



COUNTY OF HUMBOLDT
PLANNING AND BUILDING DEPARTMENT

3015 H Street • Eureka CA 95501
Phone: (707) 445-7541 • Fax: (707) 268-3792

Hearing Date: September 3, 2020

To: John H. Ford, Humboldt County Zoning Administrator

From: Steve Werner, Supervising Planner

Subject: **Westhaven Community Services District Coastal Development Permit and Special Permit**
Record Number: PLN-2020-16307
Assessor's Parcel Numbers 514-132-007, -008, 514-133-001 and 513-181-014
Westhaven area

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Please contact Joshua Dorris, Planner, at 268-3779, or by email jdorris@co.humboldt.ca.us, if you have any questions about the scheduled public hearing item.

AGENDA ITEM TRANSMITTAL

Hearing Date	Subject	Contact
September 3, 2020	Coastal Development Permit and Special Permit	Joshua Dorris

Project: A Coastal Development Permit and Special Permit for Westhaven Community Services District to drill two (2) temporary test wells to determine groundwater availability and quality and, drill up to three (3) geotechnical borings to characterize subsurface conditions.

Project Location: The project is located in Humboldt County, in the Westhaven area, on the both sides of 4th Street, approximately 125 feet west from the intersection of 4th Street and Transit Avenue, on the property known as 633, 640 and 663 4th Street and on both sides of 4th Street, approximately 1,888 feet east from the intersection of 4th Street and Transit Avenue, on the property known to be in the northwest quarter of the southwest quarter of Section 32, Township 08 North, Range 01 East.

Present Plan Land Use Designation: Inland: Public Lands (P); Coastal: Rural Residential (RRC), Density: 0-1 units per 2.5 acres, Trinidad Area Plan (TAP); Rural Village (RV), Density: 3 units per acre, TAP.

Present Zoning: Inland: Unclassified (U); Coastal: Rural Residential Agriculture (RA-2.5); Residential Single Family (RS), Manufactured Home (M), No Further Subdivision Allowed (X)

Case Number: PLN-2020-16307

Application Number: 16307

Assessor's Parcel Numbers: 514-132-007, 514-132-008, 514-133-001, and 513-181-014

Applicant: Westhaven Community Services District Paul Rosenblatt PO Box 2015 Trinidad, CA 95570	Owner(s): Same as applicant	Agent: SHN Stein Coriell 1062 G St., Ste. I Arcata, CA 95521
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Environmental Review: As Lead Agency, *Westhaven Community Services District* prepared a *Notice of Exemption* (NOE) citing CEQA Categorical Exemption Section 15305 (Minor Alterations in Land Use Limitations) and 15306 (Information Collection), and filed it with State Clearinghouse on May 13, 2020, and with the County on May 18, 2020.

Pursuant to Section 15096 (Process for a Responsible Agency) of the CEQA Guidelines, Humboldt County Planning and Building Department, as the CEQA Responsible Agency, is obligated to make a CEQA determination regarding the activity that is proposed to be undertaken

Major Issues: None.

State Appeal Status: Project is appealable to the California Coastal Commission per PRC30603(3).

WESTHAVEN COMMUNITY SERVICES DISTRICT COASTAL DEVELOPMENT PERMIT AND SPECIAL PERMIT

Case Number: PLN-2020-16307

Assessor's Parcel Numbers: 514-132-007, 514-132-008, 514-133-001 and 513-181-014

Recommended Zoning Administrator Action

1. Describe the application as part of the Consent Agenda;
2. Call for public testimony regarding the agenda item;
3. If no one requests discussion, take the following action; and
4. Close the consent item:

Make all of the required findings, based on evidence in the staff report, and approve the Westhaven Community Services District project on the Consent Agenda subject to the recommended conditions.

Executive Summary: Westhaven Community Services District (WCSD) is a community water system serving approximately 467 people with 228 service connections. In December, 2017 WCSD was issued a Compliance Order by the State Water Resources Control Board for consistently exceeding maximum contamination levels of disinfection byproducts (DBPs). WCSD is in process of determining the best solution to the exceedances and potential solutions include 1) establishing additional groundwater wells so that groundwater can be blended with surface water prior to treatment to reduce DBPs or, 2) making improvements to the existing water treatment plant (WTP).

The *Westhaven Community Services District Disinfection Byproducts Reduction Project – Test Wells and Geotechnical Borings Project*, ("Project"), consists of two locations, the temporary wells site (APNs 514-132-007, -008, and 514-133-001), within the Coastal Zone, and the WTP site (APN 513-181-014), spanning the Coastal Zone and Inland area. The well site includes a cleared landing/access area for an existing well and well pump house. Geotechnical borings will be located in the Inland portion of the WTP site within a graveled and maintained area within the vicinity of the existing treatment facility and storage tanks.

Temporary Test Wells

The test wells will be drilled using a truck-mounted rotary drill. Minor grading for access will be required at the location of proposed Test Well #1, which would involve temporary disturbance on APN 514-132-008. No grading would be required for Test Well #2, which is located in a cleared landing/access area for an existing well on APN 514-133-001. The dimensions of the drilling pad for Test Well #1 will be approximately 40 feet long by 20 feet wide. To minimize the amount of disturbance while creating a relatively level and stable working surface, grading will be performed with a mini excavator equipped with a grading bucket. The test wells will be advanced to depths of up to 200 feet. Following the pumping tests, both test wells will be destroyed by removing all temporary casing and backfilling with grout placed from the bottom of the borehole to within a few feet of the ground surface. The remaining few feet will be backfilled with native soil. The sites will be restored to pre-project conditions following demobilization of the drilling rig. The potential future installation of permanent new wells would be a separate future project subject to additional environmental review and permitting. Both test well sites would be accessed from the north end of Transit Avenue, which provides access to the existing WCSD well on APN 514-133-001.

Geotechnical Borings

Geotechnical boreholes will be drilled with a truck-mounted rotary wash drilling rig at up to three locations at APN 513-181-014. The purpose of the borings is to characterize the subsurface conditions underlying the site of potential future WTP improvements in order to develop appropriate foundation type and design criteria, along with provisions to mitigate the effects of adverse soil conditions such as liquefaction and consolidation settlement. Boreholes will be up to

50 feet deep. No grading would be required in order to facilitate the installation of the borings, which would occur within the developed area associated with WCSD's water treatment facility, including water tanks and operations buildings. The site would be accessed using the existing access road from the east end of 4th Avenue.

The project would entail temporary ground disturbance. To evaluate the potential for the well site and WTP containing wetlands and other environmentally sensitive habitat areas (ESHA) the project submittal included a Biological and Wetland Assessment (Assessment) prepared by SHN Engineers and Geologists. The Assessment identified the potential for special-status botanical and animal species within the project area, and identified two (2) previously unmapped wetlands, one (1) located at well site (514-133-001) and one (1) at the geotechnical borings site (513-181-014). At both sites sensitive natural communities were identified. The Red alder forest Rubus Association, ed alder riparian forest Community, and the Redwood Forest Community were present at the well site; the Redwood Forest Community was found at the WTP site. The Assessment provided operational measures to be implemented at the project sites to protect these resources during the test well drilling and geotechnical boring activities. With the incorporation of the recommendations in the Assessment, the ESHA protections in section 3.40 of the TAP will be satisfied. Compliance with the recommendations in the Assessment have been made a condition of approval.

WCSD, as Lead Public Agency for the project under CEQA, prepared a *Notice of Exemption* (NOE) citing CEQA Categorical Exemption Section 15305 (Minor Alterations in Land Use Limitations) and 15306 (Information Collection). A Notice of Exemption has been filed.

The project is consistent with the TAP and the HCC for the following reasons: 1) the project would improve the availability and quality of water and maintain public safety, and 2) the proposed project does not increase capacity of the water system and does not support development beyond existing conditions.

Based on the on-site inspection, a review of Planning Division reference sources, and a review of comments from all involved referral agencies, Planning staff believes that the applicant has submitted evidence in support of making all of the required findings for approving the Coastal Development Permit and Special Permit.

Staff Recommendations: Planning staff believes that the applicant has submitted evidence in support of making all of the required findings for approving the Coastal Development Permit and Special Permit.

Alternatives: Several alternatives may be considered:

1. The Zoning Administrator could elect not to hear this item and put the decision making in front of the Planning Commission. Any decision to place this matter before the Planning Commission must be done before opening the public hearing on this project.
2. The Zoning Administrator could elect to add or delete conditions of approval.
3. The Zoning Administrator could deny approval of the requested permits if the applicant is unable to make all of the required findings. Planning Division staff is confident that the required findings can be made based on the submitted evidence and subject to the recommended conditions of approval. Consequently, planning staff does not recommend further consideration of these alternatives.

**RESOLUTION OF THE ZONING ADMINISTRATOR
OF THE COUNTY OF HUMBOLDT
Resolution Number 20-
Case Number PLN-2020-16307
Assessor's Parcel Numbers 514-132-007, 514-132-008, 514-133-001 and 513-181-014**

Makes the required findings for certifying compliance with the California Environmental Quality Act and conditionally approves the Coastal Development Permit and Special Permit.

WHEREAS, Westhaven Community Services District (WCSD) submitted an application and evidence in support of approving a Coastal Development Permit and Special Permit to drill two (2) temporary test wells to determine groundwater availability and quality, and drill up to three (3) geotechnical borings to characterize subsurface conditions; and

WHEREAS, the County Planning and Building Department has reviewed the submitted application and evidence and has referred the application and evidence to involved reviewing agencies for site inspections, comments and recommendations; and

WHEREAS, WCSD, as Lead Public Agency for the project under CEQA, prepared a *Notice of Exemption* (NOE) finding the project to be Categorically Exempt per Section 15305 (Minor Alterations in Land Use Limitations) and 15306 (Information Collection) of the California Environmental Quality Act (CEQA) Guidelines; and

WHEREAS, Attachment 2 in the Planning Division staff report includes evidence in support of making all of the required findings for approving the proposed Coastal Development Permit and Special Permit (Case No. PLN-2020-16307); and

WHEREAS, a public hearing was held on the matter before the Humboldt County Zoning Administrator on September 3, 2020.

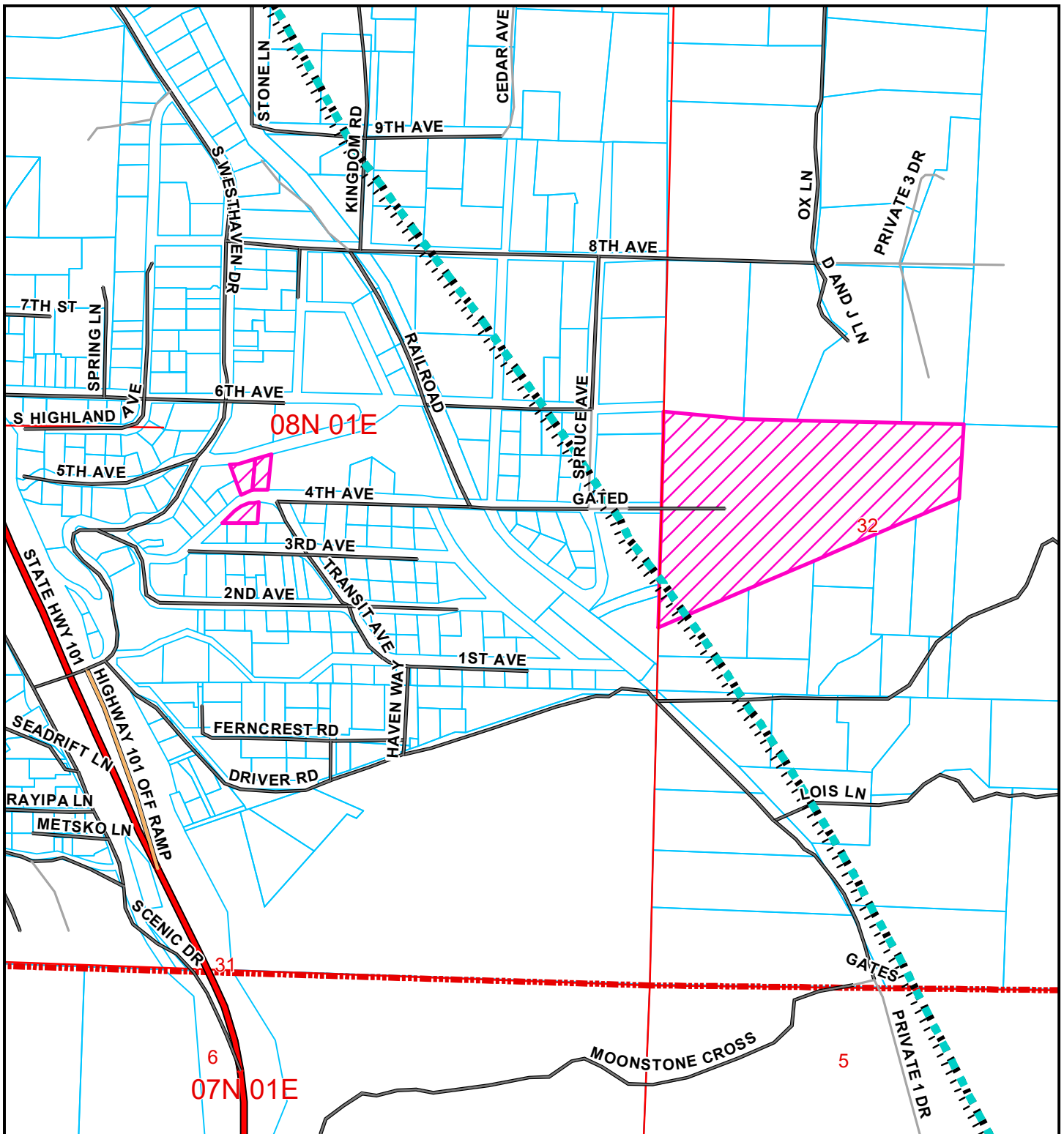
NOW, THEREFORE, be it resolved, determined, and ordered by the Zoning Administrator that:

1. The Westhaven Community Services District has determined that the Project is exempt from CEQA pursuant to Sections 15305 (Minor Alterations in Land Use Limitations) and 15306 (Information Collection); and
2. The findings in Attachment 2 of the Planning Division staff report support approval of Case Number PLN-2020-16307 based on the submitted evidence; and
3. Approves the Coastal Development Permit and Special Permit Case Number PLN-2020-16307 as recommended and conditioned in Attachment 1.

Adopted after review and consideration of all the evidence on September 3, 2020.

I, John H. Ford, Zoning Administrator of the County of Humboldt, do hereby certify the foregoing to be a true and correct record of the action taken on the above entitled matter by said Zoning Administrator at a meeting held on the date noted above.

John H. Ford
Zoning Administrator



LOCATION MAP

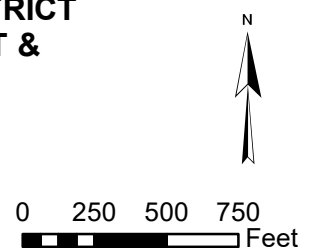
PROPOSED WESTHAVEN COMMUNITY SERVICES DISTRICT COASTAL DEVELOPMENT PERMIT, SPECIAL PERMIT &

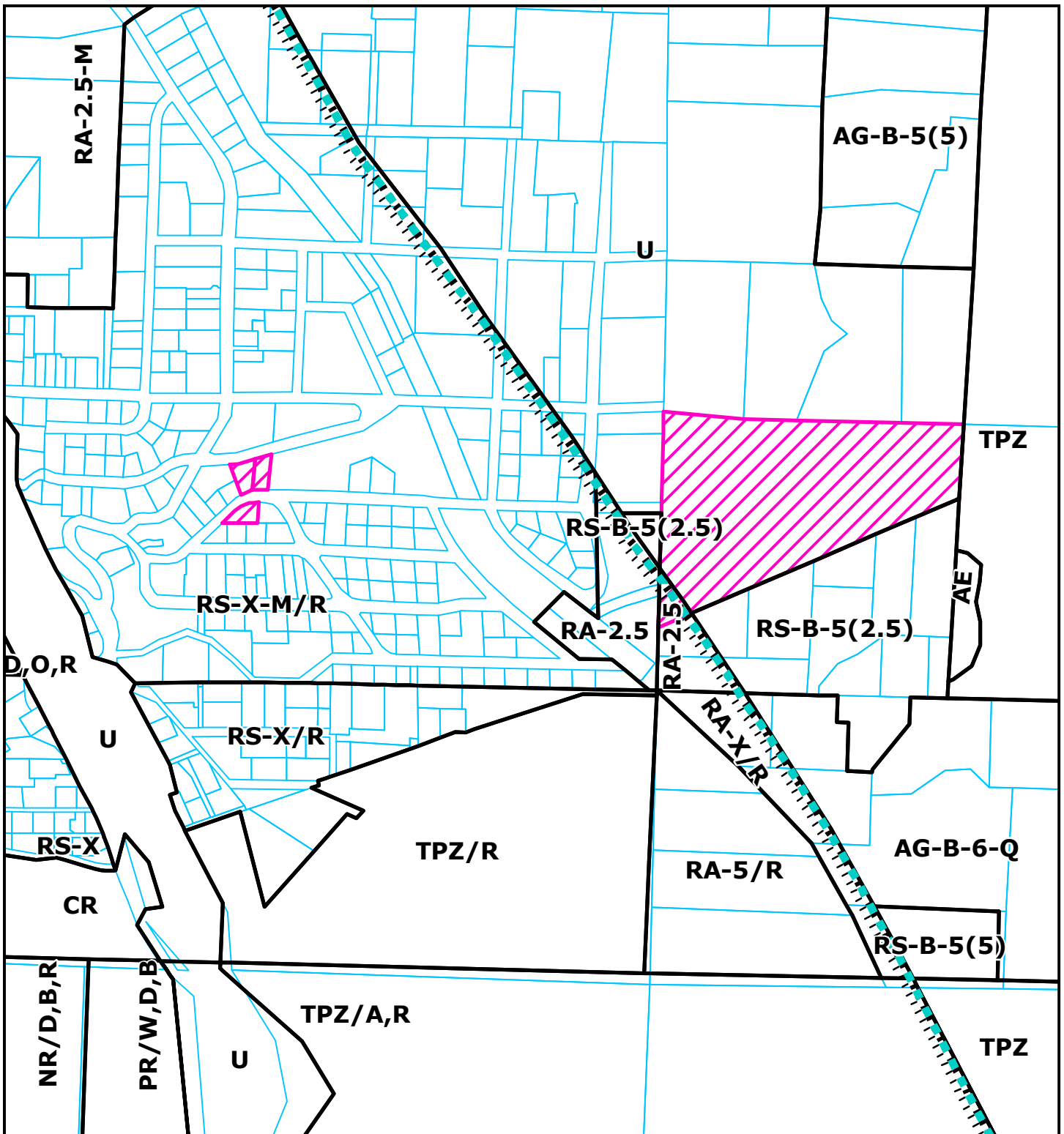
Project Area = 

Coastal Zone Boundary 

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

**NOTICE OF MERGER
WESTHAVEN AREA
PLN-2020-16307
APN: 513-181-014 et al
T8N R1E S31,32 HB&M (Crannell)**





ZONING MAP

PROPOSED WESTHAVEN COMMUNITY SERVICES DISTRICT COASTAL DEVELOPMENT PERMIT, SPECIAL PERMIT &

NOTICE OF MERGER WESTHAVEN AREA

PLN-2020-16307

APN: 513-181-014 et al

T8N R1E S31,32 HB&M (Crannell)

Project Area = 

Coastal Zone Boundary 

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

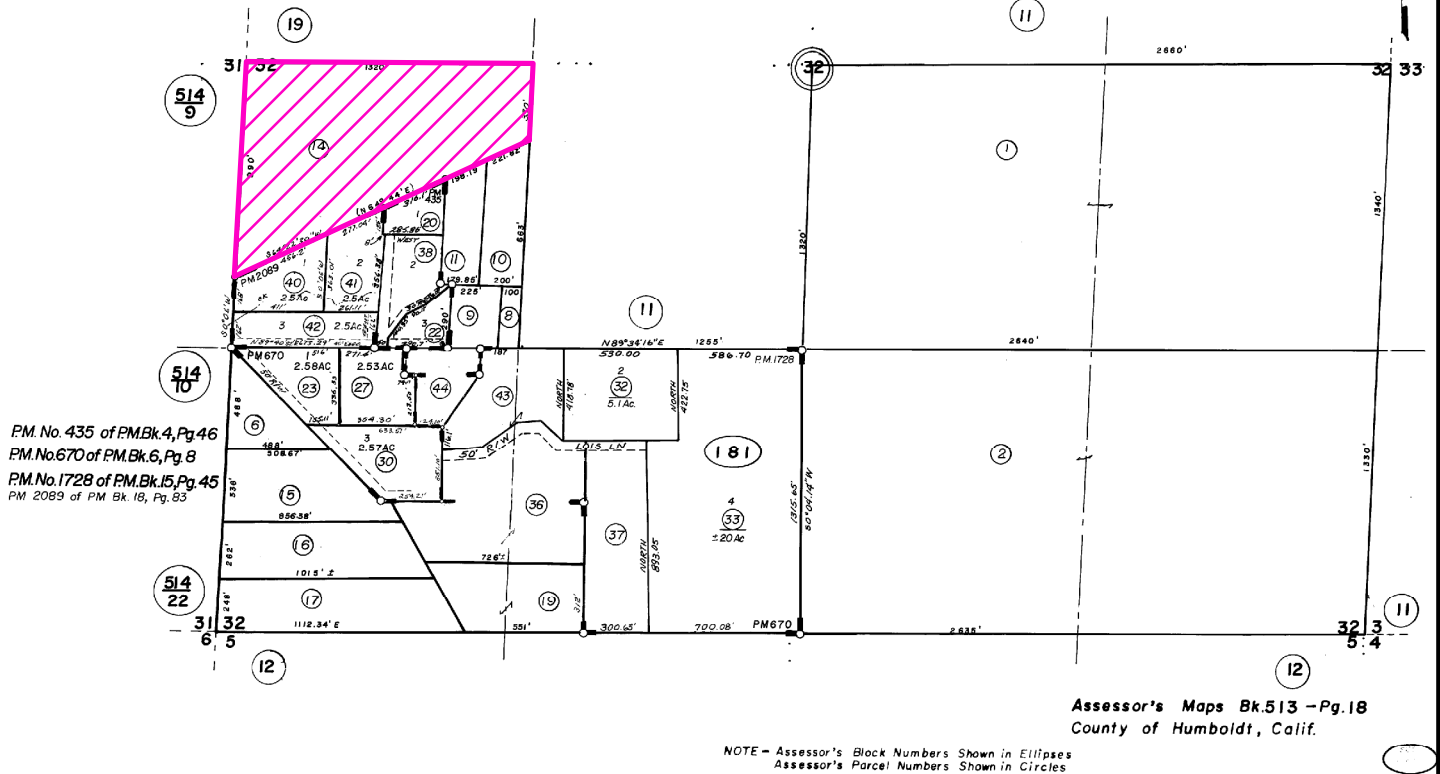


0 250 500 750
Feet

PTN SEC 32, 8N 1E

513-18

PM 4 P 46: PM 435
PM 6 PG 8 = PM 670



ASSESSOR PARCEL MAP

PROPOSED WESTHAVEN COMMUNITY SERVICES DISTRICT COASTAL DEVELOPMENT PERMIT, SPECIAL PERMIT &

NOTICE OF MERGER WESTHAVEN AREA

PLN-2020-16307

APN: 513-181-014 et al

T8N R1E S31,32 HB&M (Crannell)

Project Area = 

Coastal Zone Boundary 

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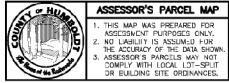


MAP NOT TO SCALE

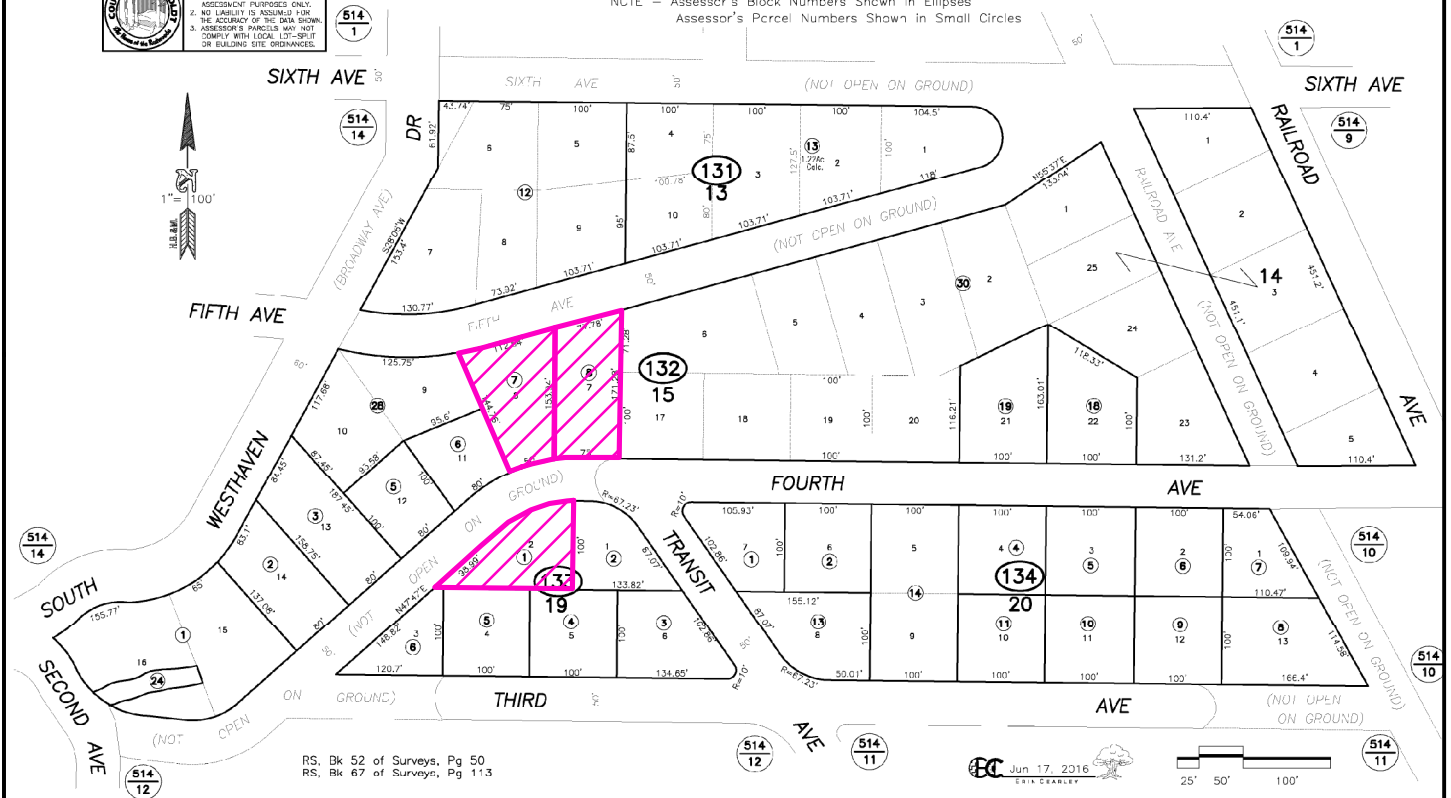
Assessor's Map Bk. 514, Pg. 13
County of Humboldt, CA.

PTN SE1/4 SEC 31, T8N R1E, HB&M
(WESTHAVEN)

514-13



NOTE - Assessor's Block Numbers Shown in Ellipses
Assessor's Parcel Numbers Shown in Small Circles



RS, Bk 52 of Surveys, Pg 50
RS, Bk 67 of Surveys, Pg 113

BC Jun 17, 2016
ERIC CRAWLEY

25' 50' 100'

ASSESSOR PARCEL MAP

PROPOSED WESTHAVEN COMMUNITY SERVICES DISTRICT COASTAL DEVELOPMENT PERMIT, SPECIAL PERMIT & NOTICE OF MERGER WESTHAVEN AREA PLN-2020-16307

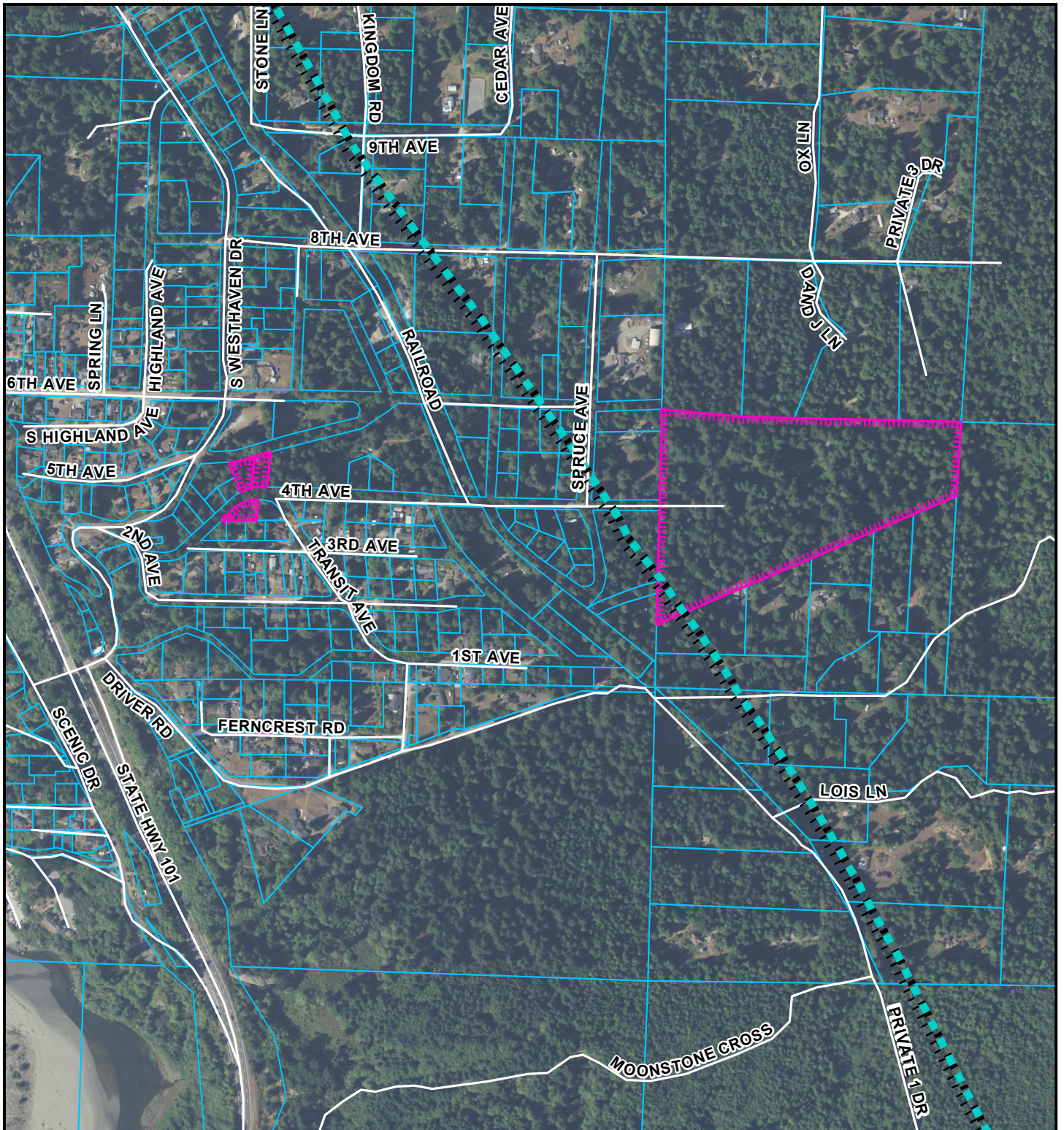
Project Area =

Coastal Zone Boundary

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should not be used for precise measurement or
navigation. Data has not been completely checked
for accuracy.

APN: 513-181-014 et al
T8N R1E S31,32 HB&M (Crannell)

MAP NOT TO SCALE



AERIAL MAP

PROPOSED WESTHAVEN COMMUNITY SERVICES DISTRICT COASTAL DEVELOPMENT PERMIT, SPECIAL PERMIT & NOTICE OF MERGER WESTHAVEN AREA PLN-2020-16307

Project Area = 

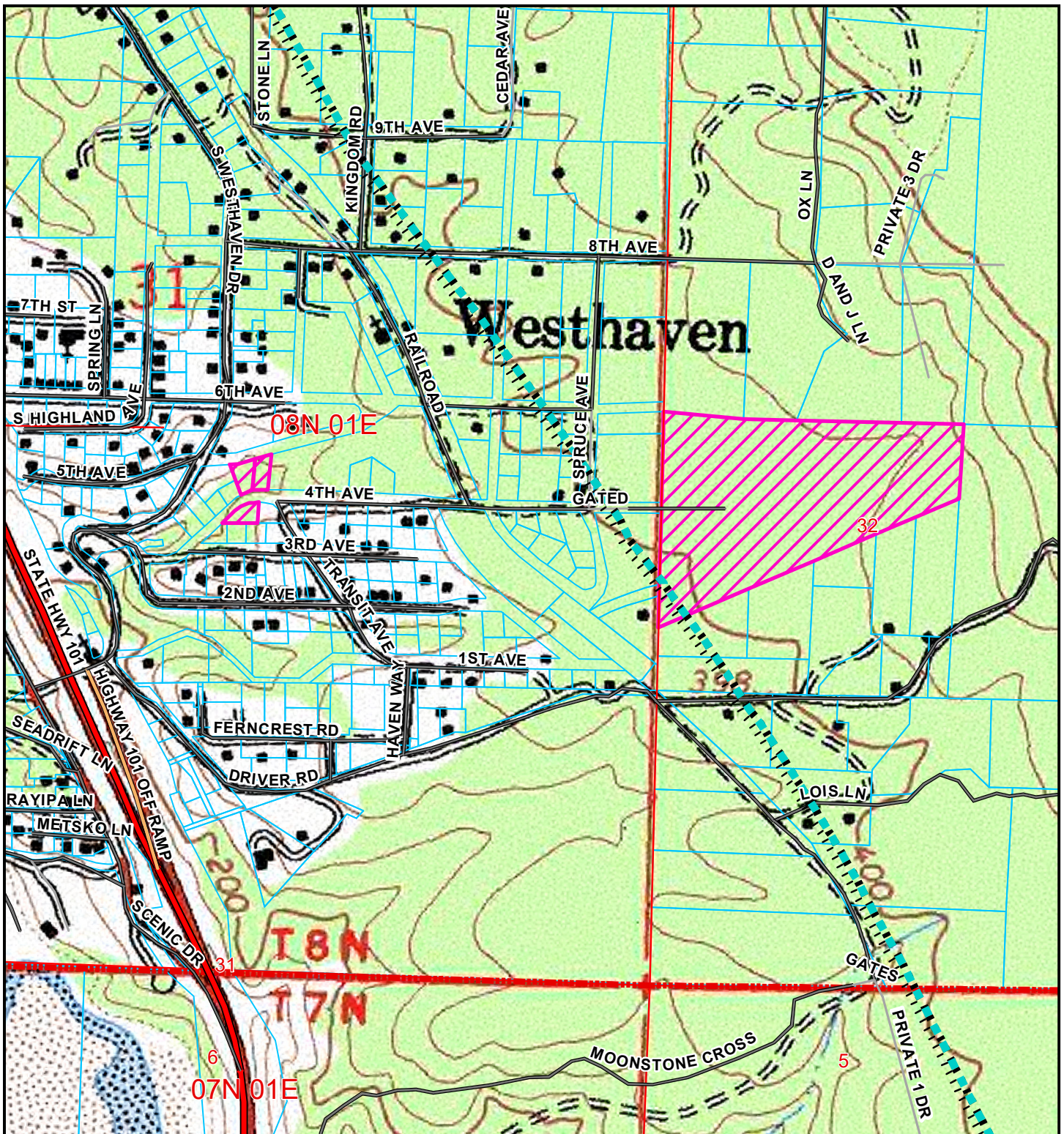
Coastal Zone Boundary 

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

**APN: 513-181-014 et al
T8N R1E S31,32 HB&M (Crannell)**



0 250 500 750
 Feet



TOPO MAP

PROPOSED WESTHAVEN COMMUNITY SERVICES DISTRICT COASTAL DEVELOPMENT PERMIT, SPECIAL PERMIT &

Project Area = 

Coastal Zone Boundary 

This map is intended for display purposes and should not be used for precise measurement or navigation. Data has not been completely checked for accuracy.

**NOTICE OF MERGER
WESTHAVEN AREA
PLN-2020-16307
APN: 513-181-014 et al
T8N R1E S31,32 HB&M (Crannell)**



0 250 500 750
 Feet

EXPLANATION













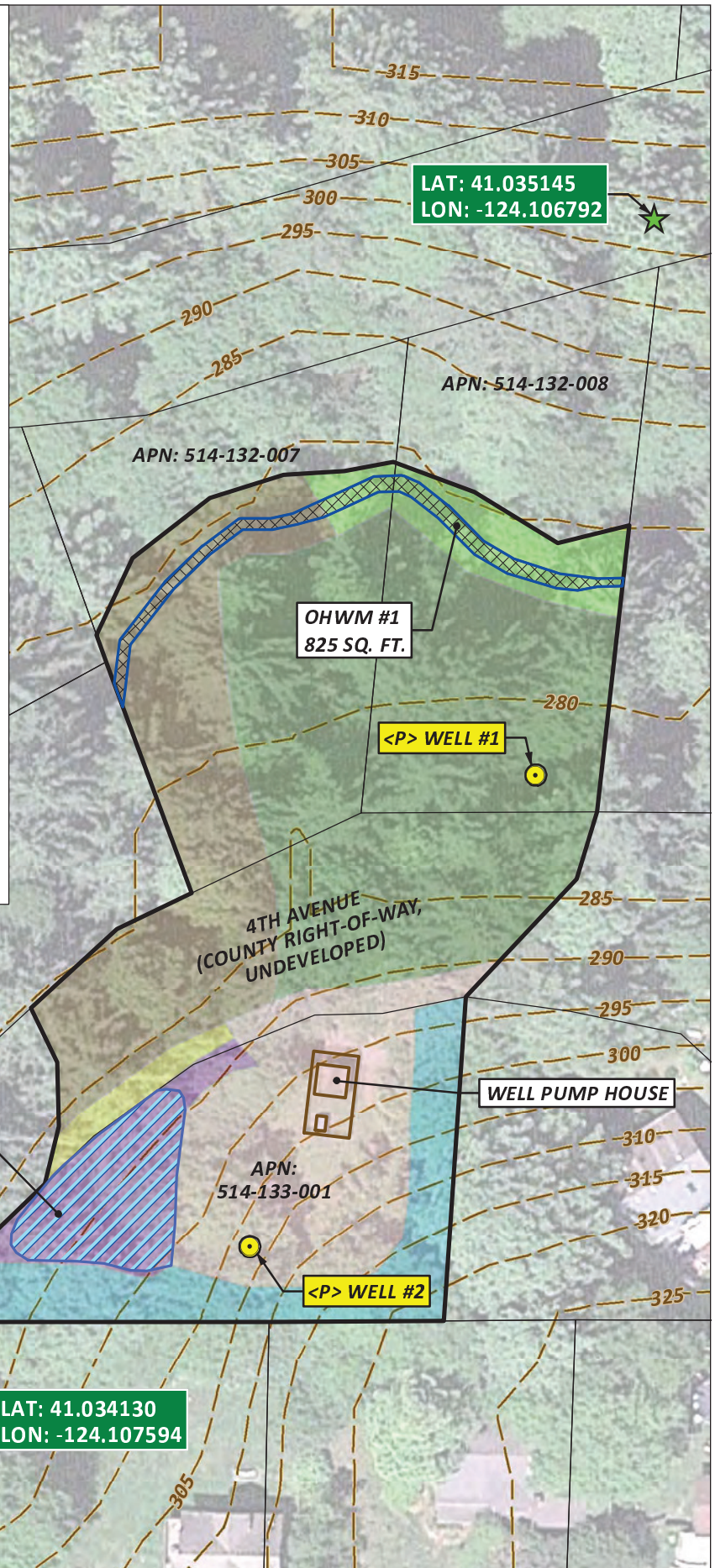
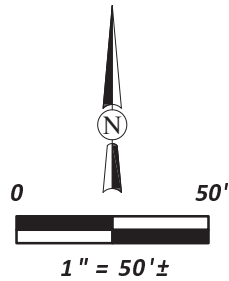
-  **PROPOSED WELL**
-  **1-PARAMETER WETLAND (ESHA)**
-  **ORDINARY HIGH WATER MARK (OHWM)**
-  **COUNTY GIS PARCELS**
-  **CONTOURS (USGS NED, 5 FT. INTERVAL)**
-  **MAINTAINED AREA**
-  **COMMUNITY TRAIL**
-  **REDWOOD FOREST COMMUNITY (ESHA)**
-  **NON-NATIVE SHRUB SPECIES WITH REDWOOD CANOPY**
-  **RED ALDER RIPARIAN FOREST (ESHA)**
-  **RED ALDER FOREST / RUBUS ASSOCIATION (ESHA)**
-  **MIXED**

IMAGE SOURCE:
GOOGLE EARTH
5/26/2016



Westhaven Community Services District
DBP Project Description
Westhaven, Humboldt County, California

Site Map - Wells #1 and #2

SHN 018193

February 2020

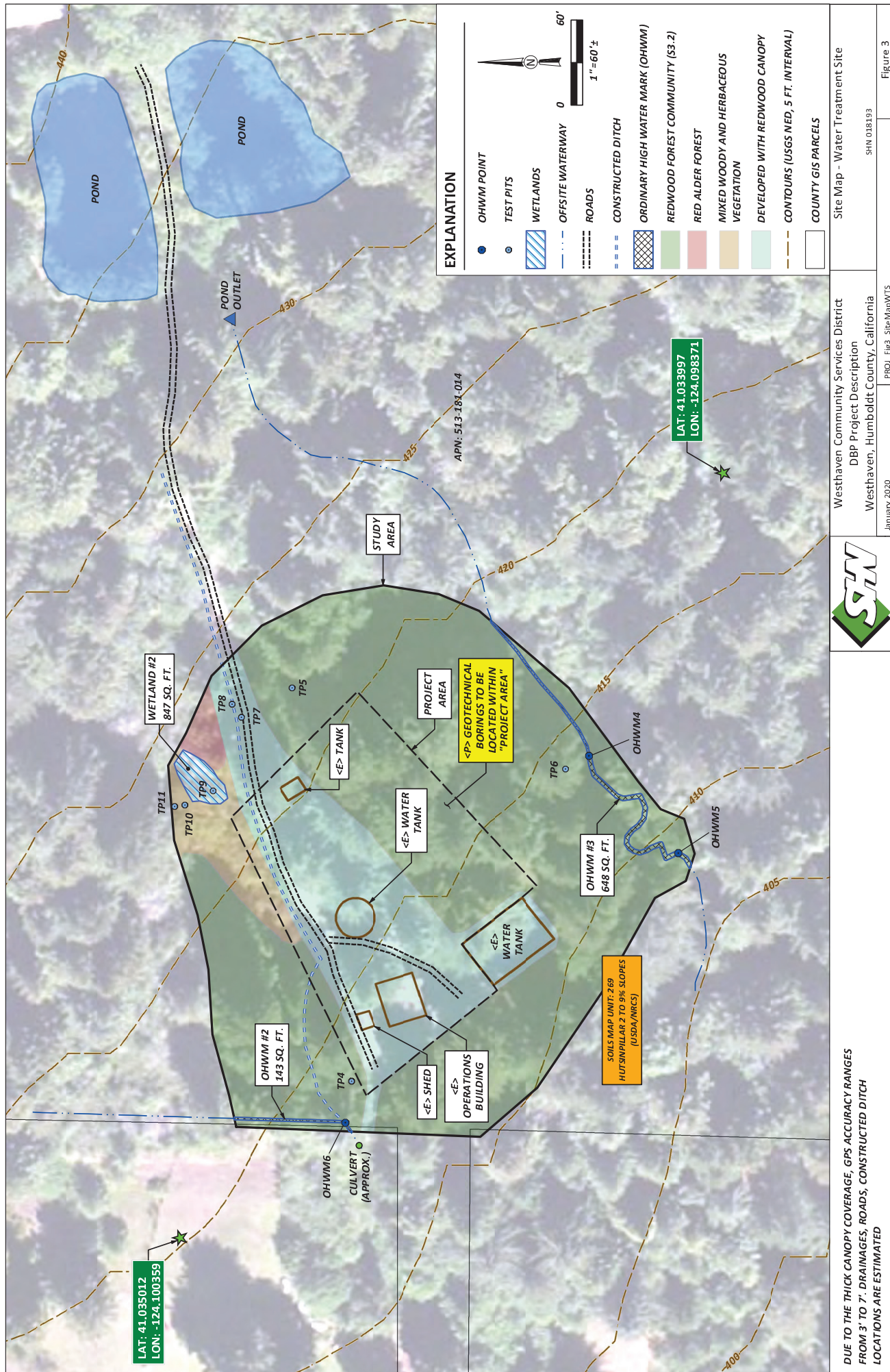
PROJ_Fig2_SiteMap

Figure 2

PLN-2020-16307 Westhaven CSD

September 3, 2020

Page 12



ATTACHMENT 1
RECOMMENDED CONDITIONS OF APPROVAL

Approval of the Coastal Development Permit and Special Permit is conditioned upon the following terms and requirements which must be fulfilled before work is initiated:

1. Development shall be conducted consistent with the Project Description, approved Site Plans, and recommendations set forth in the Restoration Plan and Biological and Wetland Assessment for the *Westhaven Community Services District Disinfection Byproducts Reduction Project – Test Wells and Geotechnical Borings Project*, dated February 11, 2020.
2. Changes to the project other than Minor Deviations as set forth in Section 312-11 shall require a modification of the permit.

On-going Requirements/Development Restrictions Which Must be Satisfied for the Life of the Project:

1. The applicant is responsible for receiving all necessary permits and/or approvals from state and local agencies.

Informational Notes:

1. If cultural resources are encountered during construction activities, the contractor on site shall cease all work in the immediate area and within a 50-foot buffer of the discovery location. A qualified archaeologist as well as the appropriate Tribal Historic Preservation Officer(s) are to be contacted to evaluate the discovery and, in consultation with the applicant and lead agency, develop a treatment plan in any instance where significant impacts cannot be avoided.

The Native American Heritage Commission (NAHC) can provide information regarding the appropriate Tribal point(s) of contact for a specific area; the NAHC can be reached at 916-653-4082. Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, shellfish or faunal remains, and human burials. If human remains are found, California Health and Safety Code 7050.5 requires that the County Coroner be contacted immediately at 707-445-7242. If the Coroner determines the remains to be Native American, the NAHC will then be contacted by the Coroner to determine appropriate treatment of the remains pursuant to PRC 5097.98. Violators shall be prosecuted in accordance with PRC Section 5097.99

The applicant is ultimately responsible for ensuring compliance with this condition.

2. This permit shall expire and become null and void at the expiration of one (1) year after all appeal periods have lapsed (see "Effective Date") except where construction under a valid building permit or use in reliance on the permit has commenced prior to such anniversary date. The period within which construction or use must commence may be extended as provided by Section 312-11.3 of the Humboldt County Code.
3. New Development Requires Permit. Any new development as defined by Section 313-139 of the Humboldt County Code (H.C.C.), shall require a coastal development permit or permit modification, except for Minor Deviations from the Plot Plan as provided under Section 312-11.1 of the Zoning Regulations.

4. The applicant is required to pay for permit processing on a time and material basis as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors. The Department will provide a bill to the applicant after the decision. Any and all outstanding Planning fees to cover the processing of the application to decision by the Hearing Officer shall be paid to the Humboldt County Planning Division, 3015 "H" Street, Eureka

ATTACHMENT 2
STAFF ANALYSIS OF THE EVIDENCE SUPPORTING THE REQUIRED FINDINGS

Required Findings: To approve this project, the Hearing Officer must determine that the applicant has submitted evidence in support of making all of the following required findings.

The County Zoning Ordinance, Section 312-17 of the Humboldt County Code (Required Findings for All Discretionary Permits) specifies the findings that are required to grant a Coastal Development Permit and Special Permit:

1. The proposed development is in conformance with the County General Plan; Open Space Plan, and the Open Space Action Program; and
2. The proposed development is consistent with the purposes of the existing zone in which the site is located; and
3. The proposed development conforms with all applicable standards and requirements of these regulations; and
4. The proposed development and conditions under which it may be operated or maintained will not be detrimental to the public health, safety, or welfare; or materially injurious to property or improvements in the vicinity; and
5. The proposed development does not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law; and
6. In addition, the California Environmental Quality Act (CEQA) states that one of the following findings must be made prior to approval of any development which is subject to the regulations of CEQA. The project either:
 - a) is categorically or statutorily exempt; or
 - b) has no substantial evidence that the project will have a significant effect on the environment and a negative declaration has been prepared; or
 - c) has had an environmental impact report (EIR) prepared and all significant environmental effects have been eliminated or substantially lessened, or the required findings in Section 15091 of the CEQA Guidelines have been made.

1. General Plan Consistency: The following table identifies the evidence which supports finding that the proposed development is in conformance with all applicable policies and standards in the Trinidad Area Plan (TAP) and the County of Humboldt 2017 General Plan (GP).

Plan Section(s)	Summary of Applicable Goal, Policy or Standard	Evidence Which Supports Making the General Plan Conformance Finding
<p>Land Use: §4.30 (TAP)</p> <p>Land Use: Chapter 4.8 (GP)</p>	<p>Rural Village (RV). Allows development of rural community neighborhoods.</p> <p>Rural Residential (RRc): Allows residential use of rural lands not permanently designated for resource protection.</p> <p>Public Lands (P): Used to classify lands owned by or under the jurisdiction of or any district authority or public corporation, or agency thereof.</p>	<p>The project would improve the availability and quality of water for the WCSD. It would not lead to increased densities in the area and is a consistent use within rural lands. The wells and borings are confined to parcels owned by WCSD.</p>
<p>Natural Resource Protection: §3.30 (TAP)</p> <p>§3.30 (B) 1.a – Identification of Environmentally Sensitive Habitats (ESHA)</p> <p>§3.30 (B) 2.a.7 – Permitted Uses in Wetlands</p> <p>§3.30 (B) 3.b.1 – Wetland Buffer</p> <p>§3.30 (B) 5.c – Development Permitted Within Stream Channels</p> <p>§3.30 (B) 5.d - Riparian Corridors</p>	<p>To protect designated sensitive and critical resource habitats.</p> <p>ESHA shall be protected against significant disruption of habitat values. New development shall be sited and designed to prevent impacts that would significantly degrade such areas, and shall be compatible with the continuance of such habitat areas. ESHA includes rivers, streams and riparian habitats, wetlands, and other critical habitat.</p> <p>Incidental Public Service Purposes is a permitted use in wetlands.</p> <p>Permits development allowed in 3.30 (B) 2, above.</p> <p>Permits development consistent with the provisions of 3.30 B</p> <p>Minimum setbacks apply for Riparian Corridors</p>	<p>The well site includes a cleared landing/access area for an existing well and well pump house. Geotechnical borings will be located in the Inland portion of the WTP site within a graveled and maintained area within the vicinity of the existing treatment facility and storage tanks.</p> <p>The Biological and Wetland Assessment identified ESHA, including wetlands and a seasonal stream, and provided operational measures to avoid and minimize disturbance to these resources from the temporary testing activities. Compliance with these operational measures is a condition of project approval.</p> <p>The Restoration Plan will restore the test wells and geotechnical borehole project area to pre-project or better conditions.</p> <p>The project is considered an Incidental Public Service.</p> <p>The project is considered an Incidental Public Service, an allowed use within wetlands and stream channels, therefore Riparian Corridor setbacks would not be applicable.</p>

<p>Conservation and Open Space Chapter 10 (GP)</p> <p>Biological Resources Section 10.3</p> <p>Development within Stream Channels BR-S6(F) and (I)</p> <p>Development within SMA BR-S7(A)</p> <p>Wetlands and Other Wet Areas BR-S10</p>	<p>Preservation of plants and wildlife, including protection of watersheds, streams and their water resources</p> <p>Allows wells and municipal groundwater pumping stations,</p> <p>Allows development permitted within stream channels per BR-S6</p> <p>Allows development permitted within SMA</p>	<p>The project entails geotechnical borings to evaluate subsurface conditions for possible improvements to the WTP to ensure a reliable and safe source of domestic water for the WCSD.</p> <p>Geotechnical borings will be located in the Inland portion of the WTP site within a graveled and maintained area within the vicinity of the existing treatment facility and storage tanks.</p> <p>As depicted on the site plan, no work in the watercourse labeled OHWM will occur. Some of the borings will be located within the 100-foot SMA buffer, therefore a Special Permit is required.</p> <p>The Biological and Wetland Assessment provides operational measures to minimize the potential impacts of the project to sensitive communities and riparian buffers. These include excluding equipment and construction from the stream and riparian area, use of construction fencing near sensitive areas to prevent accidental incursion, and use of BMPs during construction to prevent runoff and potential discharge to the riparian areas. and wetlands.</p> <p>The Restoration Plan provides measures to restore the test wells and geotechnical borehole project area to pre-project or better conditions. The project is conditioned upon compliance with the Restoration Plan.</p>
<p>Public Services §3.23 (TAP)</p> <p>Community Infrastructure and Services Chapter 5 (GP)</p>	<p>Adequate public infrastructure and services that are essential for community, and ensuring a safe means for protection of the County's water resources, health, safety and quality of life.</p>	<p>The project would provide testing that could resolve an existing water system deficiency pertaining to formation of disinfection byproducts by blending groundwater with surface water before treatment or upgrades to the WTP. The project is for information gathering purposes only. It would not constitute an expansion of capacity in excess of that necessary to provide services in the serviceable area as defined and mapped in the GP and TAP</p>

Archaeological and Paleontological Resources §3.17 (TAP) Cultural Resources Section 10.6 (GP)	Protect cultural, archaeological, and paleontological resources.	No referral response was received from the Yurok Tribe. The inadvertent discovery protocol has been added as an information note to the Conditions of Approval.
Water Resources Chapter 11 (GP)	Maintain a dependable water supply, sufficient to meet existing and future domestic needs	The project entails test wells and borings to investigate solutions to an existing problem with the formation of high levels disinfection byproducts (DBP) to ensure a reliable and safe source of domestic water for the WCSD customers.

2. Zoning Compliance and 3. Development Standards: The following table identifies the evidence which supports finding that the proposed development is in conformance with all applicable policies and standards in the Humboldt County Zoning Regulations

Code Section	Summary of Applicable Requirement	Evidence That Supports the Zoning Finding
§313-6.4 Rural Residential Agriculture (RA-2.5) §313-6.1 Residential Single Family (RS) §314-8.1 Unclassified (U)	RA is intended for low density residential development and general agricultural uses. RS is intended for low density residential development U is intended to protect the health, safety and general welfare of the citizens and to insure orderly development in conformance with the General Plan.	The project is an Essential Services Civic Use Type allowed as a conditionally permitted use in all zoning districts. A Use Permit is not required for this work because pursuant to Section 53091(d) of the California Government Code, zoning is inapplicable to the construction of facilities for the production, generation, storage, treatment, or transmission of water. Because the groundwater testing and pre-development engineering geotechnical studies are not "construction" per se evaluation for compliance with the Open Space Element and Open Space Action plan is being undertaken. For this reason, a Special Permit in addition to a Coastal Development Permit and is being required.
Min. Lot Size RA-2.5 RS U	2.5 acres 3 units/acre, 1 du/lot 6000 square feet	N/A no subdivision is proposed.

Min. Lot Width RA-2.5 RS U	175 feet (175') Fifty feet (50') Fifty feet (50')	N/A no subdivision is proposed.
Yard Setbacks RA-2.5 RS U	Front, Rear, Sides 30' all yards, within SRA 20', 10', 5' 30' all yards, within SRA	N/A no structures are proposed.
Max. Ground Coverage	Thirty-five percent (35%)	N/A no structures are proposed.
Max. Bldg. Height	Thirty-five feet (35')	N/A no structures are proposed.
§313-171 Civic Use Types	Civic Uses include... governmental uses of importance to the public and shall be permitted in any zone	The project is considered an essential public use and are permitted in all districts.

COMBINING ZONES

Zone	Purpose	Finding in Support of
§313-39.1 X : No further Subdivision Allowed	Prohibits further subdivision of the lot.	No subdivision is proposed.
§313-28.1 M : Manufactured Home	Where the development standards are modified for the sole purpose of allowing manufactured homes.	No manufactured homes are existing or proposed
§313-33.1 R : Streams and Riparian Corridor Protection	Provide for the... enhancement, and restoration of water resources by... protecting riparian habitats.	The Biological and Wetland Assessment provides measures to minimize the potential impacts of the project to special-status plant and animal species, sensitive communities, and wetlands The Restoration Plan provides measures to restore the test wells and geotechnical borehole project area to pre-project or better conditions.

COASTAL RESOURCE PROTECTION FINDINGS

Code Section	Purpose	Finding in Support of
§313-4: Coastal Streams and Riparian Areas	There are no significant adverse effects on habitat areas. There is no environmentally damaging feasible alternative.	The proposed well site is located near the existing WCSD pumphouse building. A natural drainage lies to the north. This feature will be avoided during the testing process. Test well #1 is located over 50 feet from the OHWM lying on the north end of the parcel but will occur

	<p>The best mitigation measures feasible have been provided to minimize adverse environmental effects.</p>	<p>within the 100-foot riparian buffer area.</p> <p>The district has selected this site because of the existing pump station and water infrastructure. To meet the project objective ground water from a future well must be blended with the surface water to provide adequate dilution to avoid the present water quality issue. This requires proximity to the pump station and water supply lines.</p> <p>The well site includes a cleared landing/access area for an existing well and well pump house. Impacts will be minimal as the work is temporary. The portable drill rig will be able to drive to the test well locations and minimal temporary ground disturbance will occur. Full restoration of the site will be performed consistent with the Restoration Plan once testing is concluded.</p> <p>Operational measures to minimize the potential impacts to the resource include excluding equipment and construction from the stream and riparian area, use of construction fencing near sensitive areas to prevent accidental incursion, and use of BMPs during construction to prevent runoff and potential discharge to the riparian areas.</p>
§313-15: Coastal Wetland Buffers	<p>Development will be sited and designed to prevent impacts that would significantly degrade wetland areas, and shall be compatible with the continuation of such habitat areas.</p> <p>The biological productivity shall be maintained and where feasible restored.</p>	<p>The well site includes a cleared landing/access area for an existing well and well pump house. Impacts will be minimal as the work is temporary. The portable drill rig will be able to drive to the test well locations and minimal temporary ground disturbance will occur.</p> <p>Test Well #2 will be located within 24 feet of the 1-parameter wetland. Operational measures to minimize the potential impacts to the resource include excluding equipment and construction from the stream and riparian area, use of</p>

		<p>construction fencing near sensitive areas to prevent accidental incursion, and use of BMPs during construction to prevent runoff and potential discharge to the riparian areas.</p> <p>Full restoration of the site will be performed consistent with the Restoration Plan once testing is concluded.</p>
--	--	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

4. Public Health, Safety and Welfare; and 6. Environmental Impact: The following table identifies the evidence which supports finding that the proposed development will not be detrimental to the public health, safety and welfare, or materially injurious to properties or improvements in the vicinity and will not adversely impact the environment.

Code Section	Summary of Applicable Requirement	Evidence that Supports the Required Finding
§312-17.1.4	The proposed development will not be detrimental to the public health, safety and welfare or materially injurious to properties or improvements in the vicinity.	All reviewing agencies have recommended approval of the proposed project. The proposed project in fact may contribute to greater safety as the water supply system will be improved.
CEQA Guidelines	The proposal is considered a project subject to environmental review pursuant to the CEQA Guidelines.	*As Lead Agency, the Westhaven Community Services District (WCSD) filed a Notice of Exemption with OPR and County of Humboldt citing Categorical Exemption Section 15305 (Minor Alterations in Land Use Limitations) and 15306 (Information Collection).

5. Residential Density Target: The following table identifies the evidence which supports finding that the proposed project will not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law.

Code Section	Summary of Applicable Requirement	Evidence that Supports the Required Finding
§312-17.1.5 Housing Element Densities	The proposed development shall not reduce or increase the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law, except where: 1) the reduction is consistent with the adopted general plan including the housing element; and 2) the remaining sites identified in the housing element are adequate to accommodate the County share of the regional housing need; and 3) the property contains insurmountable physical or environmental limitations and clustering of residential units on the developable portions of the site has been maximized.	The CDP and SP are to ensure adequate testing to allow the development of a solution to an existing domestic water supply water quality issue. The project is temporary in nature and does not affect the residential density of any parcel below that utilized by the Department of Housing and Community development in determining compliance with housing element law.

ATTACHMENT 3
APPLICANT'S EVIDENCE IN SUPPORT OF THE REQUIRED FINDINGS

Attachment 3 includes a listing of all written evidence which has been submitted by the applicant in support of making the required findings. The following materials are on file with the Planning Division.

- Application Form (in file)
- Project Description (in file)
- Plot Plan (attached)
- Geotechnical Borings (attached)
- Biological and Wetland Assessment (attached)
- Restoration Plan (attached)
- CEQA NOE (in file)



Reference: 018193

**Westhaven Community Services District
Disinfection Byproducts Reduction Project – Test Wells and Geotechnical Borings
Project Description
February 13, 2020**

Applicant

Attention: Paul Rosenblatt, General Manager
Westhaven Community Services District
PO Box 2015
Trinidad, CA 95570-2015
Telephone: 707-677-0798
email: prosenblatt.wcsd@suddenlinkmail.com

Agent

Attention: Stein Coriell, Senior Planner
SHN
1062 G St., Suite "I"
Arcata, CA 95521-5800
Telephone: 707-822-5785
Fax: 707-822-5786
email: scoriell@shn-engr.com

Owner

APNs 514-132-008, 514-133-001, 513-181-014
Attention: Paul Rosenblatt, General Manager
Westhaven Community Services District
PO Box 2015
Trinidad, CA 95570-2015
Telephone: 707-677-0798
email: prosenblatt.wcsd@suddenlinkmail.com



Note regarding ownership: Assessor's parcel number (APN) 514-132-008 was recently acquired by Westhaven Community Services District (WCSD, the District) and the Humboldt County Assessor's records may not yet be updated.

Project Location

The proposed project is located in the community of Westhaven in Humboldt County, California (see Figure 1 for project location). Table 1 shows the APNs associated with the proposed work and which sites are located in the coastal zone. Figure 2 shows the locations of proposed test wells and Figure 3 shows the proposed location for geotechnical borings.

Table 1 – Locations of Proposed Work

Proposed Work	APN	Includes Work Within Coastal Zone?
(P) Test Well #1	514-132-007 and -008	Yes
(P) Test Well #2	514-133-001	Yes
(P) Geotechnical Boring(s)	513-181-014	No

The proposed test wells and the parcels where they are proposed to be located are all entirely within the coastal zone, in the County of Humboldt, in the "Appeal" coastal development permit (CDP) jurisdiction. The water treatment plant parcel (APN 513-181-014) is located almost entirely outside the coastal zone, although a small portion of the southwest corner is within the coastal zone. All proposed geotechnical boring work at APN 513-181-014 would be located outside the coastal zone.

Existing Conditions

WCSD is a community water system serving approximately 467 people with 228 service connections, and has both groundwater and surface water as raw water sources. In December 2017, WCSD was issued a Compliance Order by the State Water Resources Control Board (SWRCB) for consistently exceeding maximum contamination levels of disinfection byproducts (DBP). The District is in the planning phase of determining the best solution to the exceedances. Potential solutions being considered at this time include 1) establishing additional groundwater wells so that groundwater can be blended with surface water prior to treatment to reduce required chlorination levels and to reduce formation of DBPs, or 2) making improvements to the existing water treatment plant (WTP).

Proposed Project

Test Wells

WCSD proposes to drill two new temporary test wells to determine groundwater availability and groundwater quality (as shown in Table 1 and Figure 2). This is to investigate the potential solution of establishing additional permanent groundwater wells so that groundwater can potentially be blended with surface water prior to treatment to reduce required chlorination levels and to reduce formation of DBPs.

A local California licensed C-57 drilling subcontractor will perform the work. Approximately three drilling personnel (driller plus two helpers) will be involved in drilling the test wells. The test wells will be advanced to depths of up to 200 feet. The test wells will be drilled using a truck-mounted drilling rig utilizing air and/or mud rotary wash methods.

The drilling subcontractor will collect samples of drilling cuttings. The samples will generally be taken at every change of strata and at depth intervals not to exceed 10 feet. If the test hole fails to indicate the presence of water-bearing strata, or is abandoned for any other reason, the test hole shall be properly destroyed. At the completion of the test hole, a drillers log will be prepared containing the following information: 1) Depth of static water and water-bearing strata; 2) Lithologic log with type, thickness, and depth of different material strata contacts; 3) Color, size, and soil description of cuttings; and 4) Estimated water yield. The drillers log must be submitted as part of the Water Well Test and Permanent Well Design Report.

Well Depths

The wells will be drilled to a suitable depth in an attempt to find potable water meeting WCSD water quality requirements. The depth of the test wells will take into consideration the drawdown depth, screen depth and pump submergence.

Well Pumping Tests

To determine the expected yield from the test wells and to assure acceptable water quality, a pumping test will be performed for each test well by the drilling subcontractor. The types of tests that will be performed



include: 1) Step-drawdown Test; 2) Specific Capacity Test; and 3) Constant Rate Pumping Test. During the pumping tests, all adjacent well(s) within a 100-foot radius will be monitored using pressure transducers to determine nearby drawdown effects.

The Water Well Test Report to be provided by the drilling subcontractor will include water quality lab results, pump test results, drillers log, lithologic log, and recommendations for the construction of the future permanent water wells including well diameter, total depth, screen interval, and filter pack size. The Water Well Test and Permanent Well Design Report will be submitted to WCSD for approval.

All drill cuttings and drilling fluids will be contained and removed from the each of the test well locations and disposed of by the drilling subcontractor at an approved location.

Minor grading (an area up to 40 feet long by 20 feet wide for each well) may be required to provide temporary access and a stable working surface for the drilling rig. Following the pumping tests, both test wells will be destroyed- by removing all temporary casing and backfilling with grout placed from the bottom of the borehole to within a few feet of the ground surface. The remaining few feet will be backfilled with native soil. The sites will be restored to pre-project conditions following demobilization of the drilling rig. The potential future installation of permanent new wells would be a separate future project subject to additional environmental review and permitting.

Geotechnical Borings

In order to evaluate site suitability for potential future WTP improvements that may be needed to resolve the DBP problem (if the test wells do not appear promising), WCSD is planning to drill geotechnical boreholes at up to three locations (Table 1; Figure 3). The purpose of the geotechnical borings will be to characterize the subsurface conditions underlying the site of potential future WTP improvements in order to develop appropriate foundation type and design criteria, including allowable bearing pressures and foundation embedment depth, along with provisions to mitigate the effects of adverse soil conditions such as liquefaction and consolidation settlement. SHN will oversee the drilling of the geotechnical borings and make a continuous log of the materials encountered. Samples will be collected at regular intervals using a split-spoon sampler.

A qualified California licensed C-57 drilling subcontractor will perform the work. Approximately two or three drilling personnel will be involved in drilling the geotechnical borings. Boreholes will be up to 50 feet deep or refusal (whichever is shallower), and will utilize a truck-mounted rotary wash drilling rig. Drill cuttings and drilling fluid will be collected and contained in DOT-approved 55-gallon steel drums, and disposed of by the drilling subcontractor at an approved location.

No grading efforts are anticipated in order to facilitate the installation of the geotechnical borings, which would occur within the developed area labeled "Project Area" on Figure 3.

Equipment, Access, and Staging

Test Wells

The test wells will be drilled with a truck-mounted rotary drill. A support truck with additional tooling and water tank will also be required at each test well location. Minor grading for access will be required at the location of proposed test well #1, which would involve temporary disturbance on APNs 514-132-007 and - 008. The dimensions of the drilling pad will be approximately 40 feet long by 20 feet wide. To minimize the



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amount of disturbance while creating a relatively level and stable working surface, grading will be performed with a mini-excavator equipped with a grading bucket. Both test well sites would be accessed from the north end of Transit Avenue, which provides access to the existing WCSD well on APN 514-133-001 (Figure 2).

Geotechnical Borings

The geotechnical borings will be drilled with a truck-mounted rotary wash drilling rig. The site would be accessed using the existing access road from the east end of 4th Avenue (Figure 3). All activities associated with implementation of the geotechnical borings would occur within the developed area associated with WCSD's water treatment facility.

Timing of Construction

Due to the District's ongoing exceedances of the maximum contamination levels of disinfection byproducts and the SWRCB Compliance Order, WCSD needs to proceed with evaluating the feasibility of potential solutions as expediently as possible, beginning with installation of the proposed test wells.

Test Wells

As the preferred potential solution to the DBP problem, WCSD would drill the test wells as soon as the applicable approvals are obtained. Drilling the test wells and performing pumping tests would occur over approximately two to three work weeks between the hours of 7:30 am and 5:30 pm.

Geotechnical Borings

WCSD would likely drill the test wells and evaluate their performance first as the preferred potential solution, and would likely only drill the geotechnical borings at the WTP if the test wells do not provide suitable and sufficient water to solve the DBP problem. Drilling the geotechnical borings would occur over approximately 2 days between the hours of 7:30 am and 5:30 pm.

Best Management Practices and Avoidance and Minimization Measures

The following construction best management practices and avoidance and minimization measures will be implemented during implementation of the test wells and geotechnical borings:

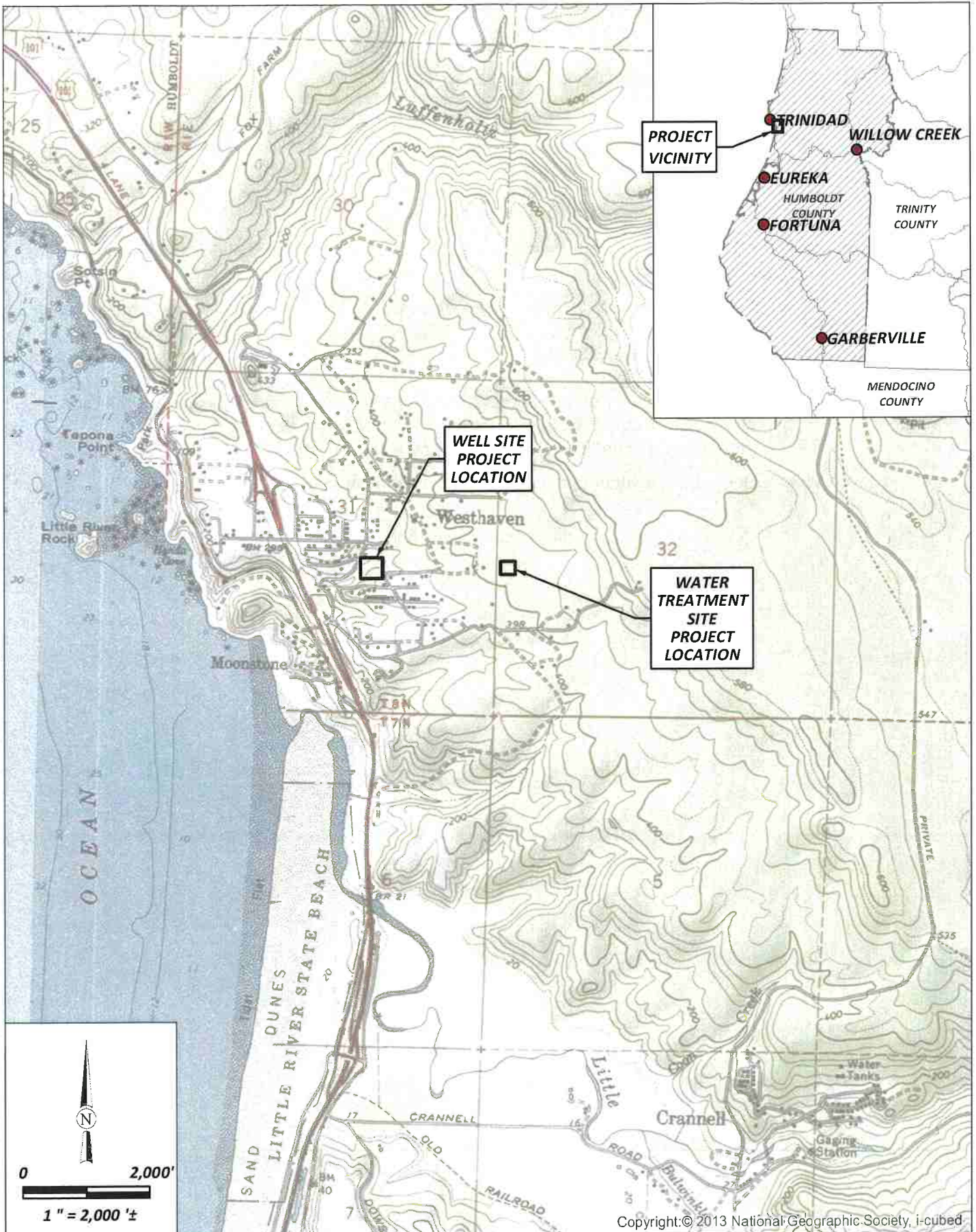
- Equipment and personnel shall stay within the approved work area during construction.
- Limit ground disturbance and vegetation clearing to the minimal extent necessary to accomplish project goals.
- Following the pumping tests, all disturbed locations shall be restored to pre-project conditions.
- Where project construction activities occur within close proximity (100 feet) to special status resources, these resources shall be demarcated by high visibility temporary construction fencing during the project construction period in a manner sufficient to avoid unintentional impacts.
- Collect and dispose of spoils from drilling at an appropriately permitted upland disposal facility. If spoils are to be temporarily stockpiled onsite, they must be covered and secured before the onset of precipitation.
- Stabilize exposed soils at the end of the job, using mulch or other erosion control measures.



- All trash shall be removed from the work site and disposed of on a regular basis.
- All equipment used during construction shall be free of oil and fuel leaks at all times.
- Hazardous materials management equipment, including oil containment booms and absorbent pads shall be available and immediately on hand at the project site. A registered first-response, professional, hazardous materials clean-up/remediation service shall be locally available on call. Any accidental spill shall be contained rapidly and cleaned up. In the event of a spill, WCSD shall notify the appropriate regulatory agencies immediately.
- Implement test wells and geotechnical borings between late August and mid-March, when birds are not typically nesting, or
 - If implementation of test wells and geotechnical borings is to take place during the nesting season (March 15 to August 15 for most birds), a qualified biologist shall conduct a pre-construction nesting bird survey. Pre-construction surveys for nesting pairs, nests, and eggs shall occur within the construction limits and within 100 feet (200 feet for raptors) of the construction limits. If active nests are encountered, species-specific measures shall be prepared by a qualified biologist in consultation with the USFWS and CDFW, and implemented to prevent abandonment of the active nest.
- Fully implement all conditions of approval required by permit terms.



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Westhaven Community Services District
DBP Project Description
Westhaven, Humboldt County, California

Project Location Map

SHN 018193

January 2020

PROJ_Fig1_ProjectLocation

Figure 1

EXPLANATION



PROPOSED WELL



1-PARAMETER WETLAND (ESHA)



ORDINARY HIGH WATER MARK (OHWM)



COUNTY GIS PARCELS



CONTOURS (USGS NED, 5 FT. INTERVAL)

MAINTAINED AREA



COMMUNITY TRAIL



REDWOOD FOREST COMMUNITY (ESHA)



NON-NATIVE SHRUB SPECIES WITH
REDWOOD CANOPY



RED ALDER RIPARIAN FOREST (ESHA)

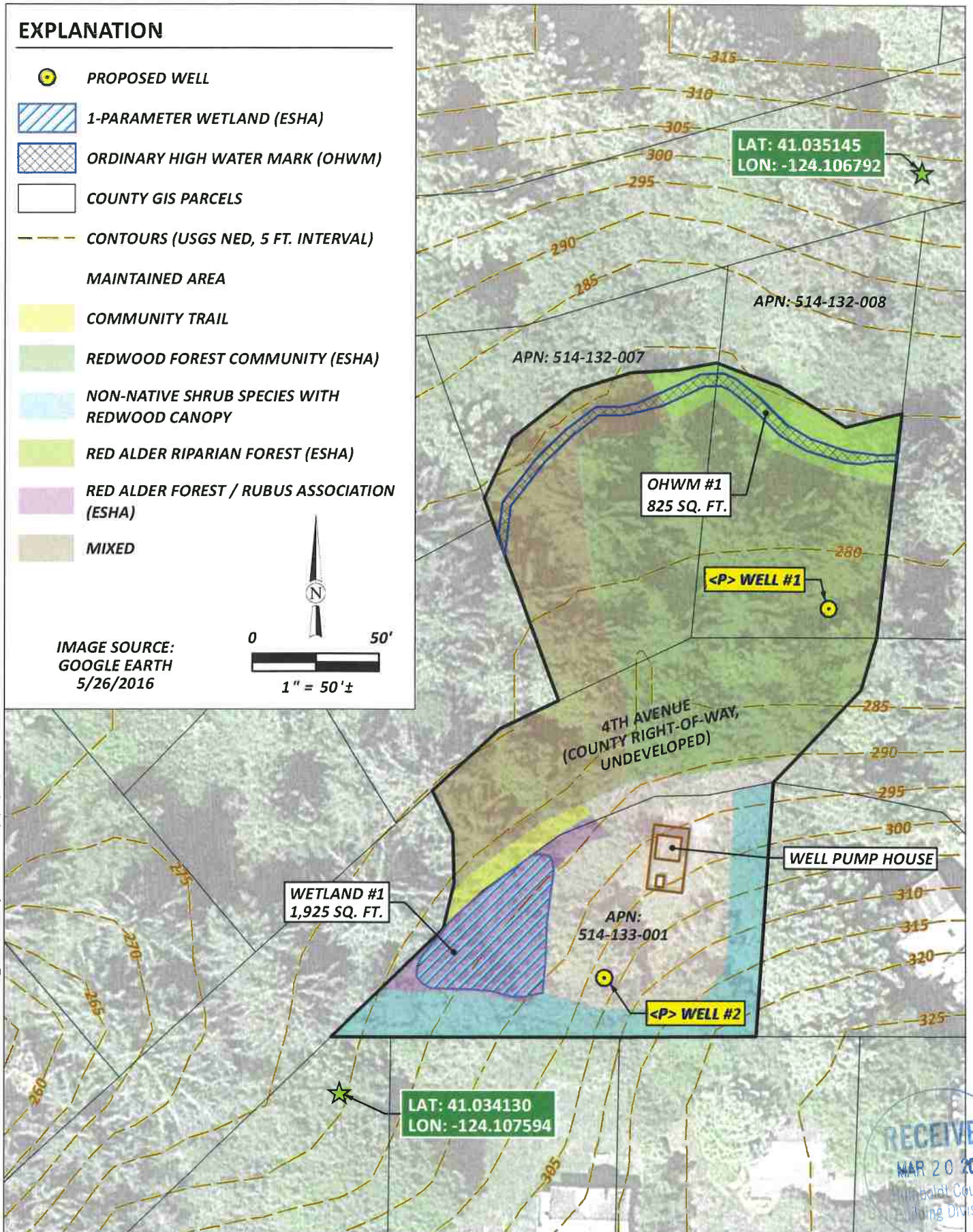
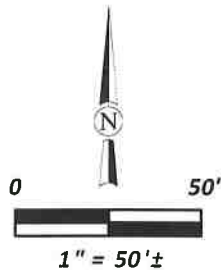


RED ALDER FOREST / RUBUS ASSOCIATION
(ESHA)



MIXED

IMAGE SOURCE:
GOOGLE EARTH
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Westhaven Community Services District
DBP Project Description
Westhaven, Humboldt County, California

Site Map - Wells #1 and #2

SHN 018193

Figure 2

February 2020

PROJ_Fig2_SiteMap

EXPLANATION













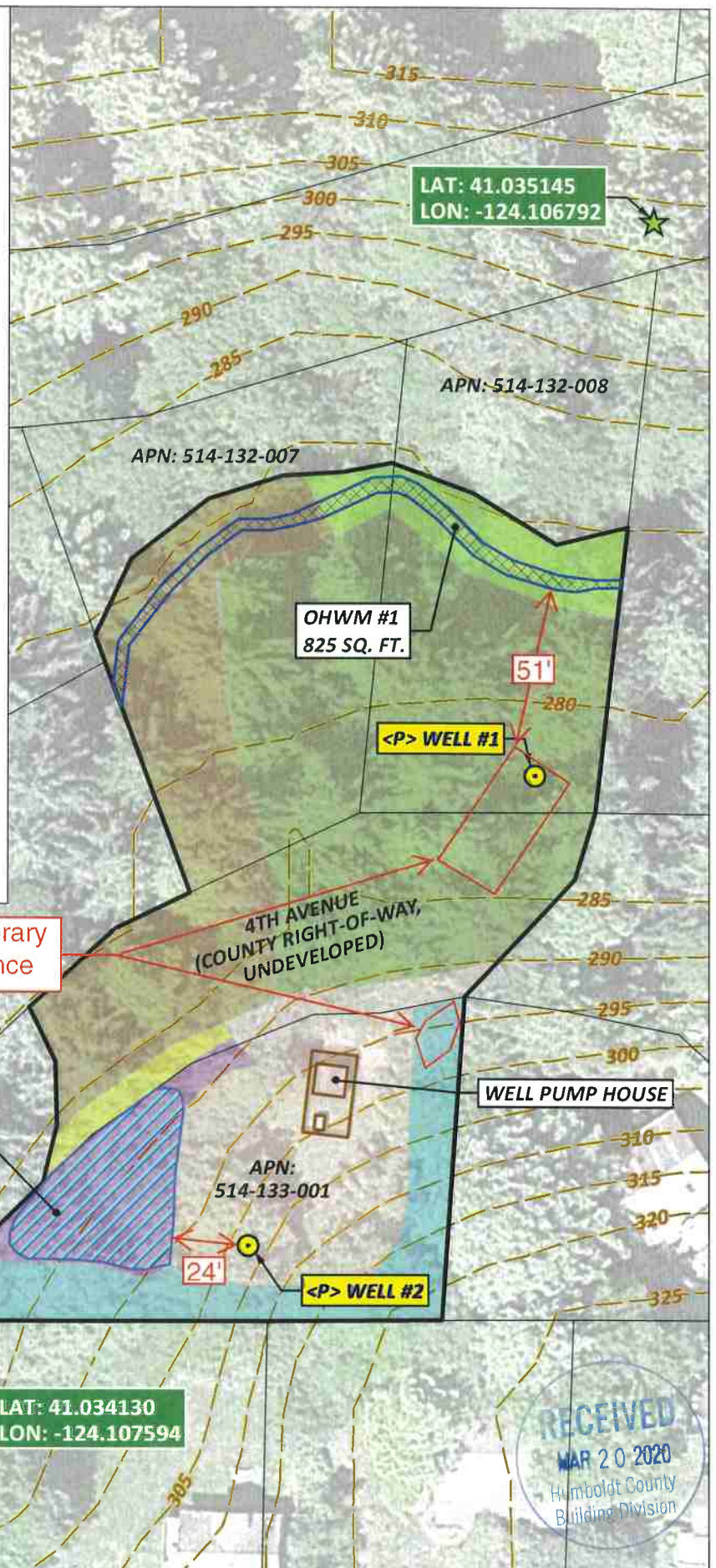
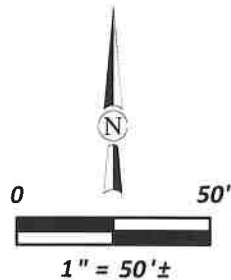
-  PROPOSED WELL
-  1-PARAMETER WETLAND (ESHA)
-  ORDINARY HIGH WATER MARK (OHWM)
-  COUNTY GIS PARCELS
-  CONTOURS (USGS NED, 5 FT. INTERVAL)
-  MAINTAINED AREA
-  COMMUNITY TRAIL
-  REDWOOD FOREST COMMUNITY (ESHA)
-  NON-NATIVE SHRUB SPECIES WITH REDWOOD CANOPY
-  RED ALDER RIPARIAN FOREST (ESHA)
-  RED ALDER FOREST / RUBUS ASSOCIATION (ESHA)
-  MIXED

IMAGE SOURCE:
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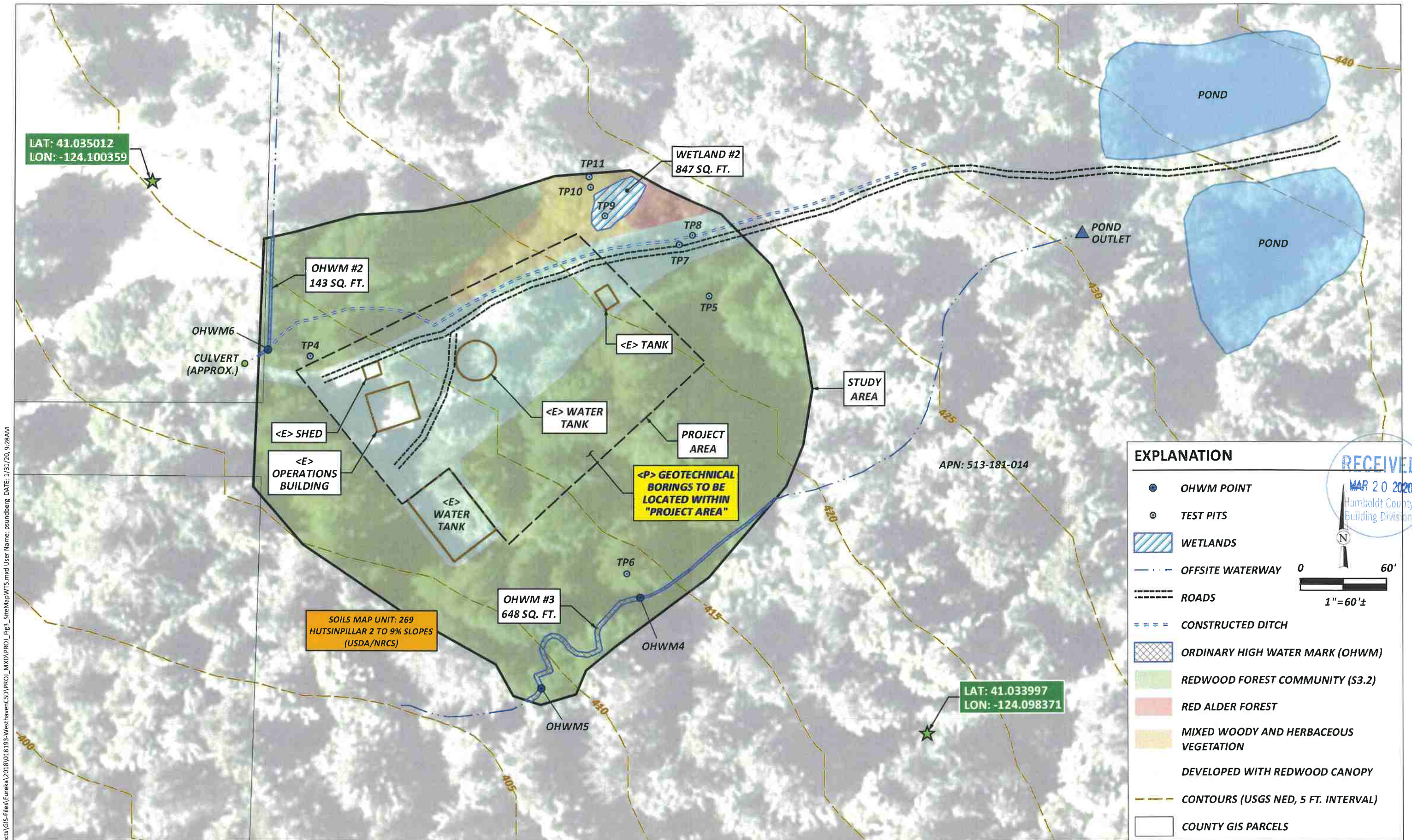
Westhaven Community Services District
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Westhaven, Humboldt County, California

Site Map - Wells #1 and #2

Temporary Ground Disturbance

Figure 2 A

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DUE TO THE THICK CANOPY COVERAGE, GPS ACCURACY RANGES FROM 3' TO 7'. DRAINAGES, ROADS, CONSTRUCTED DITCH LOCATIONS ARE ESTIMATED



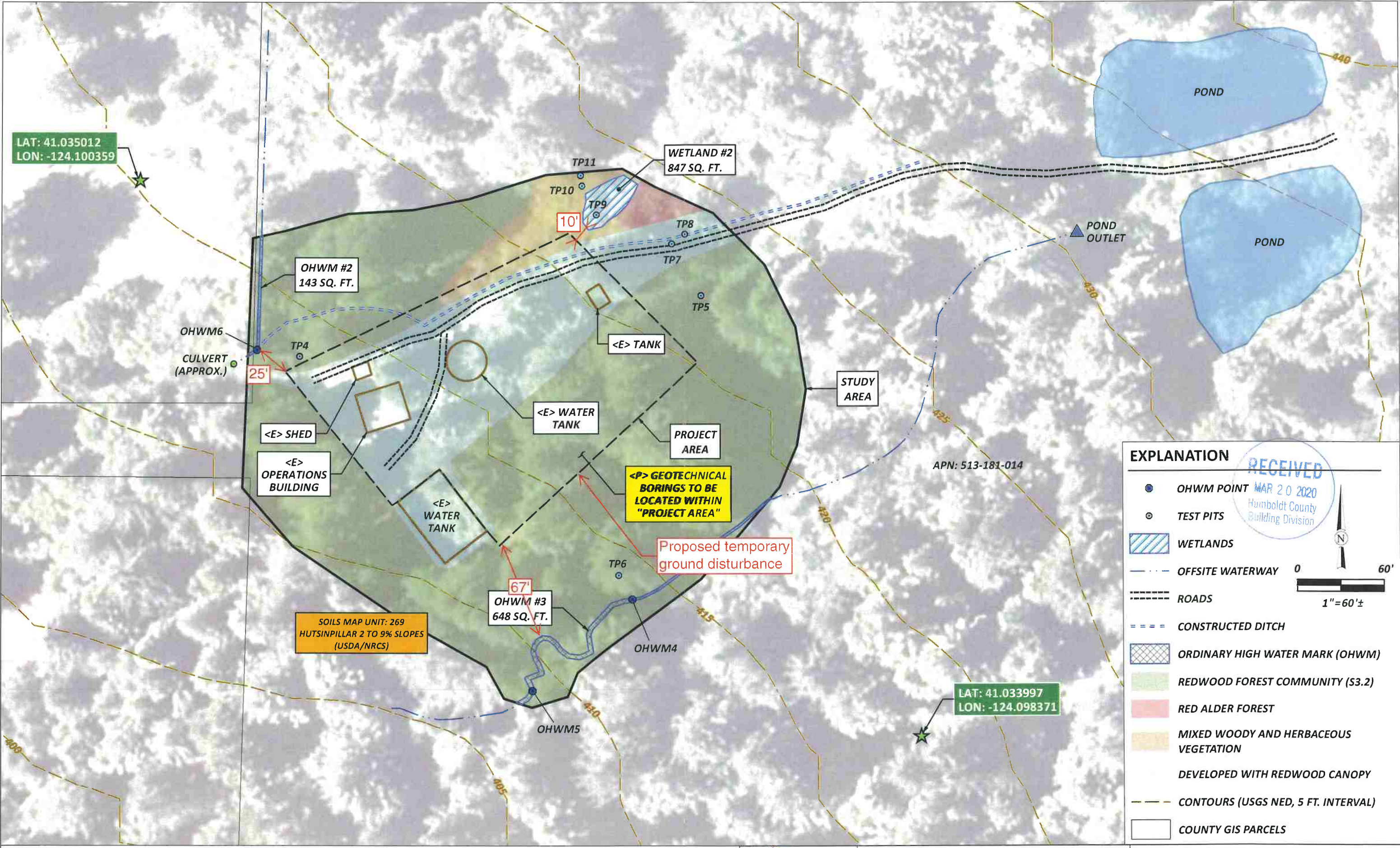
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Site Map - Water Treatment Site

SHN 018193

Figure 3

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EXPLANATION

- OHWM POINT
- TEST PITS
- WETLANDS
- OFFSITE WATERWAY
- ROADS
- CONSTRUCTED DITCH
- ORDINARY HIGH WATER MARK (OHWM)
- REDWOOD FOREST COMMUNITY (S3.2)
- RED ALDER FOREST
- MIXED WOODY AND HERBACEOUS VEGETATION
- DEVELOPED WITH REDWOOD CANOPY
- CONTOURS (USGS NED, 5 FT. INTERVAL)
- COUNTY GIS PARCELS

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0 60'
1"=60'±

DUE TO THE THICK CANOPY COVERAGE, GPS ACCURACY RANGES FROM 3' TO 7'. DRAINAGES, ROADS, CONSTRUCTED DITCH LOCATIONS ARE ESTIMATED



Westhaven Community Services District
DBP Project Description
Westhaven, Humboldt County, California

Site Map - Water Treatment Site
Temporary Ground Disturbance

Restoration Plan

Disinfection Byproducts Reduction Project - Test Wells and Geotechnical Borings Westhaven, California



Prepared for:

Westhaven Community Services District



April 2020

018193

Restoration Plan

Disinfection Byproducts Reduction Project – Test Wells and Geotechnical Borings Westhaven, California

Prepared for:

Westhaven Community Services District

Prepared by:



1062 G Street, Suite I
Arcata, CA 95521
707-822-5785

April 2020

QA/QC:SEC

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Appendices

1. Site Photos

List of Illustrations

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Abbreviations and Acronyms

APN	Assessor's Parcel Number
BMP	Best Management Practice
DBP	Disinfection Byproducts
DOT	California Department of Transportation
WCSD	Westhaven Community Services District
WTP	Water Treatment Plant

1.0 Introduction

This Restoration Plan (Plan) is intended to restore the test well and geotechnical boreholes project area to pre-project or better conditions. This Plan details appropriate methods to minimize impacts during drilling and to restore the test well and borehole locations following completion of the work. Restoration will include root avoidance, invasive species management, slope recontouring, and soil stabilization using erosion control measures. The goals of this Plan are to:

1. Prevent root damage during borehole and test well installation,
2. Reduce the cover of English ivy (*Hedera helix*) within the project vicinity,
3. Recontour slopes excavated for the drill rig access,
4. Install soil erosion prevention measures within all areas of soil disturbance associated with this project, and
5. Restore site conditions to pre-project or better conditions.

2.0 Project Description

Test Wells

Westhaven Community Services District (WCSD) proposes to drill two new temporary test wells to determine groundwater availability and groundwater quality (Figures 1 and 2). This is to investigate the potential solution of establishing additional permanent groundwater wells so that groundwater can potentially be blended with surface water prior to treatment to reduce required chlorination levels and to reduce formation of disinfection byproducts (DBP). The test wells will be advanced to depths of up to 200 feet. The test wells will be drilled using a truck-mounted drilling rig utilizing air and/or mud rotary wash methods. All drill cuttings and drilling fluids will be contained and removed from each of the test well locations and disposed of by the drilling subcontractor at an approved location.

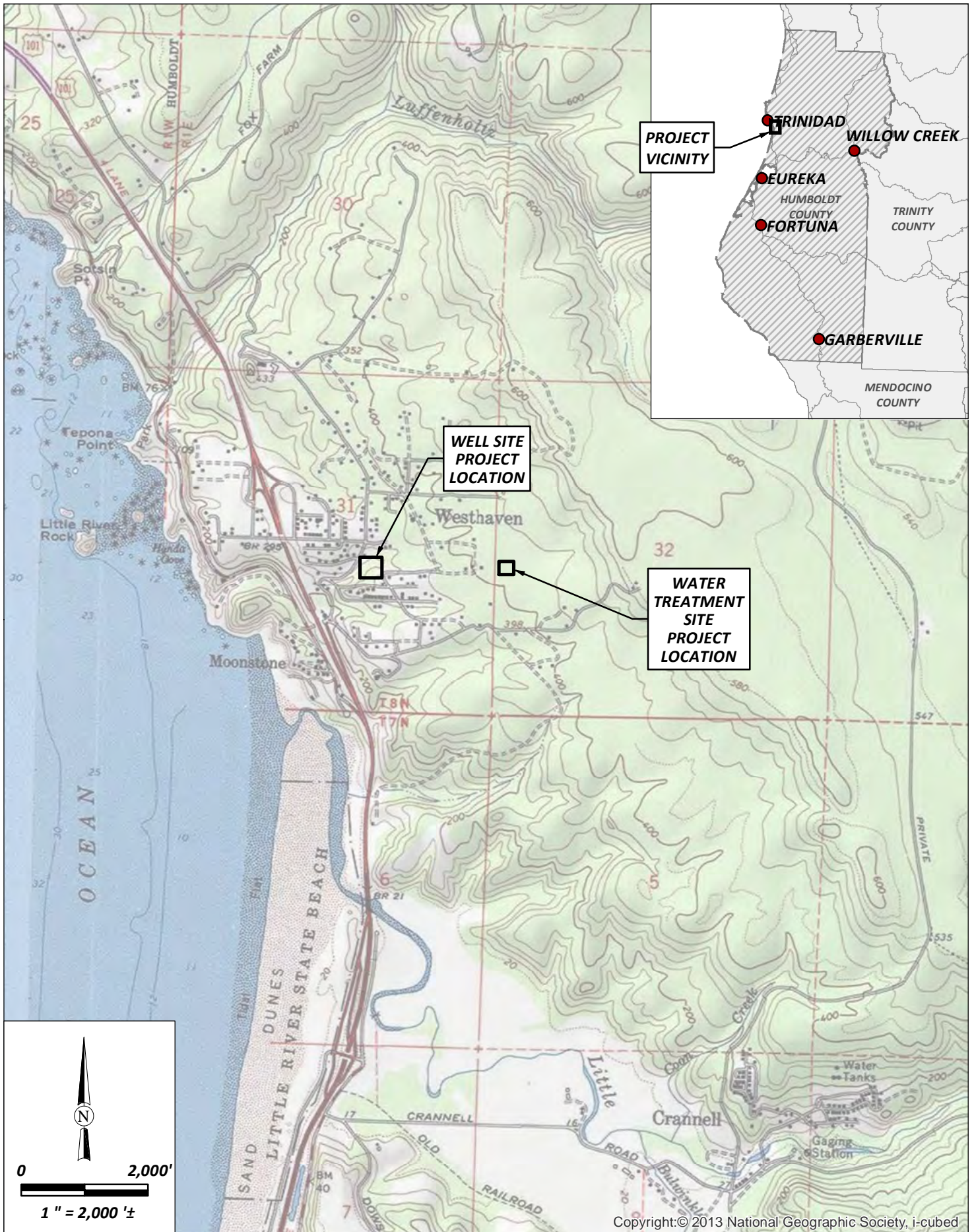
Minor grading (an area up to 40 feet long by 20 feet wide for each well) may be required to provide temporary access and a stable working surface for the drilling rig. Following the pumping tests, both test wells will be destroyed by removing all temporary casing and backfilling with grout placed from the bottom of the borehole to within a few feet of the ground surface. The remaining few feet will be backfilled with native soil. The potential future installation of permanent new wells would be a separate future project subject to additional environmental review and permitting.

Geotechnical Borings

In order to evaluate site suitability for potential future Water Treatment Plant (WTP) improvements that may be needed to resolve the DBP problem (if the test wells do not appear promising), WCSD is planning to drill geotechnical boreholes at up to three locations (Figures 1 and 3). The purpose of the geotechnical borings will be to characterize the subsurface conditions underlying the site of potential future WTP improvements in order to develop appropriate foundation type and design criteria. Boreholes will be up to 50 feet deep or to refusal (whichever is shallower) and will utilize a truck-mounted rotary wash drilling rig. Drill cuttings and drilling fluid will be collected and contained in California Department of Transportation (DOT)-approved 55-gallon steel drums and disposed of by the drilling subcontractor at an approved location.

No grading efforts are anticipated in order to facilitate the installation of the geotechnical borings, which would occur within the developed area labeled "Project Area" on Figure 3.

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Westhaven Community Services District
DBP Project Description
Westhaven, Humboldt County, California

Project Location Map

SHN 018193

January 2020

PROJ_Fig1_ProjectLocation

Figure 1

EXPLANATION













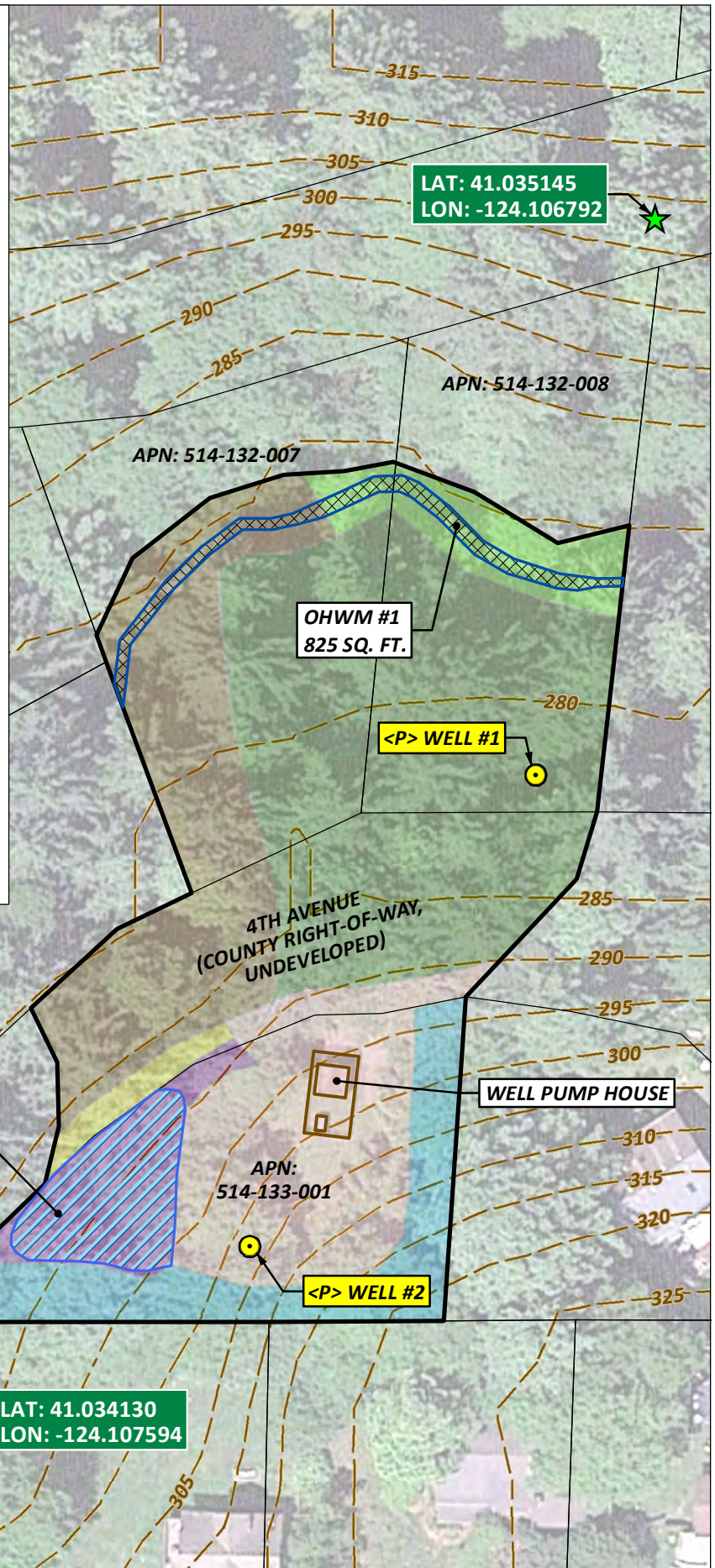
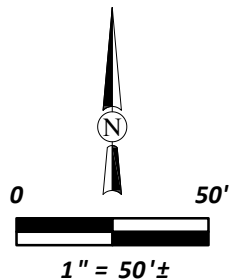
-  **PROPOSED WELL**
-  **1-PARAMETER WETLAND (ESHA)**
-  **ORDINARY HIGH WATER MARK (OHWM)**
-  **COUNTY GIS PARCELS**
-  **CONTOURS (USGS NED, 5 FT. INTERVAL)**
-  **MAINTAINED AREA**
-  **COMMUNITY TRAIL**
-  **REDWOOD FOREST COMMUNITY (ESHA)**
-  **NON-NATIVE SHRUB SPECIES WITH REDWOOD CANOPY**
-  **RED ALDER RIPARIAN FOREST (ESHA)**
-  **RED ALDER FOREST / RUBUS ASSOCIATION (ESHA)**
-  **MIXED**

IMAGE SOURCE:
GOOGLE EARTH
5/26/2016



Westhaven Community Services District
DBP Project Description
Westhaven, Humboldt County, California

Site Map - Wells #1 and #2

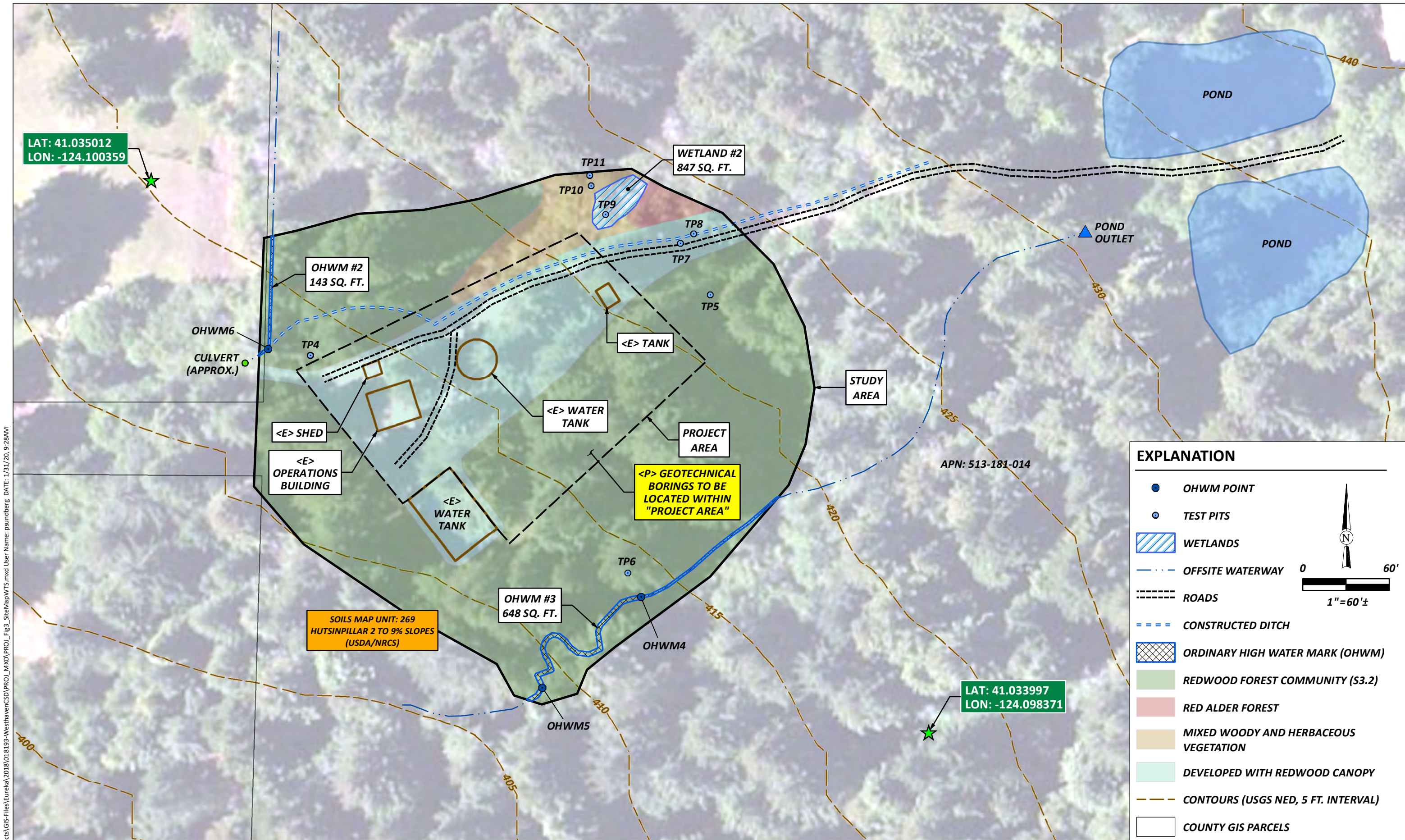
SHN 018193

February 2020

PROJ_Fig2_SiteMap

Figure 2

Path: \\arcata\projects\GIS-Files\Eureka\2018\018193-WesthavenCSD\PROJ_MXD\PROJ_Fig3_SiteMapWTS.mxd User Name: psundberg DATE: 1/31/20, 9:28AM



EXPLANATION

- OHWM POINT
- TEST PITS
- WETLANDS
- OFFSITE WATERWAY
- ROADS
- CONSTRUCTED DITCH
- ORDINARY HIGH WATER MARK (OHWM)
- REDWOOD FOREST COMMUNITY (S3.2)
- RED ALDER FOREST
- MIXED WOODY AND HERBACEOUS VEGETATION
- DEVELOPED WITH REDWOOD CANOPY
- CONTOURS (USGS NED, 5 FT. INTERVAL)
- COUNTY GIS PARCELS

0 60'

1"=60'±

N

DUE TO THE THICK CANOPY COVERAGE, GPS ACCURACY RANGES FROM 3' TO 7'. DRAINAGES, ROADS, CONSTRUCTED DITCH LOCATIONS ARE ESTIMATED



September 3, 2020

Existing Conditions. The study area consists of two locations, the well site and the water treatment site (Figure 1). The well site (Figure 2) includes a cleared landing/access area for an existing well in addition to a mature second-growth redwood forest. One test well (Well #1) will be installed within a mature second-growth redwood (*Sequoia sempervirens*) forest with an understory dominated by English ivy, which is encroaching into the canopy of several of the mature conifer trees. An old skid road will be used for the installation of the test well, which is completely overgrown with English ivy (Appendix 1, Photos 1-3). The second test well (Well #2) will be installed within the ruderal species-dominated landing/ access area used for the existing well (Figure 2, and Appendix 1, Photos 4 and 5). The location of the test wells will be above the top of bank within an area that is moderately sloping (approximately 2-10% slope), which becomes much steeper to the north of the test well locations.

Geotechnical borings will be located within a graveled and maintained area within the vicinity of the treatment facility and storage tanks (Figure 3 and Appendix 1, Photo 6). This location has second-growth redwood canopy, but the entire area proposed for geotechnical borings is gravel with little to no vegetation present. The WTP area is mostly flat and is surrounded by second-growth redwood forest.

3.0 Project Restoration

The following tasks are recommended to restore the test well and geotechnical boring locations.

3.1 Root Protection

Test well #1 will be installed under the canopy of a mature second-growth redwood forest. Care must be exercised to minimize damage to the roots of the trees. In order to avoid root damage, minimal soil excavation or grading should be conducted when creating access for the drill rig. An existing skid road should be used as much as is feasible when accessing the well site. Should the road surface be unsuitable in places for the drill rig, soil should be added to the access road rather than removed to smooth low spots or widen the access road footprint. If soft soil is encountered, thick plywood sheets should be used to minimize equipment sinkage and the associated root damage this would cause.

No root damage is anticipated at Test well #2 or at the geotechnical borehole locations at the water treatment facility on account of the graveled and manipulated nature of those sites.

3.2 Invasive Species Management

Invasive species management associated with this restoration plan will be a single targeted event, designed to reduce English ivy cover and reproduction within the test well area and test well project parcels (Assessor Parcel Numbers [APNs] 514-132-007 and -008, and 514-133-001). English ivy removal will focus primarily on collaring vines growing into trees within the test well project parcels. English ivy that extends into tree canopies has a much higher potential for berry production, aiding in reproduction and long-distance dispersal of the species by foraging birds (USDA, 2019). Furthermore, vines can strangle trees and can lead to tree blow downs by increasing weight and foliage which catches wind during storms (CalIPC, 2020). For the purposes of this restoration plan, all English ivy vines growing on trees will be collared to prevent further growth of the vine into the tree canopy. Collaring ivy consists of severing vines at ground level, which results in the death of the portion of the vine extending up the tree. Vines can be left in the trees to die; however all English ivy material extending any distance up the trunk of trees must be cut. This includes new vines less than 12 inches in height. English ivy removal will be conducted across the entirety of the three WCSD test well project parcels, including areas outside of the project area in an effort to curb the production of English

ivy berries onsite. Ivy collaring efforts will be conducted in conjunction with the test well installation and can be conducted pre-construction or post-construction. English ivy collaring will be deemed complete when all English ivy growing up into trees have been severed.

No invasive species management is proposed within the water treatment facility parcel, as all geotechnical boring will be done within a gravel access and parking area and very little environmental impacts will occur on account of this project at this site.

3.3 Soil Surface Restoration

Soil surfaces should be returned to pre-project or better condition.

Test well #1 will require recontouring the slope as well as the installation of proper best management practices (BMPs) to minimize soil erosion at the test well #1 location and all areas associated with the temporary access road. Proper BMPs for soil stabilization include covering all exposed soil with weed-free straw to a depth of 1 centimeter, as well as the placement of biodegradable straw wattles (no plastic netting) at the downhill slope of the soil disturbance.

No slope recontouring is needed at test well #2, as this well will be placed in a parking and access area associated with an existing well; however proper BMPs must be installed to minimize soil erosion. Proper BMPs for soil stabilization includes covering all exposed soil with weed-free straw to a depth of 1 centimeter, as well as the placement of biodegradable straw wattles (no plastic netting) at the downhill slope of the soil disturbance.

No slope recontouring is needed at the geotechnical boring location, as all work will be conducted within a gravel access and parking area. Due to the use of the area for access to existing tanks and water treatment facilities, soil surface restoration will consist of the placement of new gravel into areas disturbed during the drilling process after spoil soils have been removed. No weed-free straw is recommended, however biodegradable straw wattles (no plastic netting) should be placed at the downhill extent of new gravel placement to prevent fines from flowing into adjacent waterways during storm events.

All spoil soils generated during the test well and geotechnical bore drilling will be removed and disposed of properly as described in the project description.

3.4 Recommendations

The following recommendations are provided to enhance the restoration of the area disturbed during this project; however, these measures are not required as part of the restoration efforts associated with the project.

- Excavate and set aside native plants (sword fern, salmonberry, etc.) from within the project footprint prior to construction. If these plants are maintained (i.e. watered) for the duration of construction, they could be replanted into disturbed areas following completion of the project. This would only be feasible at test well #1 which has some native plants present.
- Use large woody debris to block the access road to test well #1 following completion of soil restoration efforts. Placement of large woody debris also aids in soil stabilization, water retention, and creates habitat for amphibians.

4.0 Responsible Parties

The following participants are responsible for the completion of this restoration effort. The responsibilities of each party are described below.

4.1 Project Proponent

The project proponent, WCSD, will be ultimately responsible to ensure that the approved restoration plan is implemented and successful. WCSD will be responsible for financing the root avoidance, English ivy removal, and soil recontouring and stabilization measures.

4.2 Project Biologist

Monitoring of the restoration area during construction and post-construction will be the responsibility of a qualified biologist. The project proponent is responsible for retaining the project biologist. The project biologist will coordinate with WCSD staff following completion of construction to ensure that all restoration measures have been conducted appropriately. The project biologist will also provide WCSD with a letter signifying completion of restoration efforts should they be completed satisfactorily.

5.0 Schedule and Performance Standards

Restoration efforts will be completed during construction and post-construction, whenever well drilling takes place. Root avoidance will occur concurrently with development of an access road to test well #1. Ivy collaring can occur during construction or post-construction, whenever is most convenient. Soil surface restoration must occur post-construction prior to a rainfall event.

Successful restoration will be defined as thoroughly conducting all measures described above. These measures are summarized below:

- Root avoidance will be deemed successful if maximum root avoidance was attempted as evidenced by a minimal amount of excavation for the access road to test well #1,
- English ivy removal will be deemed successful if all ivy climbing trees within APNs 514-132-007 and -008, and 514-133-001 are collared,
- Soil surface restoration will be deemed successful if all areas of soil disturbance are covered in weed-free straw at a sufficient depth (or gravel at the water treatment site), straw wattles are properly installed in the correct locations, and soils are recontoured within the access road and vicinity of test well #1.

6.0 Completion of Restoration

Following completion of the restoration efforts, the project biologist will visit the test well sites and geoboring site to take photos and record conditions. Should restoration efforts be satisfactorily completed, a brief letter, including photo documentation of the restoration efforts, will be written documenting completion of restoration efforts. The letter will be sent to WCSD and applicable agencies. Should restoration efforts be incomplete or poorly conducted (i.e. straw too thin or straw wattles misplaced), WCSD will be notified and the issues resolved before a letter of completion is written.

7.0 References

- California Invasive Plant Council. (2020). California Invasive Plant Inventory Database. Berkeley, California. Accessed April 2020 at: <http://www.cal-ipc.org/paf/>.
- USDA. (2019). Fire Effects Information System Database, Species Review: Hedera Helix. Accessed April 2020 at: <https://www.fs.fed.us/database/feis/plants/vine/hedhel/all.html#RegenerationProcesses>.

Site Photos **1**



Photo 1: Looking southwest toward the existing well from the proposed test well #1 location. The area in the photo will be used to access test well #1 for installation. Note English ivy cover and mature coast redwood trees. Photo taken July 2019.



Photo 2: Looking northeast from test well #1 location into surrounding second-growth redwood forest. Note English ivy extending into canopy of surrounding conifers. All climbing ivy within the WCSD well parcels would be collared. Photo taken July 2019.



Photo 3: Looking northeast at proposed test well #1 location. Note English ivy in surrounding conifer trees and as ground cover in proposed well location. Photo taken February 2020.



Photo 4: Looking northeast at test well #2 location. Note the managed condition of the area and existing well. Gravel and compacted soil characterize the site as well as ruderal vegetation. Photo taken July 2019.



Photo 5: Looking south at test well #2 location. Note managed condition of the area as well as minimal vegetation and surrounding development. Photo taken July 2019.



Photo 6: Looking east across proposed geotechnical boring location. Note gravel and lack of herbaceous vegetation in boring location. Photo taken February 2020.



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ATTACHMENT 4
Referral Agency Comments and Recommendations

The project was referred to the following agencies for review and comment. Those agencies that provided written comments are checked off.

Referral Agency	Response	Recommendation	On File
County DPW, Land Use Division	✓	Approval	✓
California Coastal Commission			
Building Inspection Division	✓	Additional Info needed	✓
Environmental Health			
CDFW			
Yurok Tribe			