROSS SQ. FOOTAGE: 601 sq. ft.
First Floor 601 s.f.
Covered Deck60 s.f.Square Footage taken from exterior face of perimeter studs.Occupancy: R-2Type of Construction: V-A
UNIT A2 GROSS SQ. FOOTAGE: 511 sq. ft.
First Floor 511 s.f.
Covered Deck60 s.f.Square Footage taken from exterior face of perimeter studs.Occupancy: R-2Type of Construction: V-A
UNIT B2 GROSS SQ. FOOTAGE: 748 sq. ft.
First Floor 748 s.f.
Covered Deck71 s.f.Square Footage taken from exterior face of perimeter studs. Occupancy: R-2Type of Construction: V-A
UNIT C1 GROSS SQ. FOOTAGE: 1,050 sq. ft.
First Floor1,050 s.f.
Covered Deck64 s.f.Square Footage taken from exterior face of perimeter studs.Occupancy: R-2Type of Construction: V-A
UNIT C2 GROSS SQ. FOOTAGE: 964 sq. ft.
First Floor 964 s.f.
Covered Deck73 s.f.Square Footage taken from exterior face of perimeter studs. Occupancy: R-2Type of Construction: V-A
UNIT C3
GROSS SQ. FOOTAGE: 1,058 sq. ft.
First Floor 1,058 s.f.
Covered Deck70 s.f.Square Footage taken from exterior face of perimeter studs.Occupancy: R-2Type of Construction: V-A
RETAIL COMPOSITE GROSS SQ. FOOTAGE: 24,756 sq. ft.
Building 112,378 sq. ft.Building 212,378 sq. ft.
Square Footage taken from exterior face of perimeter studs.

PA-3	
PA 3-1	ROW TOWNS
PA 3-2	ROW TOWNS
SUBTOTAL	
OTHER	
PARK (BETWEEN MISSION BLVD & DIXON ST)	
PARK (BETWEEN DIXON ST & INDUSTRIAL BLVD	
ACFC CHANNEL	
SUBTOTAL	
TOTAL	
NET AREA EXCLUDES PUBLIC R PARCEL 3–1J DEDICATED FOR P	

		DEVEL	OPMEN 7	SUMMAI	RY		
PLANNING AREA	USE	GROSS AREA (AC) +/-	NET AREA* (AC) +/-	# OF UNITS	DENSITY (UNITS/NET AREA)	SF (RETAIL) +/–	RETAIL FAR (SF/NET AREA)
PA 1							
MIXED USE	RESIDENTIAL OVER RETAIL	1.93	1.93	72	37.7	19,780	0.24
PA 1-1	CLUSTER TOWNS	2.47	2.47	48	19.3	_	_
PA 1-2	CLUSTER TOWNS	1.10	1.10	28	25.5	_	_
SUBTOTAL		5.50	5.50	148	_	_	_
PA-2							
PA 2-1	ROW TOWNS	1.34	1.34	34	25.4	_	_
PA 2-2	ROW TOWNS	3.34	3.09	88	28.5	_	_
PA 2-3	ROW TOWNS	1.99	1.99	46	23.1		_
PA 2-4	ROW TOWNS	1.38	1.33	30	22.6	_	_
SUBTOTAL		8.05	7.75	198	_		_
PA-3							
PA 3-1	ROW TOWNS	6.76	6.16	93	15.1	_	_
PA 3-2	ROW TOWNS	2.50	2.50	33	13.2	_	—
SUBTOTAL		9.26	8.66	126	_	_	_
OTHER							
PARK (BETWEEN MISSION BLVD & DIXON ST)		1.86	1.86	_	_	_	_
PARK (BETWEEN DIXON ST & INDUSTRIAL BLVD		0.00	0.54	_	—	_	-
ACFC CHANNEL		0.72	0.72	_	_	_	_
SUBTOTAL		2.58	3.12		_		_
			05.07	170	10		

25.3925.0347218EDICATIONS ON VALLE VISTA AVENUE AND DIXON STREET. NET AREA FOR PA 3–1 ALSO EXCLUDES

PA 1 UNIT AREA SUMMARY

NET SQUARE FOOTA	GE: 96	8 sq. ft.
First Floor		95 sq. ft.
Second Floor		520 sq. ft.
Third Floor		353 sq. ft.
1 Car Garage		281 sq. ft.
Covered Entry Porch		45 sq. ft.
2nd Flr. Deck		120 sq. ft.
Square Footage taken from inside fa	ce of stud at e	exterior wall
1 BR, 1.5 BA Occupancy: R-2	Type of Cons	truction: VB
PLAN 2C	2E: 102	o o ft
NET SQUARE FOOTA	<u>JE.</u> 103	•
First Floor		99 sq. ft.
Second Floor Third Floor		546 sq. ft.
		393 sq. ft.
1 Car Garage		234 sq. ft.
Covered Entry Porch		53 sq. ft.
2nd Flr. Deck		78 sq. ft.
Square Footage taken from inside fa	ce of stud at e	exterior wall
1 BR, 1.5 BA		
Occupancy: R-2	Type of Cons	truction: VE
PLAN 3C		
FLANJU		
	GE: 120)6 sq. ft.
NET SQUARE FOOTA	<u>GE:</u> 120	9 <mark>6 sq. ft.</mark> 250 sq. ft.
NET SQUARE FOOTA	<u>GE:</u> 120	-
NET SQUARE FOOTA	<u>GE:</u> 120	250 sq. ft.
NET SQUARE FOOTA First Floor Second Floor	<u>GE:</u> 120	250 sq. ft. 606 sq. ft.
NET SQUARE FOOTA First Floor Second Floor Third Floor	<u>GE:</u> 120	250 sq. ft. 606 sq. ft. 350 sq. ft.
NET SQUARE FOOTA First Floor Second Floor Third Floor 2 Car Garage	<u>GE:</u> 120	250 sq. ft. 606 sq. ft. 350 sq. ft. 420 sq. ft.
NET SQUARE FOOTA First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck		250 sq. ft. 606 sq. ft. 350 sq. ft. 420 sq. ft. 42 sq. ft. 116 sq. ft.
NET SQUARE FOOTA First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch		250 sq. ft. 606 sq. ft. 350 sq. ft. 420 sq. ft. 42 sq. ft. 116 sq. ft.
NET SQUARE FOOTA First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside fa 1 BR, 1.5 BA, Den		250 sq. ft. 606 sq. ft. 350 sq. ft. 420 sq. ft. 42 sq. ft. 116 sq. ft.
NET SQUARE FOOTA First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside fa 1 BR, 1.5 BA, Den Occupancy: R-2 PLAN 4C	ce of stud at e	250 sq. ft. 606 sq. ft. 350 sq. ft. 420 sq. ft. 116 sq. ft. exterior wall
NET SQUARE FOOTA First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside fa 1 BR, 1.5 BA, Den Occupancy: R-2 PLAN 4C NET SQUARE FOOTA	ce of stud at e	250 sq. ft. 606 sq. ft. 350 sq. ft. 420 sq. ft. 42 sq. ft. 116 sq. ft. exterior wall truction: VE
NET SQUARE FOOTA First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside fa 1 BR, 1.5 BA, Den Occupancy: R-2 PLAN 4C	ce of stud at e	250 sq. ft. 606 sq. ft. 350 sq. ft. 420 sq. ft. 116 sq. ft. 116 sq. ft. exterior wall truction: VE
NET SQUARE FOOTA First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside fa 1 BR, 1.5 BA, Den Occupancy: R-2 PLAN 4C NET SQUARE FOOTA First Floor Second Floor	ce of stud at e	250 sq. ft. 606 sq. ft. 350 sq. ft. 420 sq. ft. 116 sq. ft. 116 sq. ft. exterior wall truction: VE
NET SQUARE FOOTA First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside fa 1 BR, 1.5 BA, Den Occupancy: R-2 PLAN 4C NET SQUARE FOOTA First Floor	ce of stud at e	250 sq. ft. 606 sq. ft. 350 sq. ft. 420 sq. ft. 116 sq. ft. 116 sq. ft. exterior wall truction: VE
NET SQUARE FOOTA First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside fa 1 BR, 1.5 BA, Den Occupancy: R-2 PLAN 4C NET SQUARE FOOTA First Floor Second Floor	ce of stud at e	250 sq. ft. 606 sq. ft. 350 sq. ft. 420 sq. ft. 116 sq. ft. 116 sq. ft. exterior wall truction: VE
NET SQUARE FOOTA First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside fa 1 BR, 1.5 BA, Den Occupancy: R-2 PLAN 4C NET SQUARE FOOTA First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch	ce of stud at e	250 sq. ft. 606 sq. ft. 350 sq. ft. 420 sq. ft. 116 sq. ft. 116 sq. ft. exterior wall truction: VE 60 sq. ft. 137 sq. ft. 525 sq. ft. 413 sq. ft.
NET SQUARE FOOTA First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside fa 1 BR, 1.5 BA, Den Occupancy: R-2 PLAN 4C NET SQUARE FOOTA First Floor Second Floor Third Floor 2 Car Garage	ce of stud at e	250 sq. ft. 606 sq. ft. 350 sq. ft. 420 sq. ft. 116 sq. ft. 116 sq. ft. exterior wall truction: VE 60 sq. ft. 137 sq. ft. 618 sq. ft. 525 sq. ft.
NET SQUARE FOOTA First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside fa 1 BR, 1.5 BA, Den Occupancy: R-2 PLAN 4C NET SQUARE FOOTA First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck	ce of stud at e Type of Cons GE: 128	250 sq. ft. 606 sq. ft. 350 sq. ft. 420 sq. ft. 116 sq. ft. 116 sq. ft. exterior wall truction: VE 60 sq. ft. 137 sq. ft. 618 sq. ft. 525 sq. ft. 413 sq. ft. 93 sq. ft. 94 sq. ft.
NET SQUARE FOOTA First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside fa 1 BR, 1.5 BA, Den Occupancy: R-2 PLAN 4C NET SQUARE FOOTA First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch	ce of stud at e Type of Cons GE: 128	250 sq. ft. 606 sq. ft. 350 sq. ft. 420 sq. ft. 116 sq. ft. 116 sq. ft. exterior wall truction: VE 60 sq. ft. 137 sq. ft. 618 sq. ft. 525 sq. ft. 413 sq. ft. 93 sq. ft. 94 sq. ft.

	GEN. SUITE OPTION	
NET SQUARE FO		NET SQUARE F
First Floor	555 sq. ft.	First Floor
Second Floor	642 sq. ft.	
Third Floor	351 sq. ft.	Third Floor
1 Car Garage	265 sq. ft.	2 Car Tandem Garage
Covered Entry Porch	52 sq. ft.	Covered Entry Porch
2nd Flr. Deck	101 sq. ft.	2nd Flr. Deck
Square Footage taken from i	inside face of stud at exterior wall	Square Footage taken from
2 BR, 2.5 BA		2 BR, 2.5 BA
Occupancy: R-2	Type of Construction: VB	Occupancy: R-2
PLAN 6C		1
	OTAGE: 1482 sq. ft.	
First Floor	332 sq. ft.	
Second Floor	603 sq. ft.	
Third Floor	547 sq. ft.	
	017 04.10	
2 Car Garage	428 sq. ft.	
Covered Entry Porch	45 sq. ft.	
•	•	
2nd Flr. Deck	45 Sq. ft. 74 sq. ft.	
2nd Flr. Deck	•	
2nd Flr. Deck	74 sq. ft.	-
2nd Flr. Deck Square Footage taken from i	74 sq. ft.	
2nd Flr. Deck Square Footage taken from i 3 BR, 3.5 BA Occupancy: R-2	74 sq. ft.	
2nd Flr. Deck Square Footage taken from i 3 BR, 3.5 BA Occupancy: R-2 PLAN 7C	74 sq. ft.	
2nd Flr. Deck Square Footage taken from i 3 BR, 3.5 BA Occupancy: R-2 PLAN 7C NET SQUARE FC	74 sq. ft. inside face of stud at exterior wall Type of Construction: VB DOTAGE: 1687 sq. ft.	
2nd Flr. Deck Square Footage taken from i 3 BR, 3.5 BA Occupancy: R-2 PLAN 7C NET SQUARE FC First Floor	74 sq. ft. Inside face of stud at exterior wall Type of Construction: VB DOTAGE: 1687 sq. ft. 258 sq. ft.	
2nd Flr. Deck Square Footage taken from i 3 BR, 3.5 BA Occupancy: R-2 PLAN 7C NET SQUARE FC	74 sq. ft. inside face of stud at exterior wall Type of Construction: VB DOTAGE: 1687 sq. ft.	
2nd Flr. Deck Square Footage taken from i 3 BR, 3.5 BA Occupancy: R-2 PLAN 7C NET SQUARE FC First Floor Second Floor	74 sq. ft. inside face of stud at exterior wall Type of Construction: VB DOTAGE: 1687 sq. ft. 258 sq. ft. 686 sq. ft.	
2nd Flr. Deck Square Footage taken from i 3 BR, 3.5 BA Occupancy: R-2 PLAN 7C NET SQUARE FC First Floor Second Floor Third Floor	74 sq. ft. Inside face of stud at exterior wall Type of Construction: VB DOTAGE: 1687 sq. ft. 258 sq. ft. 686 sq. ft. 743 sq. ft.	
2nd Flr. Deck Square Footage taken from i 3 BR, 3.5 BA Occupancy: R-2 PLAN 7C NET SQUARE FC First Floor Second Floor Third Floor 2 Car Garage	74 sq. ft. Inside face of stud at exterior wall Type of Construction: VB DOTAGE: 1687 sq. ft. 258 sq. ft. 686 sq. ft. 743 sq. ft. 434 sq. ft.	
2nd Flr. Deck Square Footage taken from i 3 BR, 3.5 BA Occupancy: R-2 PLAN 7C NET SQUARE FC First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck	74 sq. ft. Inside face of stud at exterior wall Type of Construction: VB DOTAGE: 1687 sq. ft. 258 sq. ft. 686 sq. ft. 743 sq. ft. 135 sq. ft. 116 sq. ft.	
2nd Flr. Deck Square Footage taken from i 3 BR, 3.5 BA Occupancy: R-2 PLAN 7C NET SQUARE FC First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck	74 sq. ft. inside face of stud at exterior wall Type of Construction: VB DOTAGE: 1687 sq. ft. 258 sq. ft. 686 sq. ft. 743 sq. ft. 135 sq. ft.	

<u>CC.)</u> RE FOOTAGE:	1365 sq. ft.
	372 sq. ft.
	642 sq. ft.
	351 sq. ft.
arage	449 sq. ft.
orch	52 sq. ft.
	101 sq. ft.
en from inside face of st	tud at exterior wall
Туре о	f Construction: VB

MINIMUM BUILDING SETBACKS PA 1

FRONT/REAR	5'
SIDE	5'
PA 2	
FRONT	10'/15'*
SIDE	5'
REAR (DRIVE AISLE)	4'
PA 3	
FRONT	5'/7'*
SIDE	4'/10'*
REAR (DRIVE AISLE)	4'

*DENOTES MINIMUM SETBACK TO EXISTING EXTERNAL PROPERTY BOUNDARY. OTHER SETBACKS ARE MEASURED FROM BUILDING TO A PROPOSED INTERNAL PROPERTY LINE.

PA 2 UNIT AREA SUMMARY

PLAN 1 NET SQUARE FOOTA	
First Floor	477 sq. ft.
1 Car Garage	269 sq. ft.
Square Footage taken from inside f	ace of stud at exterior wall
Occupancy: R-2	Type of Construction: VB
PLAN 2	
NET SQUARE FOOT	
First Floor Second Floor	44 sq. ft. 1,307 sq. ft.
Second Floor	1,507 SQ. II.
1 Car Garage	244 sq. ft.
Covered Balcony	180 sq. ft.
Square Footage taken from inside f 2 BR, 2 BA	face of stud at exterior wall
Occupancy: R-2	Type of Construction: VB
PLAN 3	
NET SQUARE FOOTA	ACE: 1 563 sq. ft
First Floor	120 sq. ft.
Second Floor	59 sq. ft.
Third Floor	1,384 sq. ft.
1 Car Garage Covered Balcony	271 sq. ft. 180 sq. ft.
Square Footage taken from inside f	ace of stud at exterior wall
2 BR, 2 BA Occupancy: R-2	Type of Construction: VB
PLAN 4	
NET SQUARE FOOTA	AGE: 2.018 sq. ft
First Floor	<u>361 sq. ft.</u>
Second Floor	792 sq. ft.
Third Floor	865 sq. ft.
2 Car Garage Covered Balcony	479 sq. ft. 109 sq. ft.
Covered Balcony	103 34. 11.
Square Footage taken from inside f	ace of stud at exterior wall
4 BR, 3.5 BA	
4 BR, 3.5 BA Occupancy: R-2	Type of Construction: VB
PLAN 5	
NET SQUARE FOOTA	
First Floor	382 sq. ft. 825 sq. ft
Second Floor Third Floor	825 sq. ft. 898 sq. ft.
2 Car Garage	490 sq. ft.
Covered Balcony	96 sq. ft.
Square Footage taken from inside f	face of stud at exterior wall

4 BR, 3.5 BA

Occupancy: R-2

Type of Construction: VB

PA 3 UNIT AREA SUMMARY

PLAN 1	
	1400
NET SQ. FOOTAGE:	1486 sq. ft.
First Floor	200 sq. ft.
Second Floor	605 sq. ft.
Third Floor	681 sq. ft.
2 Car Garage	435 sq. ft.
÷	•
Covered Entry Porch	67 sq. ft.
2nd Flr. Deck	128 sq. ft.
Square Footage taken from inside	face of stud at exterior wall
2 BR, 2.5 BA	
Occupancy: R-2	Type of Construction: VB
[
PLAN 2	
NET SQ. FOOTAGE:	1706 cg ft
	1706 sq. ft.
First Floor	299 sq. ft.
Second Floor	725 sq. ft.
Third Floor	682 sq. ft.
2 Car Garage	454 sq. ft.
Covered Entry Porch	71 sq. ft.
2nd Flr. Deck	
ZIIU FII. DECK	71 sq. ft.
Square Footage taken from inside	face of stud at exterior wall
2 BR, 2/2(.5) BA + DEN	
Occupancy: R-2	Type of Construction: VB
PLAN 3 (ACC.)	
PLAN 3 (ACC.)	
PLAN 3 (ACC.) NET SQ. FOOTAGE:	1745 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor	1745 sq. ft. 323 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor	1745 sq. ft. 323 sq. ft. 728 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor	1745 sq. ft. 323 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor	1745 sq. ft. 323 sq. ft. 728 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 68 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 68 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 68 sq. ft. 113 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 68 sq. ft. 113 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside 3 BR, 3.5 BA	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 68 sq. ft. 113 sq. ft. face of stud at exterior wall
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 68 sq. ft. 113 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside 3 BR, 3.5 BA	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 68 sq. ft. 113 sq. ft. face of stud at exterior wall
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside 3 BR, 3.5 BA Occupancy: R-2	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 68 sq. ft. 113 sq. ft. face of stud at exterior wall
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside 3 BR, 3.5 BA Occupancy: R-2 PLAN 4 (ACC.)	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 68 sq. ft. 113 sq. ft. face of stud at exterior wall Type of Construction: VB
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside 3 BR, 3.5 BA Occupancy: R-2 PLAN 4 (ACC.) NET SQ. FOOTAGE:	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 68 sq. ft. 113 sq. ft. face of stud at exterior wall Type of Construction: VB
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside 3 BR, 3.5 BA Occupancy: R-2 PLAN 4 (ACC.) NET SQ. FOOTAGE: First Floor	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 68 sq. ft. 113 sq. ft. face of stud at exterior wall Type of Construction: VB 1872 sq. ft. 352 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside 3 BR, 3.5 BA Occupancy: R-2 PLAN 4 (ACC.) NET SQ. FOOTAGE:	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 68 sq. ft. 113 sq. ft. face of stud at exterior wall Type of Construction: VB
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside 3 BR, 3.5 BA Occupancy: R-2 PLAN 4 (ACC.) NET SQ. FOOTAGE: First Floor	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 68 sq. ft. 113 sq. ft. face of stud at exterior wall Type of Construction: VB 1872 sq. ft. 352 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside 3 BR, 3.5 BA Occupancy: R-2 PLAN 4 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 113 sq. ft. 113 sq. ft. face of stud at exterior wall Type of Construction: VB 1872 sq. ft. 352 sq. ft. 794 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside 3 BR, 3.5 BA Occupancy: R-2 PLAN 4 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 113 sq. ft. face of stud at exterior wall Type of Construction: VB 1872 sq. ft. 352 sq. ft. 794 sq. ft. 726 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside 3 BR, 3.5 BA Occupancy: R-2 PLAN 4 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 113 sq. ft. 113 sq. ft. face of stud at exterior wall Type of Construction: VB 1872 sq. ft. 352 sq. ft. 794 sq. ft. 726 sq. ft. 477 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside 3 BR, 3.5 BA Occupancy: R-2 PLAN 4 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 68 sq. ft. 113 sq. ft. face of stud at exterior wall Type of Construction: VB 1872 sq. ft. 352 sq. ft. 794 sq. ft. 726 sq. ft. 477 sq. ft. 175 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside 3 BR, 3.5 BA Occupancy: R-2 PLAN 4 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 113 sq. ft. 113 sq. ft. face of stud at exterior wall Type of Construction: VB 1872 sq. ft. 352 sq. ft. 794 sq. ft. 726 sq. ft. 477 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside 3 BR, 3.5 BA Occupancy: R-2 PLAN 4 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 113 sq. ft. 113 sq. ft. face of stud at exterior wall Type of Construction: VB 1872 sq. ft. 352 sq. ft. 794 sq. ft. 726 sq. ft. 477 sq. ft. 175 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside 3 BR, 3.5 BA Occupancy: R-2 PLAN 4 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 113 sq. ft. 113 sq. ft. face of stud at exterior wall Type of Construction: VB 1872 sq. ft. 352 sq. ft. 794 sq. ft. 726 sq. ft. 477 sq. ft. 175 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside 3 BR, 3.5 BA Occupancy: R-2 PLAN 4 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 113 sq. ft. 113 sq. ft. face of stud at exterior wall Type of Construction: VB 1872 sq. ft. 352 sq. ft. 794 sq. ft. 726 sq. ft. 175 sq. ft. 163 sq. ft.
PLAN 3 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Flr. Deck Square Footage taken from inside 3 BR, 3.5 BA Occupancy: R-2 PLAN 4 (ACC.) NET SQ. FOOTAGE: First Floor Second Floor Third Floor 2 Car Garage Covered Entry Porch 2nd Floor	1745 sq. ft. 323 sq. ft. 728 sq. ft. 694 sq. ft. 453 sq. ft. 113 sq. ft. 113 sq. ft. face of stud at exterior wall Type of Construction: VB 1872 sq. ft. 352 sq. ft. 794 sq. ft. 726 sq. ft. 175 sq. ft. 163 sq. ft.

Type of Construction: VB

DEVELOPMENT STATISTICS

Occupancy: R-2