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Existing Building:

The project entails improvements to animal containment and animal health areas and the creation of new visitor serving areas including a remodeled lobby, new accessible toilet rooms and accessibility improvements. Through the removal of existing kennels and development of new state of the art kennels, on site conditions and potential impacts to sensitive receptors are mitigated. The new kennels are individually framed walls with tempered glass panels that abate sound, provide better indoor air quality and enhance health and behavioral conditions for animals that are cared for at the facility. New air source heat pumps and energy recovery ventilators will provide excellent indoor air quality with high energy efficiency.

New building:

A 1566 s.f. training building will be built on a portion of the existing parking lot. This building will be used for animal wellness seminars and trainings for animals and their caregivers. This building will also be used for wet weather trainings and meet and greets while under the supervision of Humane Society staff.

Site Improvements:

The site improvements are characterized by relocation of 927 s.f. of existing landscaping and 1582 s.f. of impervious surfaces to become new landscaping with native plants, integrated with new stormwater management systems. Lastly, new accessibility improvements, including one new van accessible parking space and new flatwork will be developed.

**Wetlands and Waters Delineation for Sequoia
Humane Society and Adjacent Lands**

6073 Loma Avenue Eureka, CA

SPRING 2024/WINTER 2025

Project Background

This wetland survey was conducted on behalf of the Sequoia Humane Society, who is developing a project to renovate its existing facility and grounds and building a new animal training facility on a portion of its existing parking area.

Existing Facility and Site

The existing facility is a 6,800 s.f. building that was built on Assessor's Parcel # 306-391-013-000, a roughly 1+/- acre site. The facility was originally constructed in the 1960s by the State of California as a California Highway Patrol facility. The facility was later purchased by the County of Humboldt for use as the County Animal Shelter under contract with a non-profit organization that preceded the Sequoia Humane Society, which was established in 1981.

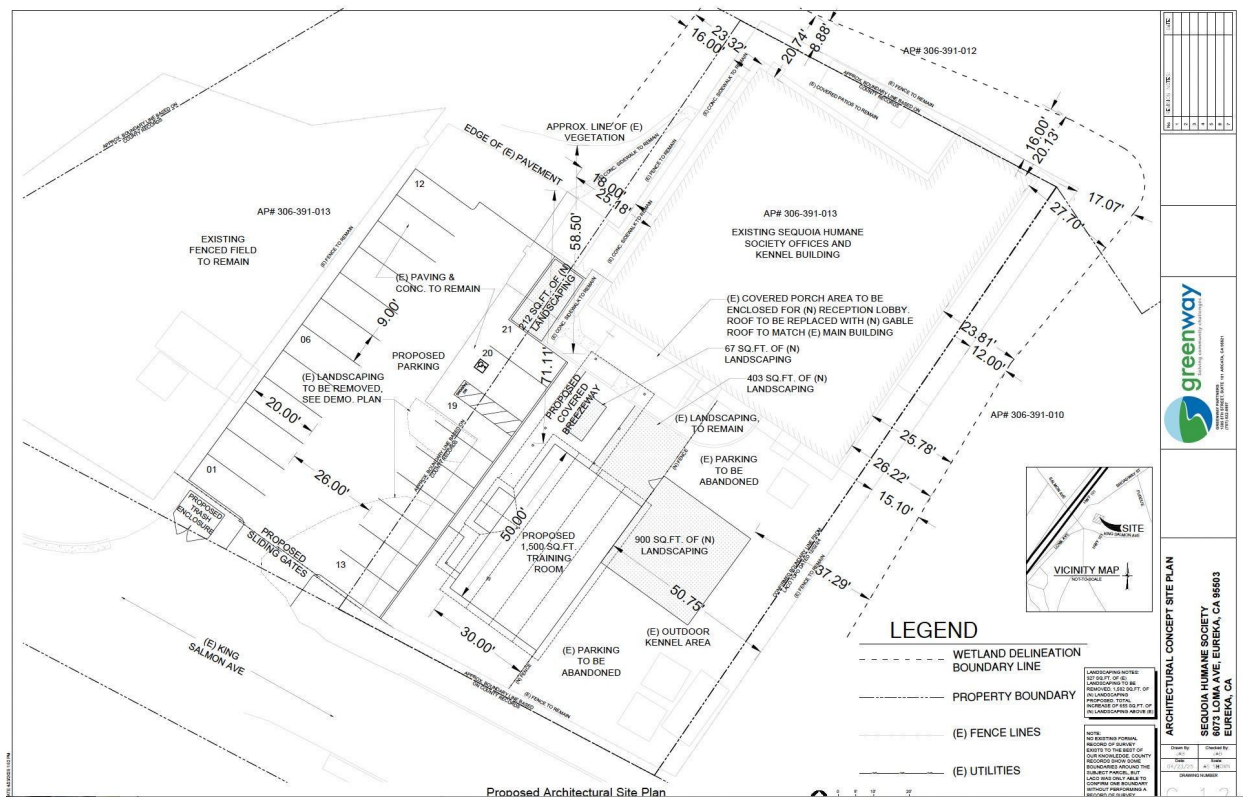


To assist with the development of the proposed project, Sequoia Humane Society has recently acquired a 2.2 acre parcel on its northern boundary. This parcel, AP# 306-391-012-000, is a

largely degraded and overgrazed 2.2 acre parcel with some wetland characteristics. It is the Humane Society's objective to engage in a wetland enhancement project to create a robust wetland area on this parcel and to protect and enhance its site. The property is shown below.



Proposed Project and Site Improvements



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The site improvements are characterized by relocation of 927 s.f. of existing landscaping and 1582 s.f. of impervious surfaces to become new landscaping with native plants, integrated with new stormwater management systems. New accessibility improvements, including one new van accessible parking space and new flatwork will be developed.

Lastly, Sequoia Humane Society has recently acquired a degraded parcel of land on its northern boundary for the purposes of protecting and enhancing its latent wetland characteristics as part of this project.

Surrounding Lands

To the east of the parcel, there is a walking path and wetland education study area on lands owned by the South Bay School District. In addition to the site proposed for development as outlined by the site plan above, neighboring properties were delineated to establish wetland criteria adjacency setbacks to the proposed project.

The western boundary of the property is State property (the 101 Highway North on-ramp) and South Broadway Avenue, owned by the County of Humboldt. South of the property is a remnant State highway easement and property owned by the South Bay School District.

Study

The Principal Investigator was Todd Siefke, who has degrees in Botany and Landscape Architecture and experience in wetland delineation.

The study area was assessed and surveyed for the presence of jurisdictional waters of both the State of California and of the United States of America as required by the federal Clean Water Act (CWA) and California's Porter-Cologne Water Quality Control Act; methodologies used are described in full below.

Field work was completed in Winter and Spring of 2025, to ensure that periods of plant growth and seed production were visible as well as significant periods of rain which may lead to soil inundation and hydrological impacts to potential wetland areas.

Coastal Commission Jurisdictional Wetland Survey

The site lies within the Coastal Zone of California, which by definition, means that the Coastal Commission has jurisdiction over any wetlands or potential wetlands. Coastal Act Section 30107.5 labels ESHA, including wetlands as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments."

- Coastal Act Section 30121 identifies wetlands, which often qualify as ESHA, as "lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens."

Under the Coastal Commission's definition of wetlands (see California Code of Regulations Section 13577(b)), a wetland need only display one of the parameters typically used to define wetland areas, in contrast to the U.S. Army Corps of Engineers, which uses a three-parameter definition under its federal authority as designated in the Clean Water Act. The diking, filling or dredging of wetlands is generally permitted only for specific purposes listed in Coastal Act Section 30233, regardless of whether the wetland also meets the definition of ESHA.

This study used the methodology developed by the USACE, to identify those wetlands within the Coastal Commission's jurisdiction. Wetland surveys were conducted in accordance with the US Army Corps of Engineers Wetland Delineation Manual (1987) and the U.S. Army Corps of Engineers Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Western Mountains, Valleys, and Coast Region (2010) and the 2022 US Army Corps of Engineers Wetland Plant List.

Using the wetland delineation methodology developed by USACE, the project area and adjacent areas were analyzed for hydric soils, hydrophytic vegetation and hydrology. The Coastal Commission's jurisdiction finds that only one of these parameters (soils, vegetation and hydrology) need to be present to make a determination of a Coastal wetland. Pedestrian and ocular surveys, vegetation surveys and soil studies were conducted to define the potential wetland boundaries and the setback to those wetland areas not on the project site.

Findings

Within the project area, there are **NO** wetland indicators; hydrophytic vegetation, hydric soils and hydrology are not present on the project site area or within 50 feet of any building improvements.

The existing building will have work completed **only** on the interior within the 50 foot setback to wetlands and the new proposed training building is 66 feet at its closest point to Coastal wetlands as delineated.

Site improvements are outside of the 50 foot setback from Coastal wetlands, with two exceptions; 1) removal of impervious surface areas for the purposes of improving on and off site water quality through improved stormwater capture and 2) the removal of impervious surface areas for the purposes of implementing new native plant landscaped areas.

Study

While there are NO wetlands on the proposed project site or within the project area, there are areas adjacent to the site (within 100 feet) that have some possible wetland indicator criteria (potential hydric soils, hydrology, and hydrophytic vegetation) and as such, this study also includes these areas. As indicated in the botanical survey list, in this area within 100 feet of the project site alone, there are several individual species present that are positive indicators of potential hydric vegetation (wetland indicator status of FAC, FACW, or OBL). These species include OBL, FACW, FAC and FACU plant types. NONE of the species on site

This additional area was surveyed to identify the setback distance between the project area and potential wetland areas. The wetland setback distances to the parcel boundary are shown in the map below.

Soils

3 Soil pits were excavated on the project site, during this investigation and are included on the attached Wetland Plot Map. Soils on the project area are completely developed and are remnant soils from Hookton Formation, which largely comprises the project area and the lands to the South. The on-site soils are non-hydric in nature.



Soils were excavated to a depth of 24 inches at ten different locations (shown on map in Exhibit A) and evaluated for the primary hydric soils inclusion (Developed by the US Army Corps of Engineers Manual, 1987) criteria: 1) Thick organic layers over mineral layers; 2) Histic epipedons, with high inundation potential due to hydrology conditions; 3) Sulfidic material is present as all minerals have been converted to Hydrogen Sulfide; 4) Aquic or peraquic moisture regime; 5) Reducing soil conditions; 6) Soil color looking for gleyed or soil indicating prior or

current anaerobic conditions; 7) Soils on the Hydric soils databases of local, state and national agencies and 8) Presence of iron or manganese staining (rust colored) in the upper layers of the soil horizon.

Project site soils did **NOT** show indication of hydric conditions and are non-hydric Hookton Formation soils characterized by deep levels of compaction and urbanized characteristics. These may have been imported to the site during construction in the 1960s from adjacent areas or are native to the site at higher elevations, which were preserved during construction. All soils on the project parcel and on adjacent parcels have been disturbed either through construction (project parcel) or through excavation and dry season grazing (Parcels East and North of the project area).

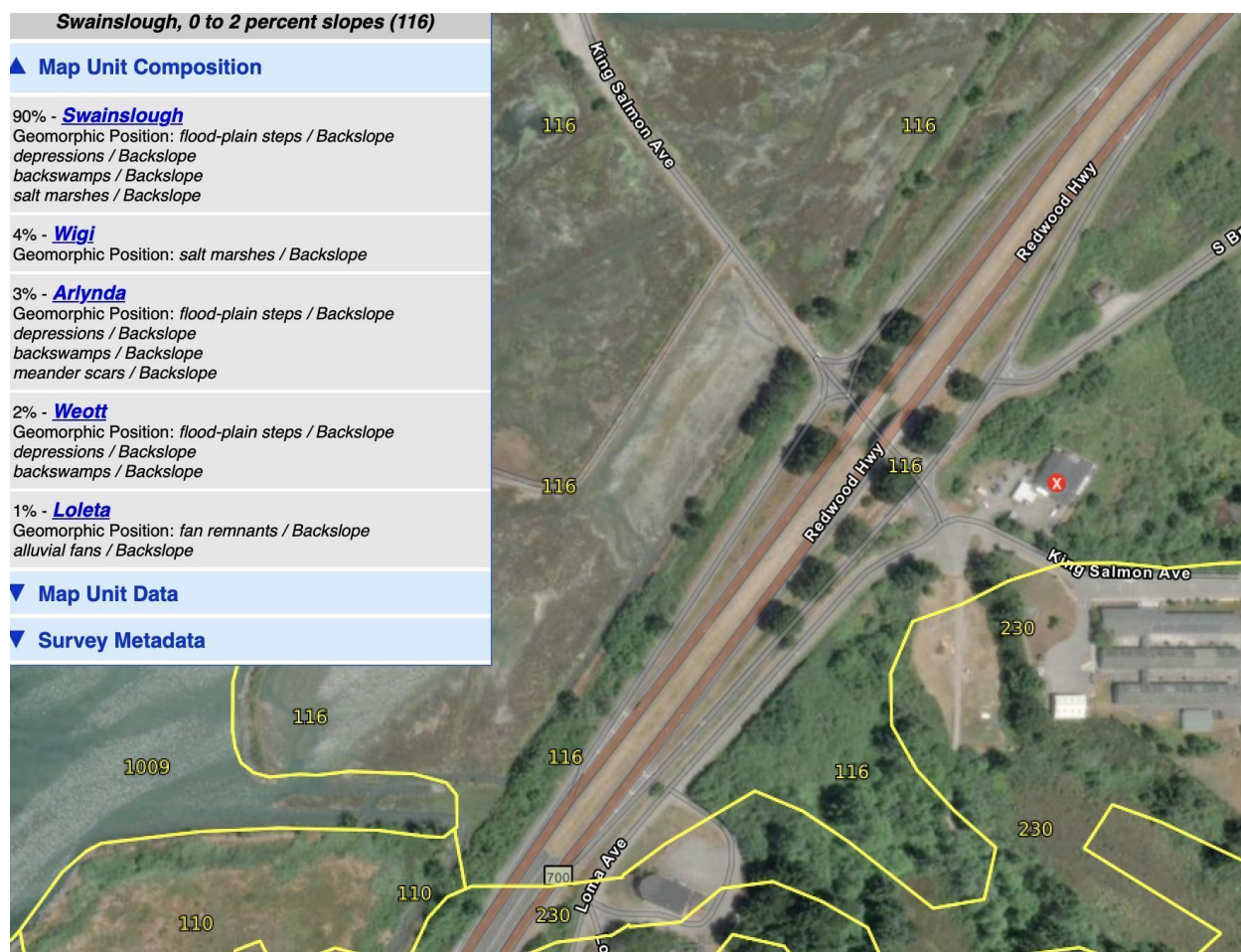
The image below shows the soil series boundary of Swainslough and Hookton Formation, right at the project site.





East and North Parcels Adjacent to the Project Parcel

The lands immediately north and east of the project site are Swainslough soils and have all of the characteristics outlined below. These soils were briefly assessed and confirmed to have hydric characteristics. All new project construction activity will occur outside of the 50 foot setback to these areas.



NRCS Soils Series Descriptions of East and North Parcel Survey Areas

The Swainslough series consists of very deep, very poorly drained soils in depressions, backswamps, low flood-plain steps, and reclaimed salt marshes on alluvial plains. These soils formed in alluvium derived from mixed sources. Slopes range from 0 to 2 percent. Mean annual precipitation is about 1015 millimeters (40 inches). Mean annual temperature is about 11 degrees C (51 degrees F).

TAXONOMIC CLASS: Fine, mixed, superactive, nonacid, isomesic Fluvaquent Endoaquepts

TYPICAL PEDON: Swainslough peat on a less than 1 percent slope under silverweed cinquefoil, spike bentgrass and pasture grasses at an elevation of 2 meters (7 feet). (Colors are for moist soil unless otherwise noted. When described on August 11, 1988 the soil was moist throughout, with a water table at 157 centimeters.)

Oi--0 to 8 centimeters (0 to 3 inches); very dark grayish brown (10YR 3/2) peat, dark grayish brown (2.5Y 4/2) dry, dark yellowish brown (10YR 3/4) rubbed; 80 percent fibers, 40 percent, rubbed; neutral (pH 6.8); abrupt wavy boundary. (0 to 8 centimeters thick)

A--8 to 30 centimeters (3 to 12 inches); dark grayish brown (2.5Y 4/2) silty clay loam, light brownish gray (2.5Y 6/2) dry; moderate fine and medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; many very fine to coarse roots; many very fine tubular pores; common fine prominent dark yellowish brown (10YR 4/4) iron-manganese masses in the matrix; neutral (pH 7.0); gradual wavy boundary. (10 to 30 centimeters thick)

Bg1--30 to 51 centimeters (12 to 20 inches); dark grayish brown (2.5Y 4/2) silty clay loam, light brownish gray (2.5Y 6/2) dry; moderate very fine and fine subangular blocky structure; hard, firm, moderately sticky and moderately plastic; many very fine to medium roots; common very fine tubular pores; common fine prominent dark yellowish brown (10YR 4/4) iron-manganese masses in the matrix; neutral (pH 7.0); gradual wavy boundary. (20 to 50 centimeters thick)

Bg2--51 to 74 centimeters (20 to 29 inches); dark grayish brown (2.5Y 4/2) silty clay loam, light brownish gray (2.5Y 6/2) dry; weak very fine and fine subangular blocky structure; hard, firm, moderately sticky and moderately plastic; common very fine to medium roots; common very fine tubular pores; many fine distinct gray (5Y 5/1) iron depletions and prominent dark yellowish brown (10YR 4/4) iron-manganese masses in the matrix; very few prominent strong brown (7.5YR 4/6) iron stains lining root channels and/or pores; neutral (pH 7.0); abrupt wavy boundary. (0 to 76 centimeters thick)

Bg3--74 to 97 centimeters (29 to 38 inches); dark grayish brown (2.5Y 4/2) silty clay loam, light brownish gray (2.5Y 6/2) dry; massive; hard, firm, moderately sticky and moderately plastic; common very fine and fine roots; common very fine tubular pores; many fine distinct gray (5Y 5/1) iron depletions and prominent dark yellowish brown (10YR 4/4) iron-manganese masses in the matrix; very few prominent strong brown (7.5YR 4/6) iron stains lining root channels and/or pores; slightly acid (pH 6.5); abrupt wavy boundary. (0 to 92 centimeters thick)

Bg4--97 to 165 centimeters (38 to 65 inches); dark gray (N 4/) silty clay loam, gray (10YR 5/1) dry; massive; slightly hard, friable, slightly sticky and slightly plastic; few very fine and fine roots; common very fine tubular pores; very few medium prominent strong brown (7.5YR 4/6) iron stains lining root channels and/or pores; moderately acid (pH 6.0). (0 to 76 centimeters thick)

RANGE IN CHARACTERISTICS:

Soil Moisture: The soil is usually moist in all parts of the soil moisture control section between the depths of 5 to 40 centimeters (2 to 16 inches) in most years, and is saturated in some parts during the months of January through March. The soils have an aquic soil moisture regime.

Soil Temperature: The mean annual soil temperature at 50 centimeters (20 inches) is 12 to 14 degrees C (54 to 59 degrees F). The average summer soil temperature is about 16 degrees C and the average winter soil temperature is about 10 degrees C. The difference between average summer and winter soil temperatures is 6 or less degrees C.

Particle size control section (weighted average):

Clay content: 35 to 45, by weight.

Depth to redoximorphic features: 0 to 10 centimeters (0 to 4 inches)

Endosaturation: The water table is at a depth of 0 to 10 centimeters (0 to 4 inches) from about January through March, between 15 to 60 centimeters (6 to 24 inches) in April, 30 to 90 centimeters (12 to 35 inches) from May through June, 90 to greater than 183 centimeters (35 to greater than 72 inches) from July through November, and rises to between 10 and 60 centimeters (4 to 24 inches) in December.

Some pedons have an O horizon

O horizon

Hue: 10YR

Value: 3, 4 dry

Reaction: neutral

A horizon

Hue: 10YR, 2.5Y, or 5Y

Value: 3 to 5 moist, and 5 to 7 dry

Chroma: 1 or 2 moist, and 2 dry

Texture of fine earth: silty clay loam

Clay content: 27 to 37 percent, by weight

Reaction: moderately acid to neutral

Redoximorphic features: fine and medium iron-manganese masses

Quantity: few or common

Hue: 7.5YR or 10YR

Value: 4 to 6

Chroma: 4 to 8

Bg horizon

Hue: 10YR, 2.5Y, 5Y, or N

Value: 4 or 5 moist, 5 to 7 dry

Chroma: / to 2, moist or dry

Texture of fine earth: silty clay loam or silty clay

Clay content: 30 to 45 percent, by weight

Reaction: moderately acid to slightly alkaline

Redoximorphic features: fine and medium iron-manganese masses in the matrix and iron stains lining root channels and/or pores

Quantity: few, common, or many

Hue: 7.5YR or 10YR

Value: 4 to 6

Chroma: 4 to 8

Redoximorphic features: medium iron depletions

Quantity: common or many

Hue: 5Y, 2.5Y

Value: 4 or 5

Chroma: / to 2

Soils outside the project area were also assessed for their hydric condition to define the distance from wetlands to the project site. Two soil pits were dug on the suspected wetlands that are located more than 65 feet from the project construction activities. The soil pits located more than 65 feet from the project site often had a deeper layer of gleying, wet margins and other indications of soil saturation and hydric conditions.

Images below:

Soil pits dug more than 65 away from project area





Soil Pit Spring 2025 NOT on the Project Site, but more than 65 feet away.

Vegetation

The ACOE Manual (1987) describes that a handful of hydrophytic species is not indicative of a wetland as a community of hydrophytic vegetation is present only if 50% of the species indicator status of OBL, FACW or FAC.

- Obligate (OBL)—usually occurs within a wetland (estimated probability 99%)
- Facultative-wet (FACW)—usually occurs in wetlands (estimated probability 67-99%)
- Facultative (FAC)—equally likely to occur in wetlands or non-wetlands (estimated probability 33-67%)
- Facultative-upland (FACU)—usually occurs in non-wetlands (estimated probability 1-33%)
- Upland (UPL)—occurs almost always in non-wetlands (estimated probability 99%)
- Non-Indicator (NI)—scored as an upland plant and calculated as such on wetland determination forms

Dominant species are determined by estimating those having the greatest percentage of cover using the “50/20” rule. The “50/20” rule entails that for each sample point and associated plant community, dominant species are the most abundant species, when ranked in descending order of abundance and cumulatively totaled, that immediately exceed 50% of the total dominance

measure for the stratum, plus any additional species comprising 20% or more of the total dominance measure for each stratum.

Absolute cover contribution was estimated for each sample plot, due to layering of species and strata percent cover values may exceed 100%. For marginal sites the FAC neutral test and the Prevalence Index were also utilized. These calculations (shown on attached forms) further analyze the vegetation community using all species in the plot, not just the dominant species.

Plants on the project site are exclusively non-native, characterized by a mix of grasses, a handful of specimen rhododendrons and no wetland species. A list of species present on the project site is listed in Table 1.

This table shows the species present and their respective wetland indicator status, in vegetation plots the grasses were treated as a group (unless otherwise noted) and given a FACU rating based on the number of species with upland characteristics verses the species with hydric ratings. No dominant vegetation on site had a status of FACW or OBL, and few FAC species were dominant in plots, these were outweighed by the other dominant plants with upland or non-indicator status at each sample point. On the project site, upland grasses and plants are found exclusively as denoted by UPL.

Table 1. Species Present on Project Site

Species	Common Name	Wetland Indicator Status	Notes
Rubus armeniacus	Himalaya blackberry	UPL	Non-native
Rumex salicifolius	Willow Dock	FACW	Small area on west
Salix scouleriana	Willow	FAC	Small area on west
Picea sitchensis	Sitka spruce	FAC	Single trees south boundary
Equisetum temateia	Giant horsetail	FACW	Small patch on slab drainage area
Conium maculatum	Poison hemlock	UPL	Large area adjacent to building
Ranunculus repens	Buttercup	FAC	Small areas on west
Graminoid Species	Common Name	Wetland Indicator Status	Notes
Agrostis capillaris	colonial bentgrass	UPL	Non-native
Anthoxanthum odoratum	sweet vernal grass	UPL	Cal-IPC*: Limited
Avena barbata	slender oat	UPL	Cal-IPC: Moderate
Avena sativa	cultivated oat	UPL	Non-native

Bromus catharticus	rescue grass	UPL	Non-native
Cynodon dactylon	Bermuda grass	UPL	Cal IPC: Moderate
Dactylis glomerata	orchard grass	UPL	Cal IPC: Limited
Festuca arundinacea	tall fescue	UPL	Cal IPC: Moderate
Festuca myuros	rattail six weeks grass	UPL	Cal-IPC: Moderate
Holcus lanatus	velvet grass	FAC	Cal-IPC: Moderate
Poa annua	annual bluegrass	FAC	Non-native
Poa pratensis	Kentucky blue grass	FAC	Cal-IPC: Limited

Adjacent Lands East and North Parcel Species Present

There are wetland indicator species found on adjacent parcels, as shown on the table below, but the prevalence and dominance test as shown on Wetland Determination Data sheets (attached) indicates there isn't sufficient reason to classify these transects as hydrophytic vegetation.

Species	Common Name	Wetland Indicator Status	Notes
Rubus armeniacus	Himalaya blackberry	UPL	Non-native
Rumex salicifolius	Willow Dock	FACW	Small area on north
Salix scouleriana	Willow	FAC	Small area on North west
Sambucus nigra	Black elderberry	FAC	East parcel
Picea sitchensis	Sitka spruce	FAC	East parcel
Rhamnus pershiana	Cascara buckthorn	UPL	East parcel
Polysticum munitum	Western swordfern	FAC	East parcel
Baccarus pilularis	Coyote brush	UPL	East parcel
Athyrium filix-femina	Western ladyfern	FAC	East parcel
Carex Obnupta	Slough sedge	OBL	6-8 individuals east parcel
Trifolium repens	White clover	FAC	
Juncus effusus	Common rush	FAC	
Equisetum telmateia	Giant horsetail	FACW	
Ranunculus repens	Buttercup	FAC	Non-native
Agrostis capillaris	colonial bentgrass	UPL	Non-native
Anthoxanthum odoratum	sweet vernal grass	UPL	Non-native
Avena barbata	slender oat	UPL	Non-native
Avena sativa	cultivated oat	UPL	Non-native
Bromus catharticus	rescue grass	UPL	Non-native

Cynodon dactylon	Bermuda grass	UPL	Non-native
Dactylis glomerata	orchard grass	UPL	Non-native
Festuca arundinacea	tall fescue	UPL	Non-native
Festuca myuros	rattail six weeks grass	UPL	Non-native
Holcus lanatus	velvet grass	FAC	Non-native
Poa annua	annual bluegrass	FAC	Non-native
Poa pratensis	Kentucky blue grass	FAC	Non-native

* California Invasive Plant Council ranking (an invasive species)

**NI - Non Indicator treated as an upland (UPL) species

Table 2. Wetland Soils Plot Characteristics Summary

Plot Number	Vegetation	Hydrology	Soils	Notes
1	Negative	Negative	Negative	Previously excavated and compacted areas
2	Negative	Negative	Negative	Previously excavated and compacted areas
3	Negative	Negative	Negative	Previously excavated and compacted areas
4	Negative	Negative	Positive	Previously excavated and compacted areas
5	Negative	Negative	Positive	Previously excavated and compacted areas

In addition to the vegetation survey completed on the project site, an off-Site (within 30 feet radius on adjacent parcels) survey was completed. The tables below indicate the general locations, which were established using EAST, NORTH and WEST transects as shown in the image below.

These transects were chosen as they are the most natural landform and consistent elevation. As the survey map shows below, there are steep slopes running east and north of the project area. These areas receive drainage from the impervious surfaces of the building roofs and exterior slab areas and some wet soils have formed as a result along the property/fence boundary.



EAST TRANSECT 30 Feet by 210 Feet (Plots East 1-East 7)



NORTH TRANSECT 30 Feet by 105 Feet (Plot points North 8-North 10)



WEST TRANSECT 30 feet by 85 Feet



Off Site Vegetation Survey Summary

Adjacent Property Survey Plot (30 ft. radius from property line)	Other dominant vegetation surveyed.	USACE 2022 Wetland Criteria	Abundance Dominance within survey area	Potential wetland plant setback from exterior of existing building (no exterior work occurring)	Setback to proposed new building
East 1	Cascara buckthorn (Rhamnus pershiana)	UPL	3%	N/A	N/A
East 1	Sword fern (Polysticum munitum)	UPL	8%	N/A	N/A
East 1	Himalaya blackberry (Rubus armeniacus)	UPL Non-native	35%	N/A	N/A
East 1	Non-native grass mix • sweet vernal grass (Antoxanthum odoratum) • annual bluegrass (Poa annua) • slender oat (Avena barbata) • cultivated oat (Avena sativa) • rescue grass (Bromus catharticus) • Tall fescue (Lolium arundinaceum) •	UPL Non-native	80%	N/A	N/A
East 2	Slough sedge (Carex obnupta)	OBL	1%	42 feet	66 feet
East 2	Sitka spruce	FAC	1%	N/A	

East 2	Willow (<i>Salix scouleriana</i>)	FAC	2%	51 feet	97 feet
East 2	Buttercup (<i>Ranunculus repens</i>)	FAC	15%	18 feet	75 feet
East 2	Coyote brush (<i>Baccharis pilularis</i>)	UPL	1%	N/A	N/A
East 2	Non-native grass mix • sweet vernal grass (<i>Antoxanthum odoratum</i>) • annual bluegrass (<i>Poa annua</i>) • slender oat (<i>Avena barbata</i>) • cultivated oat (<i>Avena sativa</i>) • rescue grass (<i>Bromus catharticus</i>) • Tall fescue (<i>Lolium arundinaceum</i>)	UPL Non-native	80%	N/A	N/A
East 2	White clover (<i>trifolium repens</i>)	FAC	8%		
East 2	Common rush (<i>juncus effusus</i>)	FACW	3%	20 feet	
East 2	Himalaya blackberry	UPL Non-native	35%	N/A	N/A
East 3	Sword fern	FAC	5%		
EAsT 3	Common lady fern (<i>Athyrium filix-femina</i>)	FAC			
East 3	Willow (<i>Salix scouleriana</i>)	FACW	2%		
East 3	Buttercup (<i>Ranunculus repens</i>)	FAC	6%		
East 3	Non-native grass mix • sweet vernal grass	UPL Non-native	55%		

	(Antoxanthum odoratum) • annual bluegrass (Poa annua) • slender oat (Avena barbata) • cultivated oat (Avena sativa) • rescue grass (Bromus catharticus) • Tall fescue (Lolium arundinaceum)				
East 4	Giant horsetail (Equisetum telmateia)	FACW	15%		
East 4	Buttercup (Ranunculus repens)	FAC	5%		
East 4	Non-native grass mix • sweet vernal grass (Antoxanthum odoratum) • annual bluegrass (Poa annua) • slender oat (Avena barbata) • cultivated oat (Avena sativa) • rescue grass (Bromus catharticus) • Tall fescue (Lolium arundinaceum)	UPL Non-native	55%		
East 4	Himalaya blackberry	UPL Non-native	35%	N/A	N/A
East 5	Giant horsetail (Equisetum telmateia)	FACW	15%	16 feet	66 feet

East 5	Non-native grass mix • sweet vernal grass (Antoxanthum odoratum) • annual bluegrass (Poa annua) • slender oat (Avena barbata) • cultivated oat (Avena sativa) • rescue grass (Bromus catharticus) • Tall fescue (Lolium arundinaceum)	UPL Non-native			
East 5	Elderberry (Sumbucus nigra)	FAC	5%		
East 5	Himalaya blackberry	UPL Non-native	35%	N/A	N/A
East 6	Non-native grass mix • sweet vernal grass (Antoxanthum odoratum) • annual bluegrass (Poa annua) • slender oat (Avena barbata) • cultivated oat (Avena sativa) • rescue grass (Bromus catharticus) • Tall fescue (Lolium arundinaceum)	UPL Non-native	70%		
East 6	Giant horsetail (Equisetum telmateia)	FACW	20%		

East 6	Buttercup (<i>Ranunculus repens</i>)	FAC	10%		
East 7	Buttercup (<i>Ranunculus repens</i>)	FAC	10%		
East 7	Giant horsetail (<i>Equisetum telmateia</i>)	FACW	10%		
East 7	Non-native grass mix • Velvet grass • sweet vernal grass (<i>Antoxanthum odoratum</i>) • annual bluegrass (<i>Poa annua</i>) • slender oat (<i>Avena barbata</i>) • cultivated oat (<i>Avena sativa</i>) • rescue grass (<i>Bromus catharticus</i>) • Tall fescue (<i>Lolium arundinaceum</i>)	UPL Non-native	65%		
North 8	Buttercup (<i>Ranunculus repens</i>)	FAC	15%		
North 8	Non-native grass mix • sweet vernal grass (<i>Antoxanthum odoratum</i>) • annual bluegrass (<i>Poa annua</i>) • slender oat (<i>Avena barbata</i>) • cultivated oat (<i>Avena sativa</i>) • rescue grass (<i>Bromus catharticus</i>)	UPL Non-native	65%		

	Tall fescue (Lolium arundinaceum)				
North 8	Giant horsetail (Equisetum telmateia)	FACW	8%		
North 8	White clover (trifolium repens)	FAC	6%		
North 8	Common rush (Juncus effusus)	FAC	5%		
North 9	Buttercup (Ranunculus repens)	FAC	15%		
North 9	Common rush (juncus effusus)	FACW	3%		
North 9	Non-native grass mix - Velvet grass - sweet vernal grass (Antoxanthum odoratum) - annual bluegrass (Poa annua) - slender oat (Avena barbata) - cultivated oat (Avena sativa) - rescue grass (Bromus catharticus) - Tall fescue (Lolium arundinaceum)	UPL Non-native	48%		
North 9					
North 9	Willow (Salix scouleriana)	FAC	15%		
North 10	Buttercup (Ranunculus repens)	FAC	15%		
North 10	Poison hemlock (Conium maculatum)	UPL	10%		
North 10	Willow (Salix scouleriana)	FACW	15%		

Hydrology

NO positive primary indicators of wetland hydrology were encountered within the project site. Using the United States Department of Agriculture (USDA) Agricultural Applied Climate Information System (AgCIS) and the Woodley Island weather station data, the average accumulation of rainfall for this area during the wet season (October 15 to May 15th) is 38 inches. 2025 totals for this time period was more than 48 inches, which is 128% above average.

At an area more than 75 feet away from the project site, several wetland hydrology indicators were present including standing water.

Recommendations

This wetland study did NOT reveal any areas with positive indicators of wetland vegetation, soils, or hydrology on the project site. Coastal wetlands are located at an area no closer than 65 feet of the project activities with the exception of two project activities, both of which are protective of wetland areas off site. The removal of some impervious surface area for stormwater management areas and the removal of some impervious surface area for native plant landscaped areas will occur within a 50 foot setback to Coastal wetlands.

Lastly, Sequoia Humane Society has acquired a degraded parcel on its northern boundary and wishes to enhance this area by planting wetland vegetation throughout upon consent of the County of Humboldt and the Coastal Commission. Vegetation planting plans will be developed for this purpose following pre-application review.

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Attachment A

USACE Field Data Forms

EAST ADJACENT PROPERTY

60' FROM ACTIVITY

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region

OMB Control #: 0710-0024, Exp: 09/30/2017
Requirement Control Symbol EXEMPT
(Authority: AR 325-12, paragraph 5-2d)

Project/Site: SEQ. HUMAN SOCIETY City/County: HUMBOLDT Sampling Date: APRIL 15, 2020
Applicant/Owner: SEQ. HUMAN SOCIETY State: CA Sampling Point: EAST plot
Investigator(s): TDPO STEFKE/KIRK GILLES Section, Township, Range: _____
Landform (hillside, terrace, etc.): HILLSIDE EAST OF ROAD Soil type (concave, convex, none): CONVEX Slope (%): 10
Subregion (LRR/MLRA): _____ Lat: 40°44'04"N Long: 124°12'27"W Datum: NAD83
Soil Map Unit Name: SWANSON/ROCKTON NWI classification: NIA

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are Vegetation _____, Soil SW, or Hydrology SW 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 <u>X</u> Hydric Soil Present? Yes _____ No <u>X</u> Wetland Hydrology Present? Yes _____ No <u>X</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: <u>THE AREA SAMPLED IS A HILLY AREA BEGINNING 12' FROM EXISTING BUILDING. THIS SLOPED AREA RECEIVES WATER FROM TWO SOURCES IMPERVIOUS SHED ROOF + IMPERVIOUS CONCRETE SLAB DRAIN WATER TO THE SITE</u>	

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>6.675 SF</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>PICEA SITCHENSIS</u>	<u>2</u>	<u>NO</u>	<u>FAC</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)
2. <u>SALEX SCALPARIANA</u>	<u>6</u>	<u>NO</u>	<u>FAC</u>	
3. <u>PHORADENDRON FORTIS</u>	<u>1</u>	<u>NO</u>	<u>UPL</u>	
4. _____	_____	_____	_____	
=Total Cover				
Shrub/Straw Stratum (Plot size: <u>6.675 SF</u>)				
1. <u>SAMBUCUS NIGRA</u>	<u>3</u>	<u>NO</u>	<u>FAC</u>	Prevalence Index worksheet: Total % Cover of: Multiply by: OBL species: <u>1</u> x 1 = <u>1</u> FACW species: <u>16</u> x 2 = <u>32</u> FAC species: <u>17</u> x 3 = <u>51</u> FACU species: <u>0</u> x 4 = <u>0</u> UPL species: <u>60</u> x 5 = <u>300</u> Column Totals: <u>114</u> (A) <u>403</u> (B) Prevalence Index = B/A = <u>4.1</u>
2. <u>RUBUS AMERICANUS</u>	<u>15</u>	<u>YES</u>	<u>UPL</u>	
3. <u>DOUGLASSIUM ALBIFLUM</u>	<u>3</u>	<u>NO</u>	<u>UPL</u>	
4. <u>ATTURUM FILIX-FEMINA</u>	<u>2</u>	<u>NO</u>	<u>FAC</u>	
5. <u>PRUNUS PULCHRA</u>	<u>2</u>	<u>NO</u>	<u>UPL</u>	
=Total Cover				
Herb Stratum (Plot size: <u>6.675 SF</u>)				
1. <u>CAREX OXYSTACHYAE</u>	<u>1</u>	<u>NO</u>	<u>OBL</u>	Hydrophytic Vegetation Indicators: 1 - Rapid Test for Hydrophytic Vegetation 2 - Dominance Test is >50% 3 - Prevalence Index is <3.0 ¹ 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) 5 - Wetland Non-Vascular Plants ¹ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>JUNCUS PLTINUS</u>	<u>15</u>	<u>NO</u>	<u>FAC</u>	
3. <u>RAUNULIA REPENS</u>	<u>15</u>	<u>NO</u>	<u>FAC</u>	
4. <u>EQUISETUM TELMATA</u>	<u>10</u>	<u>NO</u>	<u>FACW</u>	
5. <u>RUMEX SP</u>	<u>2</u>	<u>NO</u>	<u>FACW</u>	
6. <u>ANTHRANTHUS ODOREUM</u>	<u>20</u>	<u>YES</u>	<u>UPL</u>	
7. <u>STACHYS LATIFOLIA</u>	<u>10</u>	<u>NO</u>	<u>UPL</u>	
8. <u>LALUM ARMINACEUM</u>	<u>10</u>	<u>NO</u>	<u>UPL</u>	
9. <u>TRIFOLIUM REPENS</u>	<u>4</u>	<u>NO</u>	<u>FAC</u>	
10. _____	_____	_____	_____	
=Total Cover				
Woody Vine Stratum (Plot size: <u>6.675 SF</u>)				
1. _____	_____	_____	_____	Hydrophytic Vegetation Present? Yes _____ No <u>X</u>
2. _____	_____	_____	_____	
=Total Cover				
% Bare Ground in Herb Stratum: <u>0</u>				

Sampling Point

ADJACENT
PROPERTY
EAST

[illegible]²Location: PLE-Pore Lining, McMatris.

Indicators for Problematic Hydric Soils¹

- | | | |
|---|---|--|
| ☐ Histosol (A1) | ☐ Sandy Gleyed Matrix (S4) | ☐ 2 cm Muck (A10) (LRR A, E) |
| ☒ Histic Epipedon (A2) | ☐ Sandy Redox (S5) | ☐ Iron-Manganese Masses (F12) (LRR D) |
| ☐ Black Histic (A3) | ☐ Stripped Matrix (S6) | ☐ Red Parent Material (F21) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Mucky Mineral (F1) (except MLRA 1) | ☐ Very Shallow Dark Surface (F22) |
| ☐ 1 cm Muck (A9) (LRR D, G) | ☐ Loamy Gleyed Matrix (F2) | ☐ Other (Explain in Remarks) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Depleted Matrix (F3) | |
| ☐ Thick Dark Surface (A12) | ☐ Redox Dark Surface (F5) | |
| ☐ Iron Monosulfide (A18) | ☐ Depleted Dark Surface (F7) | |
| ☐ Sandy Mucky Mineral (S1) | ☐ Redox Depressions (F8) | |
| ☐ 2.5 cm Mucky Peat or Peat (S2) (LRR G) | | |
- ²Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Type _____
Depth (inches) _____

Hydric Soil Present?

Yes ☒ No ☐

Remarks: SWAINSCOTT TO EAST FENCE LINE
HOOKTON / DEVELOPED SOIL THROUGHOUT PROJECT AREA

Wetland Hydrology Indicators:

Primary indicators (minimum of one is required; check all that apply)

- | | | |
|---|--|---|
| Surface Water (A1) | Water-Stained Leaves (B9) (except | Water-Stained Leaves (B9) (MLRA 1, 2 |
| High Water Table (A2) | MLRA 1, 2, 4A, and 4B) | 4A, and 4B) |
| Saturation (A3) | Salt Crust (B11) | Drainage Patterns (B10) |
| Water Marks (B1) | Aquatic Invertebrates (B13) | Dry-Season Water Table (C2) |
| Sediment Deposits (B2) | Hydrogen Sulfide Odor (C1) | Saturation Visible on Aerial Imagery (C8) |
| Drift Deposits (B3) | Oxidized Rhizospheres on Living Roots (C3) | Geomorphic Position (D2) |
| Algal Mat or Crust (B4) | Presence of Reduced Iron (C4) | Shallow Aquifer (D3) |
| Iron Deposits (B5) | Recent Iron Reduction in Tilled Soils (C6) | FAC-Neutral Test (D5) |
| Surface Soil Cracks (B6) | Stunted or Stressed Plants (D1) (LRR A) | Raised Ant Mounds (D6) (LRR A) |
| Inundation Visible on Aerial Imagery (B7) | Other (Explain in Remarks) | Frost-Heave Hummocks (D7) |
| Sparsely Vegetated Concave Surface (B8) | | |

Secondary indicators (2 or more required)

Water-Stained Leaves (B9) (MLRA 1, 2
4A, and 4B)

- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Saturation Visible on Aerial Imagery (C8)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D6)
- ___ Raised Ant Mounds (D6) **(LRR A)**
- ___ Frost-Heave Hummocks (D7)

Wetland Hydrology Present?	Yes	No
----------------------------	-----	----

Field Observations:

Surface Water Present?	Yes _____	No _____	Depth (inches) _____
Water Table Present?	Yes _____	No _____	Depth (inches) _____
Saturation Present?	Yes _____	No _____	Depth (inches) _____

(includes capillary fringe)

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

Remarks

U.S. Army Corps of Engineers

WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region
See ERDC/EL TR-10-3; the proponent agency is CECW-COROMB Control #: 0710-0024, Exp: 09/06/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: SEQUIA HUMANE SOCIETY City/County: HUMBOLDT Sampling Date: APRIL 15, 2008
 Applicant/Owner: SEQUIA HUMANE SOCIETY State: _____ Sampling Point: NORTH DANGER ALONG GRADUATE
 Investigator(s): TOD SIEGKE Section, Township, Range: _____
 Landform (hillside, terrace, etc.): HILLSIDE Local relief (concave, convex, none): CONVEX Slope (%): 30
 Subregion (LRR/MLRA): _____ LAT: 40°44'04"N Long: 124°12'27"W Datum: NAD 83
 Soil Map Unit Name: SWANSLUGH NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
 Are Vegetation X Soil X or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
 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 X
 Hydric Soil Present? Yes X No X
 Wetland Hydrology Present? Yes _____ No X
 Is the Sampled Area within a Wetland? Yes X No X

Remarks: NORTH TRANSECT HILLSIDE SCOPE FED BY IMPERVIOUS ROOF AND CONCRETE SLAB. PROPERTY BOUNDARY (N) TO 30' RADIUS AND 110' LONG

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: 2500 sq ft)
 1. SALIX SCULEARIANA Absolute % Cover: 4 Dominant Species? NO Indicator Status: FAC
 2. CHAMAENIS PURSHIANA Absolute % Cover: 1 Dominant Species? NO Indicator Status: UPL
 3. _____
 4. _____
 =Total Cover

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
 Total Number of Dominant Species Across All Strata: 6 (B)
 Percent of Dominant Species That Are OBL, FACW, or FAC: 33.3 (A/B)

Prevalence Index worksheet:

Total % Cover of: Multiply by:
 OBL species 0 x 1 = 0
 FACW species 13 x 2 = 26
 FAC species 71 x 3 = 213
 FACU species 0 x 4 = 0
 UPL species 16 x 5 = 80
 Column Totals: 110 (A) 269 (B)
 Prevalence Index = B/A = 2.39

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation
 2 - Dominance Test is >50%
 3 - Prevalence Index is >3.0
 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
 5 - Wetland Non-Vascular Plants
 Problematic Hydrophytic Vegetation (Explain)
 Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Woody Vine Stratum (Plot size: 1096)
 1. _____
 2. _____
 =Total Cover

% Bare Ground in Herb Stratum 10%

Remarks:

Sampling Point

ADJACENT
PROPERTIES

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type	Loc ^a		
2H	Manganese						Sat., Blocky	Submin Scale II
	3H							
	Cylindrical							

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

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes ☒ No ☐
Remarks: SW AINSLOUGH SOIL SERIES TO PROPERTY BOUNDARY HOOKTON/COMPACTED, DEVELOPED SOIL THROUGHOUT PROJECT	

Wetland Hydrology Indicators:			Secondary Indicators (2 or more required)		
Primary Indicators (minimum of one is required, check all that apply)			Water-Stained Leaves (B9) (except MLRA 1, 2, 4A, and 4B)		
☐ Surface Water (A1)	☐	☐	☐	☐	☐
☐ High Water Table (A2)	☐	☐	☐	☐	☐
☐ Saturation (A3)	☐	☐	☐	☐	☐
☐ Water Marks (B1)	☐	☐	☐	☐	☐
☐ Sediment Deposits (B2)	☐	☐	☐	☐	☐
☐ Drift Deposits (B3)	☐	☐	☐	☐	☐
☐ Algal Mat or Crust (B4)	☐	☐	☐	☐	☐
☐ Iron Deposits (B5)	☐	☐	☐	☐	☐
☐ Surface Soil Cracks (B6)	☐	☐	☐	☐	☐
☐ inundation Visible on Aerial Imagery (B7)	☐	☐	☐	☐	☐
☐ Sparsely Vegetated Concave Surface (B8)	☐	☐	☐	☐	☐
Field Observations:			Wetland Hydrology Present? Yes ☐ No ☒		
Surface Water Present?	Yes ☐ No ☐	Depth (inches):			
Water Table Present?	Yes ☐ No ☐	Depth (inches):			
Saturation Present?	Yes ☐ No ☐	Depth (inches):			
(includes capillary fringe)					
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:					
Remarks:					

WEST TRANSECT

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET - Western Mountains, Valleys, and Coast Region
See ERDC/EL TR-10-3; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-3a)

Project/Site: GEOPUNA City/County: HUMBOLDT Sampling Date: APRIL 19 2020
Applicant/Owner: _____ State: CA Sampling Point: WEST TRANSECT
Investigator(s): ADD SIEFKE Section, Township, Range: _____
Landform (hillside, terrace, etc.): HILLSIDE Local relief (concave, convex, none): CONVEX Slope (%): 20%
Subregion (LRR/MLRA): _____ Lat: 40°44'04"N Long: 124°12'27"W Datum: NAD83
Soil Map Unit Name: SWANSLICH / HOPKIN NW1 classification: _____
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are Vegetation X Soil X or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are Vegetation X Soil X or Hydrology X 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 _____	Hydro Soil Present? Yes _____ No _____	Wetland Hydrology Present? Yes _____ No _____	Is the Sampled Area within a Wetland? Yes _____ No <u>X</u>
Remarks: <u>WEST TRANSECT FROM PROPERTY BOUNDARY</u> <u>30' Radius west</u>			

VEGETATION - Use scientific names of plants.

Tree Stratum (Plot size: <u>120</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>ZALIX SCULPTURATA</u>	<u>70</u>	<u>YES</u>	<u>FAC</u>
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
= Total Cover			
Sapling/Shrub Stratum (Plot size: _____)			
1. _____	_____	_____	_____
2. _____	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
= Total Cover			
Herb Stratum (Plot size: _____)			
1. <u>EALYUM PAROLINE</u>	<u>20</u>	<u>YES</u>	<u>FAC</u>
2. <u>CONIUM MACULATUM</u>	<u>5</u>	<u>NO</u>	<u>UPL</u>
3. <u>PENNYCILLUS PARS</u>	<u>10</u>	<u>YES</u>	<u>FAC</u>
4. <u>EQUISETUM</u>	<u>5</u>	<u>NO</u>	<u>FAC</u>
5. <u>ADITHIOXANTHUM</u>	<u>25</u>	<u>YES</u>	<u>UPL</u>
6. <u>ARUNCA BARBATA</u>	<u>15</u>	<u>YES</u>	<u>UPL</u>
7. _____	_____	_____	_____
8. _____	_____	_____	_____
9. _____	_____	_____	_____
10. _____	_____	_____	_____
11. _____	_____	_____	_____
= Total Cover			
Woody Vine Stratum (Plot size: _____)			
1. _____	_____	_____	_____
2. _____	_____	_____	_____
= Total Cover			
% Bare Ground in Herb Stratum <u>25%</u>			

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>0</u>	x 2 = <u>0</u>
FAC species <u>55</u>	x 3 = <u>165</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>45</u>	x 5 = <u>225</u>
Column Totals <u>100</u>	(A) <u>365</u> (B)
Prevalence Index = B/A = <u>3.65</u>	

Hydrophytic Vegetation Indicators:

- 1 - Rapid Test for Hydrophytic Vegetation
- 2 - Dominance Test is >50%
- 3 - Prevalence Index is >3.0
- 4 - Morphological Adaptations (Provide supporting data in Remarks or on a separate sheet)
- 5 - Wetland Non-Vascular Plants
- 6 - Problematic Hydrophytic Vegetation (Explain)

Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

HOOKTON FORMATION - NON-HYALIC ON
DEVELOPED AREAS OF SITE

WEST
TRANS

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

Sampling Point

[illegible]

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.

²Location: PL=Pore Lining, M=Matrix.

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

Indicators for Problematic Hydric Soils³

Soil Profile		Indicators for Problematic Hydric Soils ¹
___ Histosol (A1)	___ Sandy Gleyed Matrix (S4)	___ 2 cm Muck (A10) (LRR A, E)
___ Histic Epipedon (A2)	___ Sandy Redox (S5)	___ Iron-Manganese Masses (F12) (LRR D)
___ Black Histic (A3)	___ Stripped Matrix (S6)	___ Red Parent Material (F21)
___ Hydrogen Sulfide (A4)	___ Loamy Mucky Mineral (F1) (except MLRA 1)	___ Very Shallow Dark Surface (F22)
___ 1 cm Muck (A9) (LRR D, G)	___ Loamy Gleyed Matrix (F2)	___ Other (Explain in Remarks)
___ Depleted Below Dark Surface (A11)	___ Depleted Matrix (F3)	
___ Thick Dark Surface (A12)	___ Redox Dark Surface (F6)	
___ Iron Monosulfide (A18)	___ Depleted Dark Surface (F7)	
___ Sandy Mucky Mineral (S1)	___ Redox Depressions (F8)	
___ 2.5 cm Mucky Peat or Peat (S2) (LRR G)		

¹Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type:

Depth (inches): _____

Hydric Soil Present?

Yes ☒ No ☐

Remarks: Soil is SWAINSCOTT/HOOKTON combination. SWAINSCOTT is poorly drained, organic clay silt w/ hydric potential. HOOKTON formation is throughout WS boundary and on developed

HYDROLOGY

Wetland Hydrology Indicators:

NONE

Primary indicators (minimum of one is required, check all that apply)

Secondary Indicators (2 or more required)

Surface Water (A1)	Water-Stained Leaves (B9) (except	Water-Stained Leaves (B9) (MLRA 1, 2
High Water Table (A2)	MLRA 1, 2, 4A, and 4B)	4A, and 4B)
Saturation (A3)	Salt Crust (B11)	Drainage Patterns (B10)
Water Marks (B1)	Aquatic Invertebrates (B13)	Dry-Season Water Table (C2)
Sediment Deposits (B2)	Hydrogen Sulfide Odor (C1)	Saturation Visible on Aerial Imagery (C9)
Drift Deposits (B3)	Oxidized Rhizospheres on Living Roots (C3)	Geomorphic Position (D2)
Algal Mat or Crust (B4)	Presence of Reduced Iron (C4)	Shallow Aquitard (D3)
Iron Deposits (B5)	Recent Iron Reduction in Tilled Soils (C6)	FAC-Neutral Test (D5)
Surface Soil Cracks (B6)	Stunted or Stressed Plants (D1) (LRR A)	Raised Ant Mounds (D6) (LRR A)
Inundation Visible on Aerial Imagery (B7)	Other (Explain in Remarks)	Frost-Heave Hummocks (D7)
Sparsely Vegetated Concave Surface (B8)		

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes ☐ No ☐ Depth (inches)

Saturation Present? Yes _____ No _____ Depth (inches) _____

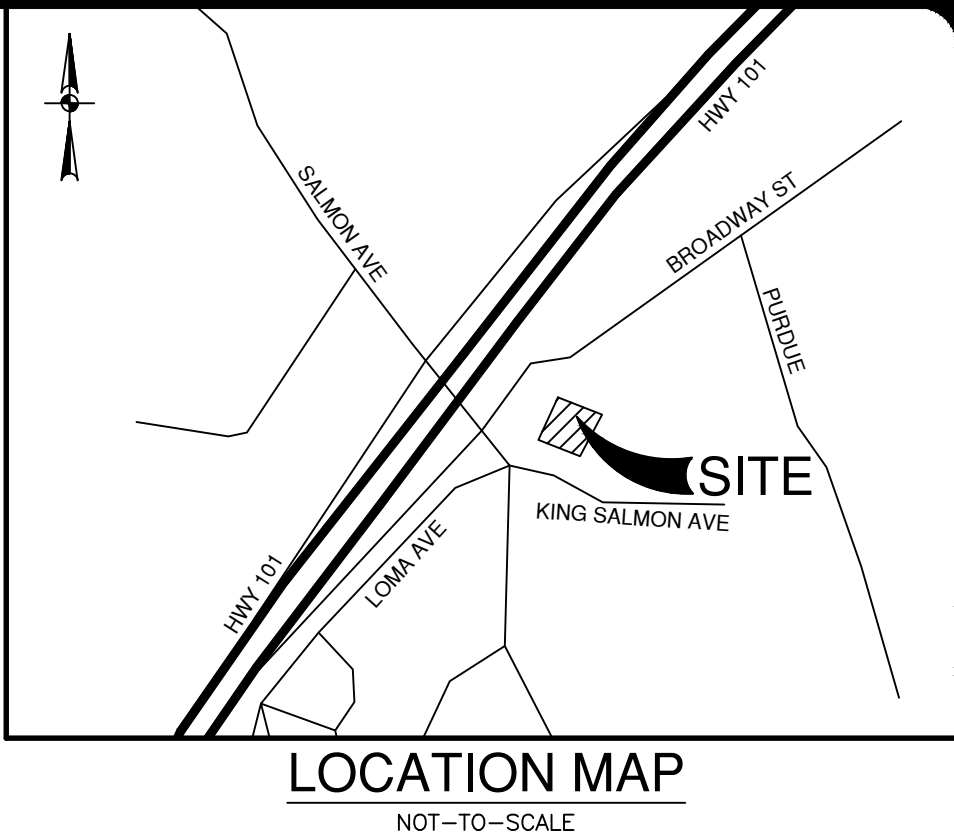
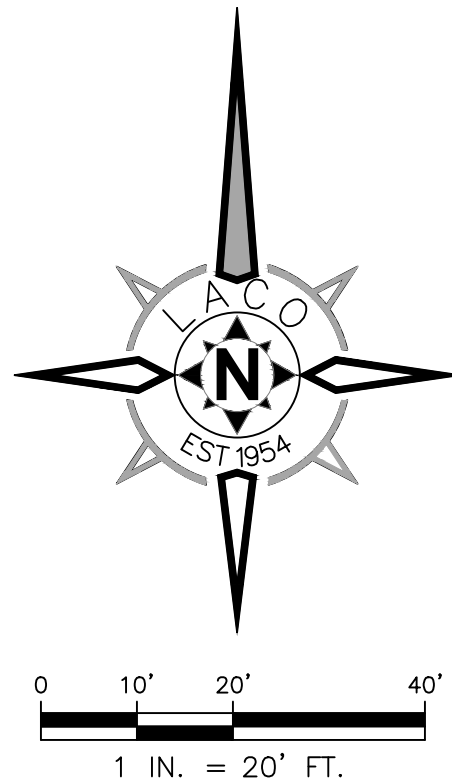
Wetland Hydrology Present? Yes No ☒

(Includes capillary fringe)

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

Remarks

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File: L:\Shared\Projects\10676.00 Sequoia Humane Society\Survey\DWG\10676.00_10676.dwg



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LEGEND/ABBREVIATIONS:

- BOUNDARY LINE
- MAJOR CONTOUR
- MINOR CONTOUR
- CYCLONE FENCE
- BUILDING LINE
- BUILDING ROOF LINE
- SD STORM DRAIN PIPE
- EDGE ASPHALT SURFACE
- CONCRETE SURFACE
- GRAVEL SURFACE
- UTILITY POLE
- SIGN
- STORM DRAIN CATCH BASIN/INLET
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- GAS METER
- FIRE HYDRANT
- WATER METER
- WATER VALVE
- WATER SPIGOT
- SURVEY CONTROL POINT
- FOUND MONUMENT AS NOTED

SURVEY CONTROL TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	2158995.82	5949419.52	11.48	SET 3/8" REBAR/CAP
3	2158875.63	5949602.28	16.13	SET MAG NAIL
4	2158993.90	5949390.23	10.86	SET MAG NAIL
5	2159015.14	5949591.99	12.30	SET MAG NAIL
6	2159088.61	5949712.25	8.16	SET MAG NAIL

NOTES:

BOUNDARY LINES SHOWN ON THIS MAP DERIVED FROM FOUND MONUMENTS AND RECORD DATA PER _____ AND DOES NOT REFLECT A RECORD OF SURVEY.

ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988(NAVD88), GEOID 18, DERIVED FROM STATIC GPS OCCUPATION PROCESSED USING TRIMBLE BUSINESS CENTER.

CONTOUR INTERVAL IS ONE FOOT

BASIS OF BEARINGS:
GRID NORTH

UNDERGROUND UTILITIES AND SUBSURFACE CONDITIONS NOT SURVEYED.

THE CONTENT OF THIS MAP WAS DEFINED BY CONTRACT AT THE REQUEST OF HUMANE SOCIETY. LACO ASSOCIATES ACCEPTS NO LIABILITY FOR USE OF THIS MAP BY ANYONE OTHER THAN THE AUTHORIZED REPRESENTATIVE THEREOF.

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FIELD SURVEY BY LACO ASSOCIATES ON NOVEMBER 18, 2024.
ONLY CONDITIONS EXISTING AT THAT TIME ARE REFLECTED ON THIS MAP.

TOPOGRAPHIC MAP
SEQUOIA HUMANE SOCIETY

6073 LOMA AVENUE KING SALMON, CA 95503

APN: 306-391-013

JOB NO. 10676
DATE 12/2/24
DESIGNER
CHECKED XXX DRAWN RTT
SHEET 1 OF 1

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