Appendix B:

The Biological Reconnaissance Survey Report by ECORP Consulting, Inc. and the Wetland Delineation report by ECORP Consulting Inc.

20 May 2010

Hue Tran
4584 Ewing Road
Castroville, California 94546

RE: 4659 Proctor Road, Castro Valley, California- Biological Reconnaissance Survey

Dear Mr. Tran:

At your request, I recently met with you at your property located at 4659 Proctor Road in Castro Valley, California to conduct an assessment existing biological conditions of the subject property. The 6.8-acre property is located within an unsectioned portion of Township 2 South, Range 2 West on the *Hayward, California, 7.5. minute topographic quadrangle* (USGS 1993) (Figure 1. *Project Site and Vicinity*). The site is located due south of Proctor Road, west of the terminus of Sorani Way, and approximately 750 feet east of Walnut Road, and is surrounded by an existing residential subdivision (Figure 2. *Aerial View of Project Site*). It is my understanding that a reconnaissance-level biological characterization of the site was requested by Alameda County (Mr. Phil Sawrey-Kubecek) in support of your subdivision of the land. The assessment investigation was conducted to characterize existing conditions, with particular emphasis on any potential habitat for special status plant and wildlife species, but does not constitute species specific-surveys nor a jurisdictional wetland delineation.

Prior to our site visit, I reviewed various sources of available baseline data including the *Hayward, California, 7.5. minute topographic quadrangle* (USGS 1993), recent aerial photographs of the site (via Google Earth), the Alameda County soil survey, *USDA Natural Resources Conservation Service Hydric Soils List, Alameda County, CA Western Part*, topographic data provided by Lea & Braze Engineering, Inc., and the California Department of Fish and Game's Natural Diversity Data Base (CNDDB). I subsequently conducted a site visit on May 18, 2010, during which time I walked meandering transects throughout the property and made notes regarding existing conditions.

The subject property consists of two residences (4659 and 4651 Proctor Road) and associated land (comprising 5 separate parcels) totaling approximately 6.8-acres. The property is relatively flat where the existing houses are located. The property then slopes steeply to the south and southeast. A broad topographic swale (which trends in a north to south direction) is located in the eastern portion of the site (Figure 3. *Topographic Survey*). The southern-most tip of the property corresponds to the lowest elevation on site. The property drains via an existing storm drain at that point. Representative photographs of the property are attached (see Attachment A – *Plates 1 and 2*).

It is my understanding that the houses present on the property were built in 1946 and 1948 and that past owners and tenants lived in the houses and historically maintained a few livestock (goats and horses) on the back of the property. The land has been used as pasture/rural land over the last 65 or so years and may have historically been used as orchard land before the World War II era (volunteer plum trees/fruit tree remnants were observed at various locations). The soil unit mapped

2525 Warren Drive • Rocklin, CA 95677 • Tel: (916) 782-9100 • Fax: (916) 782-9134 • Web: www.ecorpconsulting.com

for the site is *122 Los Osos-Millsholm complex, 9-30% slopes.* This soil type is not listed as a hydric soil on the *USDA Natural Resources Conservation Service Hydric Soils List, Alameda County, CA Western Part* and there are no USGS blue-line features (e.g. creeks, canals, drainages) mapped for the site per the *Hayward, California, 7.5. minute topographic quadrangle.*

The majority of the site consists of ruderal upland grassland dominated by non-native grass species such as wild oat (*Avena* sp.), barley (*Hordeum murinum*), ripgut brome (*Bromus diandrus*), and ryegrass (*Lolium* sp.), and forbes such as wild radish (*Rhaphinus sativa*), mustard (*Brassica nigra*) and rose clover (*Trifolium hirtum*). It is my understanding that the grassland areas on site are mowed on a regular basis for the purposes of fire control. Evidence of site periodic disking is evident through review of historical aerial photography. Most of the trees on the property including Coast live oaks (*Quercus agrifolia*), pine (*Pinus* sp.), and a few eucalyptus (*Eucalyptus globulus*), are situated along property boundaries. However, various trees and shrubs also occur at scattered locations throughout the site including some live oaks, pines, coyote brush (*Bacharris pilularis*), poison oak (*Toxicodendron diversiloba*) and nonnative ornamental species including pyracantha (*Pyracantha* sp.), olive (*Olea europea*), cotoneaster (*Cotonester* sp.), deodar cedar (*Cedrus deodara*) and fruit (primarily plum) trees (*Prunus* sp.).

The broad and sloped topographic swale located in the east portion supports many of the afore mentioned plant species, including a large recently cleared stand of Himalayan blackberry (*Rubus discolor*). It is my understanding that the extensive blackberry growth along the swale and in the southern-most portion of the site was recently cleared for fire prevention purposes as requested by the Planning Department. This clearing has resulted in a more open and currently sparsely vegetated area. Signs of blackberry regrowth are evident at various locations along the swale and southern portion of the property. There is no evidence of a naturally occurring "bed and bank" drainage within the swale. At the southern-most terminous of the property, a very small recently excavated ditch is evident immediately above an existing storm drain outlet which helps facilitate site drainage. In reviewing topographic data for the site and adjacent areas it is evident that an additional small swale traverses the southern-most terminous of the site in west-east direction. The project site drains via overland flow along slopes and the eastern swale. Some runoff from offsite lands to the south and west may also occur during rain events. Some small puddles were evident in the southern-most portion of the site on the survey date, the likely result of recent rains the day and evening before. This low lying area is relatively wet compared with other areas of the site and it is clearly evident that the site drains from this point. While much of the vegetation (primarily blackberry) has been cleared, some blackberry regrowth was evident and blackberry shrubs will likely become reestablished over time. Other plants observed in the low lying area included poison oak, plum , curly dock (*Rumex crispus*), geranium (*Geranium dissectum*), nutsedge (*Cyperus* sp.), toad rush (*Juncus bufoneus*), loosestrife *(Lythrum* sp.), and scarlet pimpernell (*Anagallis arvensis*). Some of these species are facultative wetland species and given the apparent seasonally wet conditions at the southernmost drainage area, it is possible that wetland indicator species may persist in this low area due to the current absence of blackberry cover. Fill of verified jurisdictional wetlands and waters of the U.S. is regulated by the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act. It is my understanding, however, that the proposed project has been designed to avoid building in this southern-most area, and that the lower portion of the site will continue to serve in a drainage capacity.

According to the California Natural Diversity Data Base (CNDDB) (Figure 4. *CNDDB Occurrences of Special-Status Species*), maintained by the California Department of Fish and Game, there are no documented occurrences of special status plant of wildlife species within a 1-mile radius of the

Proctor Road property. This is not surprising given that the surrounding area has been largely converted to residential development. Designated critical habitat for the Alameda whip snake (*Masticophis lateralis euryxanthus*) is documented within 1-mile (northeast) of the project site, within the Cull Canyon Regional Recreational Area and immediately adjacent lands. The Proctor Road project site, is separated from this and other open space areas by existing residences. Furthermore there is no suitable habitat for this species within the project site given current conditions. The condition of the grassland areas varies annually, with the area being heavily vegetated with dense tall grass cover in the spring to being disked on a regular basis. Under these conditions, there is no suitable habitat for the Alameda whipsnake. The CNDDB also documents occurrences of the California red-legged frog (*Rana draytonii*) within 5 miles to the north and east of the project. The presence of this species is, similarly, not expected due to the project sites separation from these areas and the absence of any potential breeding habitat on-site. No federal or state-listed species are expected to occur within the subject property.

An occurrence of San Francisco wood rat (*Neotoma fuscipes annectens*), a California species of concern, is documented almost 1 mile to the southeast of the project site. This species is associated with riparian zones. Given the absence of an established riparian area and the long-term presence of residential/feral cats (and non-native rodents) in the area, the presence of this species is not expected. Two occurrences of Lum's micro-blind harvestman (*Microcina lumi*) are known from a little over 1-mile west of the project site. This invertebrate has a very localized and specialized microhabitat (e.g. moist serpentine rocky areas) and suitable habitat does not occur on site. Several special status plant species are also documented in the surrounding region. However, given the regular mowing regime and historical land uses of property, the presence of rare plants on-site is not expected.

The site could support nesting by various bird species including raptors. Raptors, including non-listed species such as the red-tailed hawk (*Buteo jamaicensis*) and other common species are protected under the Migratory Bird Treaty Act. Preconstruction surveys are often required by local resource agency jurisdictions to ascertain the presence or absence of nesting raptors prior to development. This requirement also typically applies to tree removal procedures to help ensure that nesting birds are not disturbed. Ground-nesting raptors such as the western burrowing owl (*Athene cunicularia*), while not documented in the immediate area, are likely to be present in the greater vicinity. However, no evidence of suitable burrows was observed during the site visit. The presence of burrowing owls is not expected due to the regular fire suppression management practices referenced above.

The preceding assessment summarizes my observations regarding exiting biological conditions during our May 18, 2010 site visit. Should you have any questions, or require additional assistance, please call me at (916) 782-9100.

Sincerely,

Peter Balfour
Vice President

Attachment(s)

LIST OF FIGURES

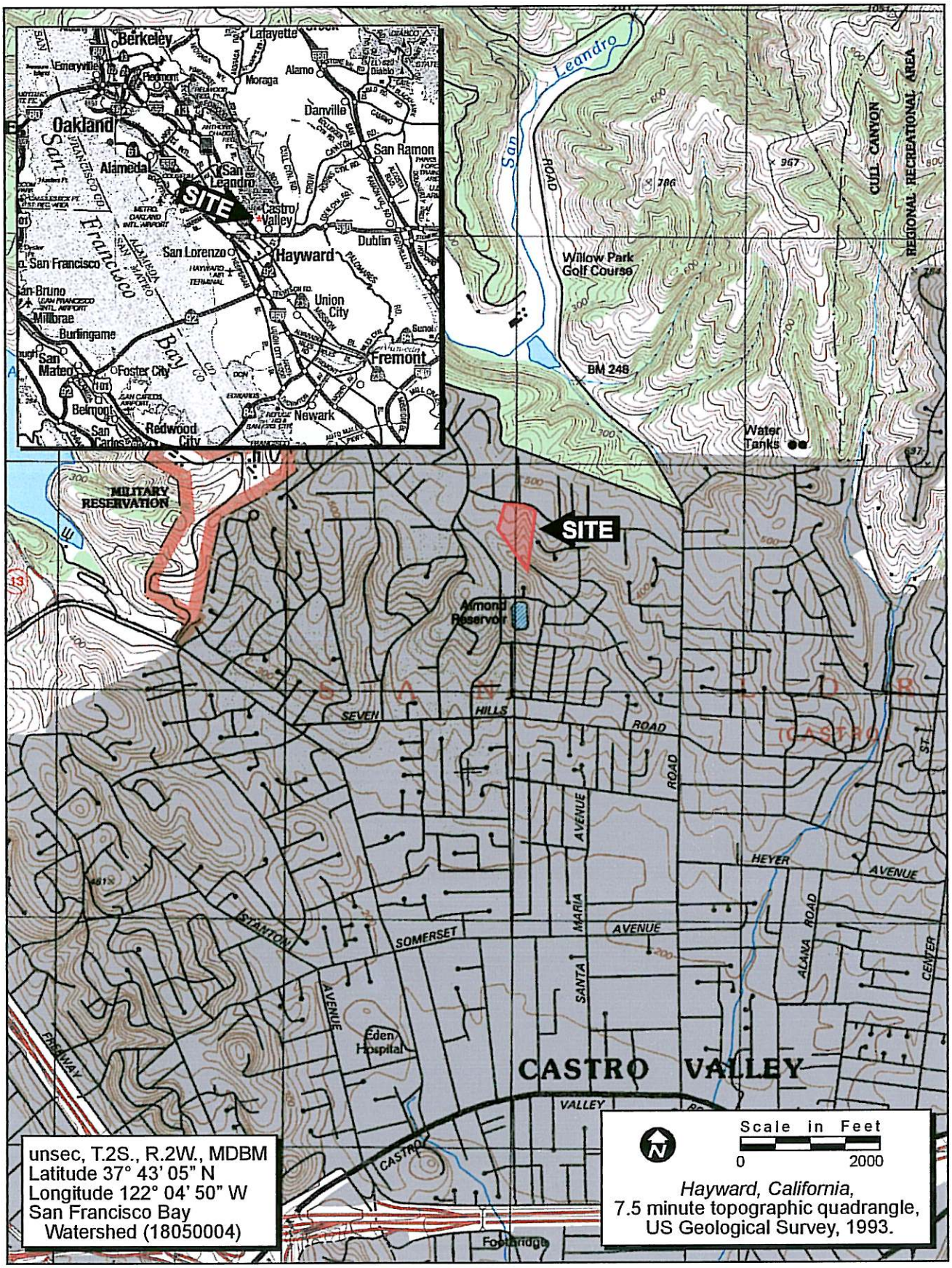

FIGURE 1. Project Site and Vicinity

2010-061 Proctor Road

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

FIGURE 2. Aerial View of Project Site

2010-061 Proctor Road

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

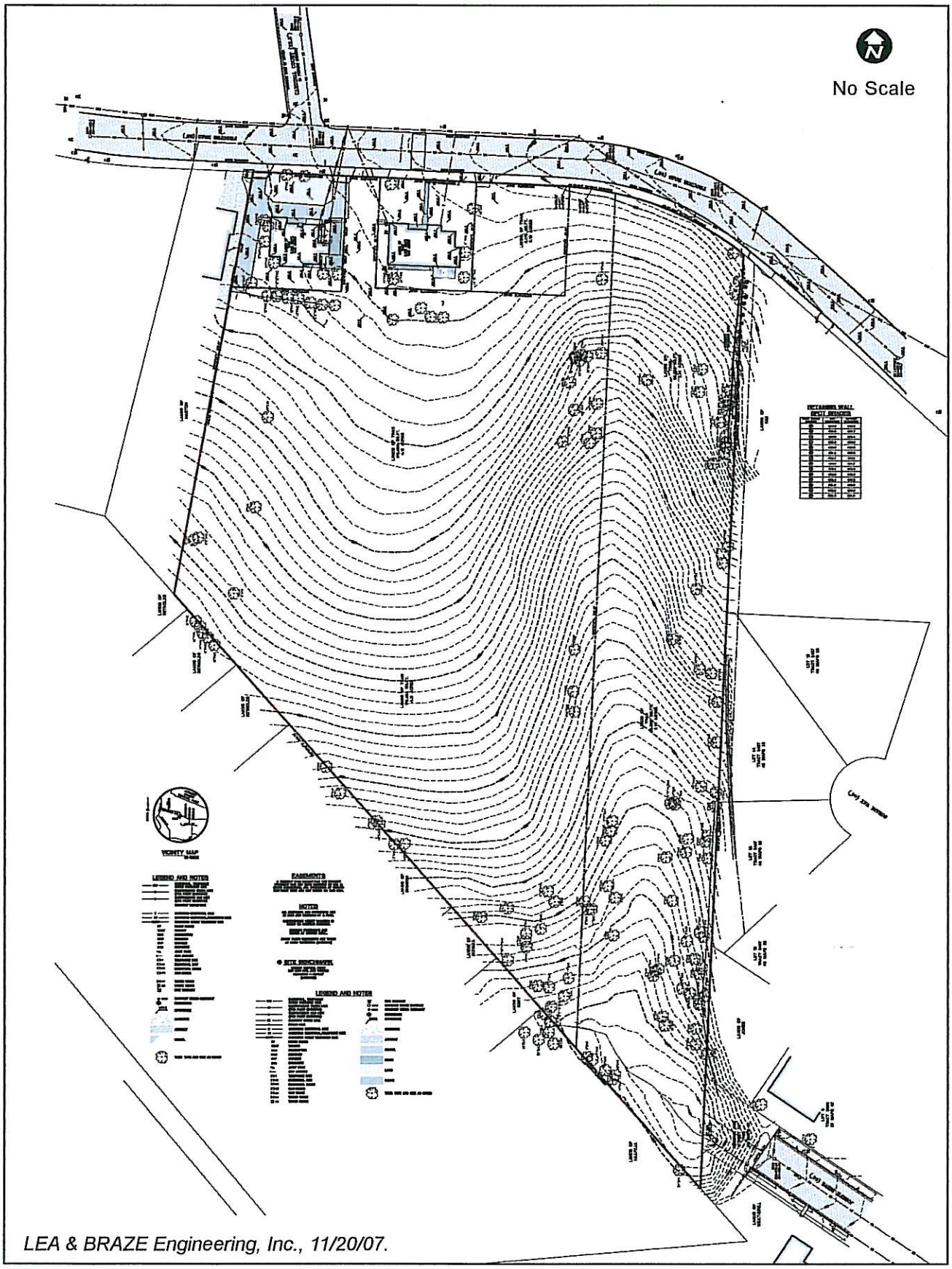

FIGURE 3. Topographic Survey

2010-061 Proctor Road

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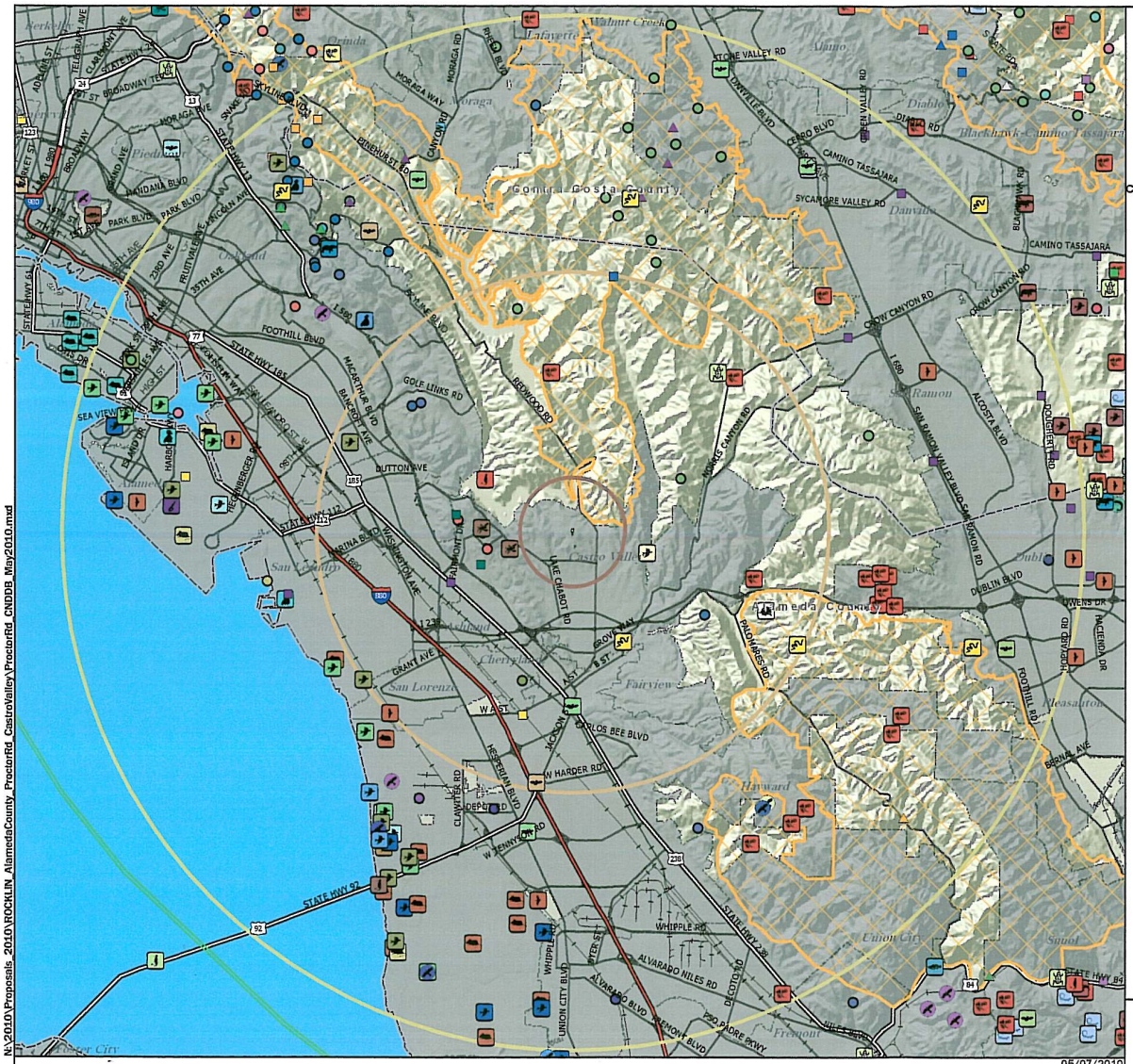

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05/07/2010
GIS Specialist: ECK

FIGURE 4. CNDDB Occurrences of Special-Status Species

2010-061 Proctor Road

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Map Features

Administrative Boundaries
- Project Boundary [1]
- City Boundary
- County Boundary

Distance From Project
- 1 mile
- 5 miles
- 10 miles

Transportation
- Interstate
- State Highway
- Roads
- Railroads

Aquatic Features
- Lakes and Reservoirs
- Rivers

CNDDB Occurrences [2]

Plants
- Slender Silver Moss
- Oregon Polemonium
- Arcuate Bush-mallow
- Tiburon Buckwheat
- Santa Clara Red Ribbons
- Norris' Beard Moss
- Hall's Bush-mallow
- Bent-flowered Fiddleneck
- Mt. Diablo Manzanita
- Contra Costa Manzanita
- Pallid Manzanita
- Alkali Milk-vetch
- San Joaquin Spearscale
- Big-scale Balsamroot
- Round-leaved Filaree
- Mt. Diablo Fairy-lantern
- Chaparral Harebell
- Congdon's Tarplant
- San Francisco Bay Spineflower
- Robust Spineflower
- Presidio Clarkia
- Point Reyes Bird's-beak
- Western Leatherwood
- Mt. Diablo Buckwheat
- Fragrant Fritillary
- Diablo Helianthella
- Brewer's Western Flax
- Loma Prieta Holta
- Santa Cruz Tarplant
- Kellogg's Horkelia
- Northern California Black Walnut
- Contra Costa Goldfields
- Oregon Meconella
- Robust Monardella
- Mt. Diablo Phacelia
- Choris' Popcorn-flower
- San Francisco Popcorn-flower
- Hairless Popcorn-flower
- Slender-leaved Pondweed
- Adobe Sanicle
- Rock Sanicle
- Most Beautiful Jewel-flower
- Mt. Diablo Jewel-flower
- California Seablite
- Saline Clover
- Coastal Triquetrella
- Oval-leaved Viburnum

Invertebrates
- Mimic Tryonia (=California Brackishwater Snail)
- Lee's Micro-blind Harvestman
- Lum's Micro-blind Harvestman
- California Linderiella
- Antioch Efferian Robberfly
- Monarch Butterfly
- Bay Checkerspot Butterfly

Fish
- Steelhead - Central California Coast Esu
- Tidewater Goby

Amphibians/Reptiles
- California Tiger Salamander
- California Red-legged Frog
- Foothill Yellow-legged Frog
- Western Pond Turtle
- Alameda Whipsnake

Birds
- Double-crested Cormorant
- Great Blue Heron
- Black-crowned Night Heron
- Cooper's Hawk
- Sharp-shinned Hawk
- Golden Eagle
- Ferruginous Hawk
- Northern Harrier
- White-tailed Kite
- Prairie Falcon
- California Black Rail
- California Clapper Rail
- Western Snowy Plover
- Black Skimmer
- California Least Tern
- Burrowing Owl
- California Horned Lark
- Yellow Warbler
- Saltmarsh Common Yellowthroat
- Alameda Song Sparrow
- Tricolored Blackbird

Mammals
- Alameda Island Mole
- Big Free-tailed Bat
- San Francisco Dusky-footed Woo
- Salt-marsh Wandering Shrew
- Pallid Bat
- Silver-haired Bat
- Hoary Bat
- Yuma Myotis
- Western Mastiff Bat
- Berkeley Kangaroo Rat
- Salt-marsh Harvest Mouse
- San Joaquin Kit Fox
- American Badger

This map may include multiple species' occurrences at each location, some of which may not be visible on this graphic. The CNDDB occurrences shown may not reflect the actual location of the occurrence.

1 " = 12,000 '

SCALE IN FEET

0 6,000 12,000

Critical Habitat

Alameda Whipsnake — Steelhead

NOTES

[1] Project Boundary: Alameda County Parcel Database

[2] CDFG California Natural Diversity Database (CNDDB), March 2010 Update (GIS Shapefile)

CNDDB Occurrences Located on USGS 7.5' Quadrangles: Oakland West, Oakland East, Las Trampas Ridge, Diablo, Hunters Point, San Leandro, Hayward, Dublin, San Mateo, Redwood Point, Newark, Niles

ATTACHMENT A

Plate 1. 4651 Procter Avenue Residence and Surrounding Area

Plate 2. Representative Site Photos

2010-061 Proctor Road

PLATE 1. 4651 Procter Avenue Residence and Surrounding Area

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2010-061 Proctor Road

Lowest portion of property (southern tip) at storm drain area.

View of property from Proctor Road, looking from the northeast to southwest direction.

Downslope view of cleared area within eastern swale.

→ Upslope view from within eastern swale.

PLATE 2. Representative Site Photos

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

LETTER OF TRANSMITTAL

DATE: 27 June 2012

TO: Cameron Johnson
U.S. Army Corps of Engineers
1455 Market Street, Room 1655
San Francisco, California 94103

Hue Tran
4584 Ewing Road
Castro Valley, California 94546

FROM: Peter Balfour

RE: ***Proctor Road Property***

WE ARE SENDING:			**DELIVERED BY:**	
CAD PLOT (S)	⇨	REPORT (S)	⇨	OVERNIGHT
BLUEPRINTS		LETTERS (S)		FEDERAL EXPRESS
DISKETTE		CONTRACT (S)		U.S. MAIL
AGENCY CORR.		OTHER		HAND

REMARKS:

Please find enclosed the Wetland Delineation for the Proctor Road Property project. If you have any questions, please feel free to call me at (916) 782-9100.

SIGNED: for Wendy Sanchez
Peter Balfour
Vice President

2010-061.1: WD_Tran Transmittal 5.31.12

DRAFT

Wetland Delineation

FOR

Proctor Road Property

5.85± Acre

ALAMEDA COUNTY, CALIFORNIA

25 May 2012

I approve this document to be submitted to the U.S. Army Corps of Engineers

_____ _____

Signature Date

Prepared for:

Hue Tran

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

DRAFT

Wetland Delineation

FOR

Proctor Road Property

5.85± Acre

ALAMEDA COUNTY, CALIFORNIA

25 May 2012

Prepared for:

Hue Tran

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Wetland Delineation

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Proctor Road Property

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Attachment D. Representative Photographs of Seasonal Wetland

Attachment E. Wetland Delineation Shape File (to be included with USACE submittal only)

Attachment F. USACE-Verified Wetland Map and Verification Letter (to be included in ECORP Consulting master copy only)

INTRODUCTION

On behalf of Mr. Hue Tran, ECORP Consulting, Inc. (ECORP) conducted a wetland delineation of the 5.85±-acre Proctor Road Property site, located south of Proctor Road, west of the terminus of Sorani Way, and east of Walnut Road in Castro Valley, Alameda County, California (Figure 1. *Project Site and Vicinity*). The site corresponds to an unsectioned portion of Township 2 South, and Range 2 West (MDBM) of the "Hayward, California" 7.5-minute quadrangle (U.S. Department of the Interior, Geological Survey 1981). The approximate center of the site is located at 37° 43' 04" North and 122° 04' 55" West within the San Francisco Bay Watershed (#18050004) (U.S. Department of the Interior, Geological Survey 1978).

This report describes potential waters of the United States, including wetlands, identified within the site that may be regulated by the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act. The information presented in this report provides data required by the USACE Sacramento District's *Minimum Standards for Acceptance of Preliminary Wetland Delineations* (U.S. Army Corps of Engineers 2001). The potential waters of the U.S. boundaries depicted in this report represent a calculated estimation of the jurisdictional area within the site, and are subject to modification following the USACE verification process.

APPLICANT:

Attn: Mr. Hue Tran
4584 Ewing Road
Castroville, California 94546
Phone: (510) 366-6158

AGENT:

Attn: Ms. Daria Snider
ECORP Consulting, Inc.
2525 Warren Drive
Rocklin, California 95677
Phone: (916) 782-9100
Fax: (916) 782-9134

Existing Site Conditions

The Proctor Road Property project site is composed of steeply sloping hillside and adjacent topographic swale at an elevational range of approximately 400 to 520 feet above mean sea level. The property is comprised primarily of non-native annual grassland with scattered trees and shrubs, and is surrounded by urban residential properties.

The non-native annual grassland is dominated by non-native grass species such as wild oat (*Avena barbata*), barley (*Hordeum murinum*), ripgut brome (*Bromus diandrus*), and ryegrass (*Festuca perennis*), and forbs such as wild radish (*Raphanus sativus*), black mustard (*Brassica nigra*) and rose clover (*Trifolium hirtum*). Trees and shrubs are scattered throughout portions of the property, and include Coast live oak (*Quercus agrifolia*), pines (*Pinus* species), coyote brush (*Baccharis pilularis*), poison oak (*Toxicodendron diversilobum*) and nonnative ornamental species including pyracantha (*Pyracantha* sp.), olive (*Olea europaea*), cotoneaster (*Cotoneaster* sp.), deodar cedar (*Cedrus deodara*) and fruit trees (*Prunus* sp.). In addition, Coast live oaks, pines, and eucalyptus (*Eucalyptus globulus*) are concentrated along the property boundaries.

The wetland delineation was conducted in the spring, when most plant species were identifiable to species. A seasonal wetland was identified in the southern most portion of the property. Water was flowing through the central portion of the seasonal wetland at the time of the site visit. The last rain event prior to the site visit occurred on 10-12 April 2012, when 1.46 inches of rain fell (DWR 2012)

According to the *Soil Survey of Alameda County, California* (U.S. Department of Agriculture, Soil Conservation Service 1981), one soil unit has been mapped within the site (Figure 2. *Natural Resources Conservation Service Soil Types*); (122) Los Osos-Millsholm complex, 9-30%. This soil unit contains neither hydric components nor hydric inclusions (U.S. Department of Agriculture, Soil Conservation Service 1992).

METHODS

This wetland delineation was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Arid West Region Supplement) (U.S. Army Corps of Engineers 2008). The boundaries of potential waters of the U.S. were delineated through standard field methodologies (i.e., paired data set analyses), and all wetland data were recorded on Arid West Region - Wetland Determination Data Forms (Attachment A). A color aerial photograph (1"=200' scale, NAIP 2011) was used to assist with mapping and ground-truthing (Attachment B). *Munsell Soil Color Charts* (Kollmorgen Instruments Co. 1990)

and the *Soil Survey of Alameda County, California* (U.S. Department of Agriculture, Soil Conservation Service 1981) were used to aid in identifying hydric soils in the field. *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin, et al 2012) was used for plant nomenclature and identification.

Field surveys were conducted on 10 May 2012 by ECORP biologist Daria Snider. Ms. Snider walked the entire 5.85±-acre site to determine the location and extent of potential waters of the U.S. within the property. A transect consisting of three data points was sampled to accurately determine the boundary of the seasonal wetland on-site. At each data point location, the vegetation, hydrology, and soils were evaluated to determine if they supported a wetland or non-wetland status. Two of the data points were located such that they were within the estimated wetland area, and third point was situated outside the limits of the estimated wetland area. The total area of the wetlands on-site was recorded in the field using a post-processing capable global positioning system (GPS) unit with sub-meter accuracy (Trimble GeoXT).

Waters Of The United States

This report describes potential waters of the U.S., including wetlands, which may be regulated by the USACE under Section 404 of the Clean Water Act. Wetlands are "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [33 CFR 328.3(b), 51 FR 41250, November 13, 1986]. Wetlands can be perennial or intermittent, and isolated or adjacent to other waters.

Other waters are non-tidal, perennial, and intermittent watercourses and tributaries to such watercourses [33 CFR 328.3(a), 51 FR 41250, November 13, 1986]. The limit of USACE jurisdiction for non-tidal watercourses (without adjacent wetlands) is defined in 33 CFR 328.4(c)(1) as the "ordinary high water mark". The ordinary high water mark is defined as the "*line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas*" [33 CFR 328.3(e), 51 FR 41250, November 13,

1986]. The bank-to-bank extent of the channel that contains the water-flow during a normal rainfall year generally serves as a good first approximation of the lateral limit of USACE jurisdiction. The upstream limits of other waters are defined as the point where the ordinary high water mark is no longer perceptible.

Routine Determinations

To be determined a wetland; the following three criteria should be met:

- A majority of dominant vegetation species are wetland associated species;
- Hydrologic conditions exist that result in periods of flooding, ponding, or saturation during the growing season; and
- Hydric soils are present.

Vegetation

Hydrophytic vegetation is defined as the sum total of macrophytic plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanent or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present (Environmental Laboratory 1987). The definition of wetlands includes the phrase "a prevalence of vegetation typically adapted for life in saturated soil conditions." Prevalent vegetation is characterized by the dominant plant species comprising the plant community (Environmental Laboratory 1987). The dominance test is the basic hydrophytic vegetation indicator and was applied at each data point location. The "50/20 rule" was used to select the dominant plant species from each stratum of the community. The rule states that for each stratum in the plant community, dominant species are the most abundant plant species (when ranked in descending order of coverage and cumulatively totaled) that immediately exceed 50 percent of the total coverage for the stratum, plus any additional species that individually comprise 20 percent or more of the total cover in the stratum (HQUSACE 1992, U.S. Army Corps of Engineers 2008).

Dominant plant species observed at each data point were then classified according to their indicator status (probability of occurrence in wetlands) (Table 1), in accordance with the U.S. Fish and Wildlife Service's (USFWS) National List of Vascular Plant Species That Occur in Wetlands: California (Region 0) (Reed 1988). If the majority (greater than 50 percent) of the dominant vegetation on a site are classified as obligate (OBL), facultative wetland (FACW), or facultative (FAC), then the site was considered to by dominated by hydrophytic vegetation. Pursuant to the Arid West Region Supplement, plus (+) and minus (-) modifiers were not used (e.g., FAC-, FAC, and FAC+ plants are all considered to be FAC). Plant species not listed in Reed 1988 were assumed to be upland (UPL) species.

Table 1. Classification of Wetland-Associated Plant Species[1]

Plant Species Classification	Abbreviation	Probability of Occurring in Wetland
Obligate	OBL	>99%
Facultative Wetland	FACW	66-99%
Facultative	FAC	33-66%
Facultative Upland	FACU	1-33%
Upland	UPL	<1%
No indicator status	NI	Insufficient information to determine status
Plants That Are Not Listed (assumed upland species)	NL	Does not occur in wetlands in any region.

[1] Source: Reed 1988

In instances where indicators of hydric soil and wetland hydrology were present, but the plant community failed the dominance test, the vegetation was re-evaluated using the prevalence index. The prevalence is a weighted-average wetland indicator status of all plant species in the sampling plot, where each indicator status category is given a numeric code (OBL=1, FACW=2, FAC=3, FACU=4, and UPL=5) and weighting is by abundance (percent cover). If the plant community failed the prevalence index, the presence/absence of plant morphological adaptations to prolonged inundation or saturation in the root zone was evaluated.

Soils

A hydric soil is defined as a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (USDA-NRCS 2003). Indicators that a hydric soil is present include, but are not limited to, histosols, histic epipedon, hydrogen sulfide, depleted below dark surface, sandy redox, loamy gleyed matrix, depleted matrix, redox dark surface, redox depressions, and vernal pools.

A soil pit was excavated to the depth needed to document an indicator, to confirm the absence of indicators, or until refusal at each data point. The soil was then examined for hydric soil indicators. Soil colors were determined while the soil was moist using the *Munsell Soil Color Charts* (Kollmorgen Instruments Co. 1990).

Hydrology

Wetlands, by definition, are seasonally or perennially inundated or saturated at or near (within 12 inches of) the soil surface. Primary indicators of wetland hydrology include, but are not limited to: visual observation of saturated soils, visual observation of inundation, surface soil cracks, inundation visible on aerial imagery, water-stained leaves, oxidized rhizospheres along living roots, aquatic invertebrates, water marks (secondary indicator in riverine environments), drift lines (secondary indicator in riverine environments), and sediment deposits (secondary indicator in riverine environments). The occurrence of one primary indicator is sufficient to conclude that wetland hydrology is present. If no primary indicators are observed, two or more secondary indicators are required to conclude wetland hydrology is present. Secondary indicators include, but are not limited to: drainage patterns, crayfish burrows, FAC-neutral test, and shallow aquitard. The occurrence of at least one primary indicator or two secondary indicators is required to confirm the presence of wetland hydrology.

RESULTS

A total of 0.111 acre of potential waters of the U.S has been mapped for this site (Table 2). The wetland determination data forms are included in Attachment A, and a list of plant species

observed on-site is included in Attachment C. A discussion of the wetland is presented below, and a wetland delineation map is included as Figure 4.

Table 2. Potential Waters of the U.S.

Type	Acreage[1]
Wetlands	
Seasonal Wetland	0.111
Total	**0.111**

[1] Acreages represent a calculated estimation and are subject to modification following the Corps' verification process.

Wetlands

Seasonal Wetland

One seasonal wetland is present within the southern-most corner of the site, just upstream of an existing storm drain (Figure 3). The seasonal wetland is located within the southern portion of the property, which corresponds to the lowest topographic area on site. The wetland receives runoff from upslope areas on site as well as from runoff from adjacent properties/residences. Its presence is the result of existing drainage patterns from the upslope watershed and adjacent developments. Representative photographs of the seasonal wetland and downstream culvert are included as Attachment D. Dominant plants within the on-site seasonal wetland include Himalayan blackberry (*Rubus armeniacus*), common sheep sorrel (*Rumex acetosella*), and iris-leaved rush (*Juncus xiphioides*). Other species commonly observed in the seasonal wetland include apple mint (*Mentha suaveolens*), curly dock (*Rumex crispus*), tall flat sedge (*Cyperus eragrostis*), and bull thistle (*Cirsium vulgare*). Vegetation within the seasonal wetland was determined to be hydrophytic due to passage of the dominance test.

Indicators of wetland hydrology observed within the seasonal wetland include oxidized rhizospheres and soil saturation within 12 inches of the soil surface. The soil matrix color within the seasonal wetland was 2.5Y2.5/1 without redox features 0 to 7 inches below the surface and 2.5Y3/1 with 10% redox concentrations colored 10YR4/6 from 7to 12 inches below the surface. The soil was determined to be hydric based on the presence of field indicator F6 (redox dark

surface). The soil matrix color in an upland area adjacent to the seasonal wetland was 2.5Y3/3 without redox features from the surface to a depth of 3 inches, and 2.5Y3/2 with 5% redox concentrations colored 10YR3/6 from 3 to 8 inches below the soil surface.

CONCLUSION / JURISDICTIONAL ASSESSMENT

Pursuant to the U.S. Environmental Protection Agency (USEPA) and USACE memorandum regarding Clean Water Act jurisdiction, issued following the United States Supreme Court's decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* (herein referred to as *Rapanos*), the agencies will assert jurisdiction over the following waters: "traditionally navigable" waters (TNW), all wetlands adjacent to TNWs, non-navigable tributaries of TNWs that are "relatively permanent" (i.e., tributaries that typically flow year-round or have continuous flow at least seasonally), and wetlands that directly abut such tributaries (USEPA and USACE 2007).

Waters requiring a significant nexus determination by the USACE and USEPA to establish jurisdiction include non-navigable tributaries that are not relatively permanent, wetlands adjacent to non-navigable tributaries that are not relatively permanent, and wetlands adjacent to but do not directly abut a relatively permanent non-navigable tributary (USEPA and USACE 2007). The jurisdictional determination is a fact-based evaluation to establish whether a water has a significant nexus with a TNW. The significant nexus analysis will assess the flow characteristics and functions of the non-navigable tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of downstream TNWs (USEPA and USACE 2007).

The seasonal wetland on-site drains south into a storm drain, which is presumed to flow eventually into San Lorenzo Creek, which is tributary to the San Francisco Bay, a navigable water. San Lorenzo Creek is a relatively permanent water. The seasonal wetland on-site does not abut San Lorenzo Creek, but would be considered adjacent. As the seasonal wetland is adjacent but not abutting a relatively permanent water, a significant nexus determination will likely be required by the USACE and USEPA to establish jurisdiction. It should be noted that

proximity alone does not establish a significant nexus, and that the USACE and USEPA are ultimately responsible for making this determination.

A total of 0.111 acre of potential waters of the U.S. has been mapped on-site. This acreage represents a calculated estimation of the jurisdictional area within the site, and is subject to modification following the USACE verification process. Fill within jurisdictional features would require permitting pursuant to Section 404 and 401 of the federal Clean Water Act.

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LIST OF FIGURES

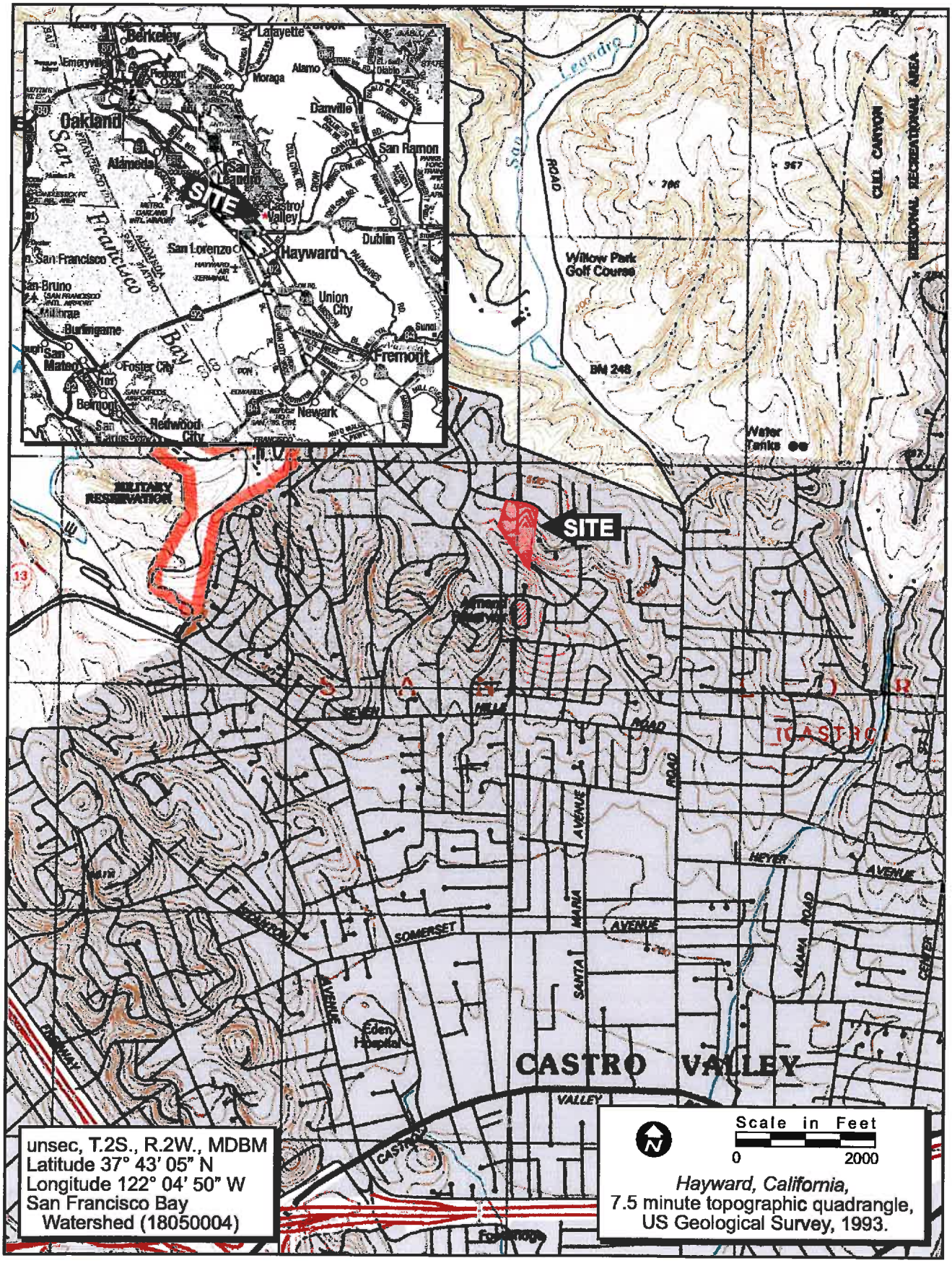

FIGURE 1. Project Site and Vicinity

2010-061 Proctor Road

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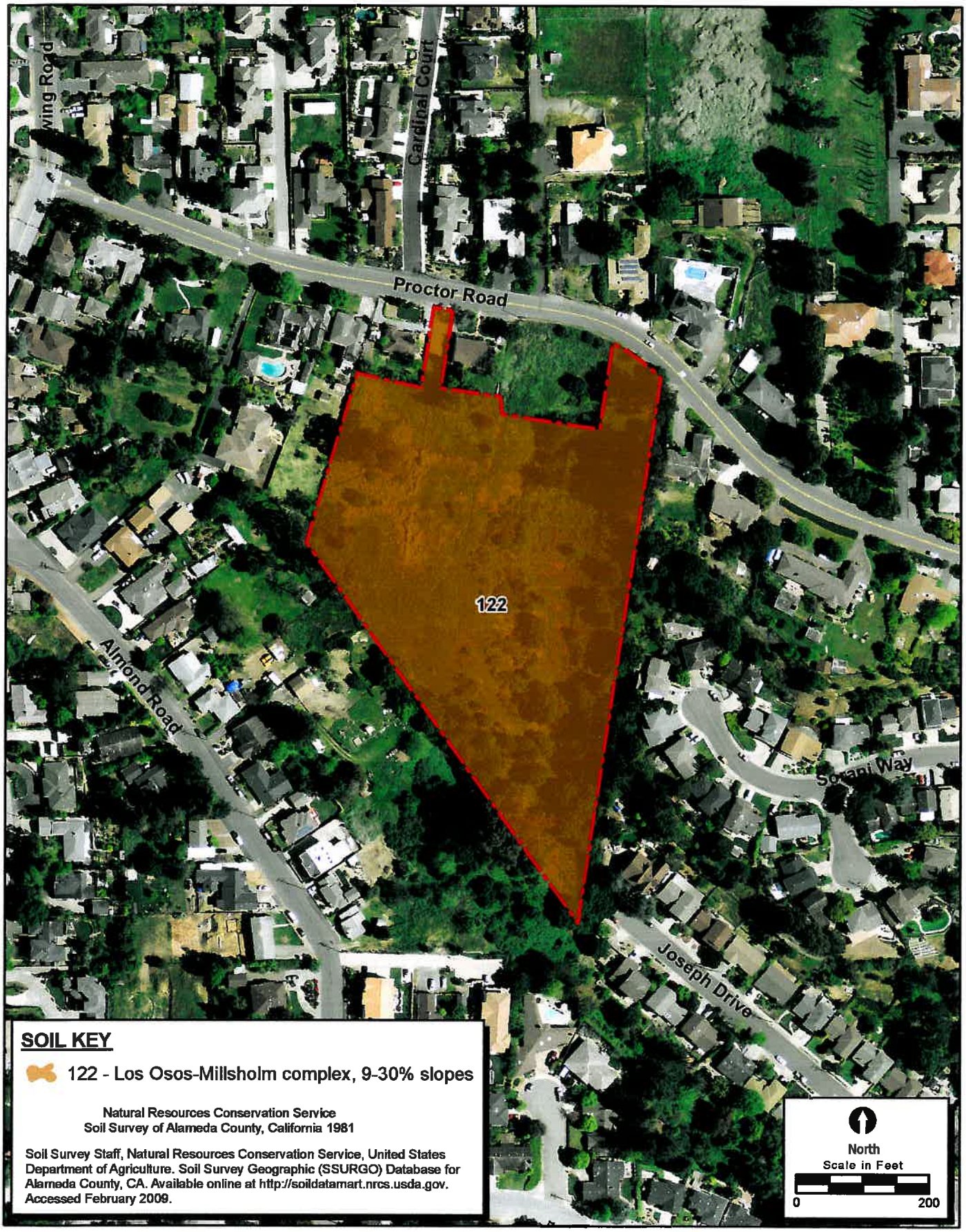

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Map Date: 5/21/2012

Figure 2. Natural Resource Conservation Service Soil Types

2010-061 Proctor Road

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Figure 3. Wetland Delineation

SEASONAL WETLAND

ID	Existing Square Feet	Existing Acreage
SW-1	4819	0.111

WATERS OF THE U.S.

THREE CRITERIA SAMPLE POINT	GPS COORDINATES LAT/LONG
△ 1	37.716760 / -122.081721
△ 3	37.716852 / -122.081832

UPLAND

THREE CRITERIA SAMPLE POINT	GPS COORDINATES LAT/LONG
△ 2N	37.716871 / -122.081847

This exhibit depicts information and data produced in strict accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region and conforms to Sacramento District specifications. However, wetland boundaries have not been legally surveyed and may be subject to minor adjustments if exact locations are required.

Image Source: 2011 NAIP Imagery

ECORP Consulting, Inc.
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Map Date: 5/25/2012

Location: N:\2010\2010-061 Proctor Road\MAPS\Wetland_Mapping\Wetland_Delineation\v1\PR_WDv1.mxd (KOrtega, 5/25/2012)

2010-061 Proctor Road

LIST OF ATTACHMENTS

ATTACHMENT A

Wetland Determination Data Forms - Arid West Region

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Proctor Road City/County: Hayward / Alameda Sampling Date: 5/10/12
Applicant/Owner: Hue Tran State: CA Sampling Point: 2N
Investigator(s): Daria Snider Section, Township, Range: unsectioned / T2S / R2W
Landform (hillslope, terrace, etc.): Base of hillslope Local relief (concave, convex, none): None Slope (%): 9-30%
Subregion (LRR): C Lat: Long: Datum:
Soil Map Unit Name: (122) Los Osos-Millsholm complex, 9-30% NWI classification: None
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No	Is the Sampled Area within a Wetland? Yes No ✓
Hydric Soil Present?	Yes ✓ No	
Wetland Hydrology Present?	Yes No ✓	

Remarks:
Upland Comparison to DPs 1+3

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. Baccharis pilularis	10	✓	N/L
2. Rubus ursinus	10	✓	FacW
3.			
4.			
5.			
Total Cover:	20		
Herb Stratum			
1. Cyperus eragrostis	10	✓	FacW
2. Bromus diandrus	10	✓	N/L
3. Rumex acetosella	5	✓	Fac-
4. Cirsium vulgare	tr		FacU
5. Cynosurus echinatus	tr		N/L
6. Avena barbata	tr		N/L
7. Geranium dissectum	tr		N/L
8. Toxicodendron diversilobum	tr		N/L
Carex species	tr		—
Total Cover:	25		
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 70% % Cover of Biotic Crust 0

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)
Total Number of Dominant Species Across All Strata: 5 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 60% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:
X Dominance Test is >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes ✓ No

Remarks:

SOIL

Sampling Point: 2N

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-3"	2.5Y 3/3	100%					clay loam	
3"-8"	2.5Y 3/2	95%	10YR 3/6	5%	C	PL	clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix **(S4)**
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology indicators detected.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Proctor Road City/County: Hayward / Alameda Sampling Date: 5/10/12

Applicant/Owner: Hue Tran State: CA Sampling Point: 3

Investigator(s): Daria Snider Section, Township, Range: unsectioned / T2S / R2W

Landform (hillslope, terrace, etc.): Base of hillslope Local relief (concave, convex, none): None Slope (%): 9-30%

Subregion (LRR): C Lat: Long: Datum:

Soil Map Unit Name: (422) Los Osos-Millsholm complex, 9-30% NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X No	**Is the Sampled Area within a Wetland?** Yes X No
Hydric Soil Present?	Yes X No	
Wetland Hydrology Present?	Yes X No	

Remarks:

Seasonal wetland

VEGETATION

Tree Stratum (Use scientific names.)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
Total Cover:			
Sapling/Shrub Stratum			
1. Rubus armeniacus	40	✓	FACW
2.			
3.			
4.			
5.			
Total Cover: 40			
Herb Stratum			
1. Rumex acetosella	60	✓	FAC-
2. Juncus xiphioides	10		OBL
3.			
4.			
5.			
6.			
7.			
8.			
Total Cover: 70%			
Woody Vine Stratum			
1.			
2.			
Total Cover:			

% Bare Ground in Herb Stratum 5% % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species	x 4 =	
UPL species	x 5 =	
Column Totals: (A)		(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

X Dominance Test is >50%

__ Prevalence Index is ≤3.0[1]

__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present.

Hydrophytic Vegetation Present? Yes X No

Remarks:

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4"	2.5Y 2.5/1	100%					clay loam	
4-12"	2.5Y 3/1	90%	10YR 3/4	10%	C	PL, M	clay	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) **(LRR C)**
- ___ 1 cm Muck (A9) **(LRR D)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- X Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) **(LRR C)**
- ___ 2 cm Muck (A10) **(LRR B)**
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes X No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) **(Nonriverine)**
- ___ Sediment Deposits (B2) **(Nonriverine)**
- ___ Drift Deposits (B3) **(Nonriverine)**
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- X Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Plowed Soils (C6)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) **(Riverine)**
- ___ Sediment Deposits (B2) **(Riverine)**
- ___ Drift Deposits (B3) **(Riverine)**
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Thin Muck Surface (C7)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 4"

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

ATTACHMENT B

Aerial Photograph of the Site

Aerial Photograph

Image Source: 2011 NAIP Imagery

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Map Date: 5/25/2012

2010-061 Proctor Road

Location: N:\2010\2010-061 Proctor Road\MAPS\Wetland_Mapping\Wetland_Delineation\v1\PR_AerialV1.mxd (KOrtega, 5/25/2012)

ATTACHMENT C

Plant Species Observed On-site

Proctor Road
Wetland Delineation
Plant Species Observed On-Site

Scientific Name	Common Name	Indicator Status
Avena barbata	Wild oat	N/L
Baccharis pilularis	Coyote brush	N/L
Brassica nigra	Black mustard	N/L
Bromus diandrus	Ripgut brome	N/L
Carex species	Sedge	--
Cedrus deodara	Deodar cedar	N/L
Cirsium vulgare	Bull thistle	FACU
Cotoneaster species	Cotoneaster	N/L
Cynosurus echinatus	Hedgehog dogtail grass	N/L
Cyperus eragrostis	Tall flat sedge	FACW
Eucalyptus globulus	Eucalyptus	N/L
Festuca perennis	Ryegrass	FAC
Geranium dissectum	Cut-leaved geranium	N/L
Hordeum murinum	Barley	N/L
Juncus xiphioides	Iris-leaved rush	OBL
Mentha suaveolens	Apple mint	FACW
Quercus agrifolia	Coast live oak	N/L
Olea europaea	Olive	N/L
Pinus species	Pine	--
Prunus species	Fruit trees	N/L
Pyracantha species	Pyracantha	N/L
Raphanus sativus	Wild radish	N/L
Rubus armeniacus	Himalayan blackberry	FACW
Rumex acetosella	Sheep sorrel	FAC-
Rumex crispus	Curly dock	FACW
Toxicodendron diversilobum	Poison oak	N/L
Trifolium hirtum	Rose clover	N/L

Indicator Status Codes
OBL = Obligate Wetland; occur almost always (estimated probability >99%) under natural conditions in wetlands.
FACW = Facultative Wetland; usually occur in wetlands (estimated probability 67%-99%) under natural conditions in wetlands.
FAC = Facultative; equally likely to occur in wetlands or non-wetlands (estimated probability 34%-66%).
FACU = Facultative Upland; usually occur in non-wetlands (estimated probability 67%-99%).
UPL = Obligate Upland; occur almost always (estimated probability >99%) in non-wetlands in the region specified.
N/L = Not Listed.
NI = No indicator was recorded for those species for which insufficient information was available to determine a status.
-- = May or may not occur in wetlands depending upon species.
A positive (+) sign indicates a frequency toward the higher (more frequently found in wetlands) end of the facultative categories.
A negative (-) sign indicates a frequency toward the lower (less frequently found in wetlands) end of the facultative categories.
An asterisk (*) indicates a tentative assignment based upon limited information or conflicting review.

ATTACHMENT D

Representative Photographs of Seasonal Wetland

Seasonal wetland, 5/07/12.

Culvert/drain, 5/07/12.

Representative Photographs of Seasonal Wetland

2010-061 Proctor Road

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ATTACHMENT E

Wetland Delineation Shape File (to be include with USACE submittal only)

ATTACHMENT F

USACE-Verified Wetland Map and Verification Letter (to be included in ECORP Consulting master copy only)