on Behalf of

PROJECT SUPPORT STATEMENT

AT&T PROJECT NAME: CONNECT AMERICA FUND II (CAF II) PROJECT

DEVELOPMENT APPLICATION FOR AT&T SITE "GUALALA"

AT&T SITE NUMBER: CCL05838

AUTHORIZED AGENT:

EPIC WIRELESS GROUP, LLC

ZONING MANAGER:

JARED KEARSLEY; 916-755-1326; jared.kearsley@epicwireless.net

PROPERTY OWNER: ARENA UNION ELEMENTARY SCHOOL DISTRICT

(707) 882-2803

APN: 145-091-22-00

39290 OLD STAGE ROAD, GUALALA, CA 95445

- **PROJECT'S BACKGROUND AND OBJECTIVES**
- **SEARCH RING'S DESCRIPTION AND OBJECTIVES**
- **POTENTIAL CO-LOCATIONS**
- **ALTERNATIVE SITE ANALYSIS**
- **SUBJECT PARCEL AND SITE DETAILS AND SUPPORTING DOCUMENTS**
- **OPERATIONAL STATEMENT**
- **FIRE SUPPRESSION SYSTEM**

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CAF II Project Background and objectives:

AT&T is participating in a Federal Government funded project called Connect America Fund (CAF) – which is to provide underserved areas throughout the United States in general and throughout Mendocino County in particular with hi-speed broadband internet. The build-up of hi-speed broadband internet throughout rural/underserved areas will not only drive economic growth in rural America, but will expand the online marketplace nationwide, creating jobs, educational and businesses opportunities across the country. The CAF project is required to provide broadband internet services capable of 10 Mbps download and 1 Mbps upload speeds.

AT&T has the necessary technology that allows them to build out their territory in Mendocino County with the much demanded hi-speed broadband internet to help improve the county's rural infrastructure. AT&T's basis for transmitting and receiving hi-speed broadband internet to residences is executed by providing one site with either a microwave fiber hop or a direct fiber line to the site and transferring the high speeds of fiber to each Living Unit (LU) via wireless signals. Each LU being provided with the service will have a small square antenna located in a vantage point on the property where it has a direct line of site to the tower. The square antenna will send and receive wireless broadband internet providing the LU with a minimum of 10/1 Mbps download and upload speeds, respectively.

AT&T's secondary objective is to provide and enhance AT&T's Wireless Telecommunications services (cellular services) to underserved areas. Cellular services go hand in hand with building the internet infrastructure throughout these underserved areas. People today rely on their mobile devices not only for educational and business purposes, but also for emergency services. Increasing AT&T's cellular coverage and capacity throughout Mendocino County's rural areas while providing wireless broadband internet will greatly assist with enhancing the county's economic growth and the area's infrastructure.

Given the need for direct line of site to residences, a taller than typical tower will be necessary in order to provide wireless broadband internet services to as many homes in the targeted areas as possible. During the tower design phase, the Radio Frequency (RF) engineers study many variables including surrounding tree heights, tree densities, population densities, and surrounding hill tops, in order to properly design a sufficient tower height with the goal of achieving the FCC's track census block mandates of reaching specific LU coverage objectives per area. Living Unit (LU) coverage objectives are provided by the RF engineer using density maps and are based on the area's approximate population. AT&T's goal is not only to reach the coverage objective, but to outperform the coverage objective to ensure that the maximum amount of homes are being provided this service while taking into consideration a small margin of error during the simulation process.

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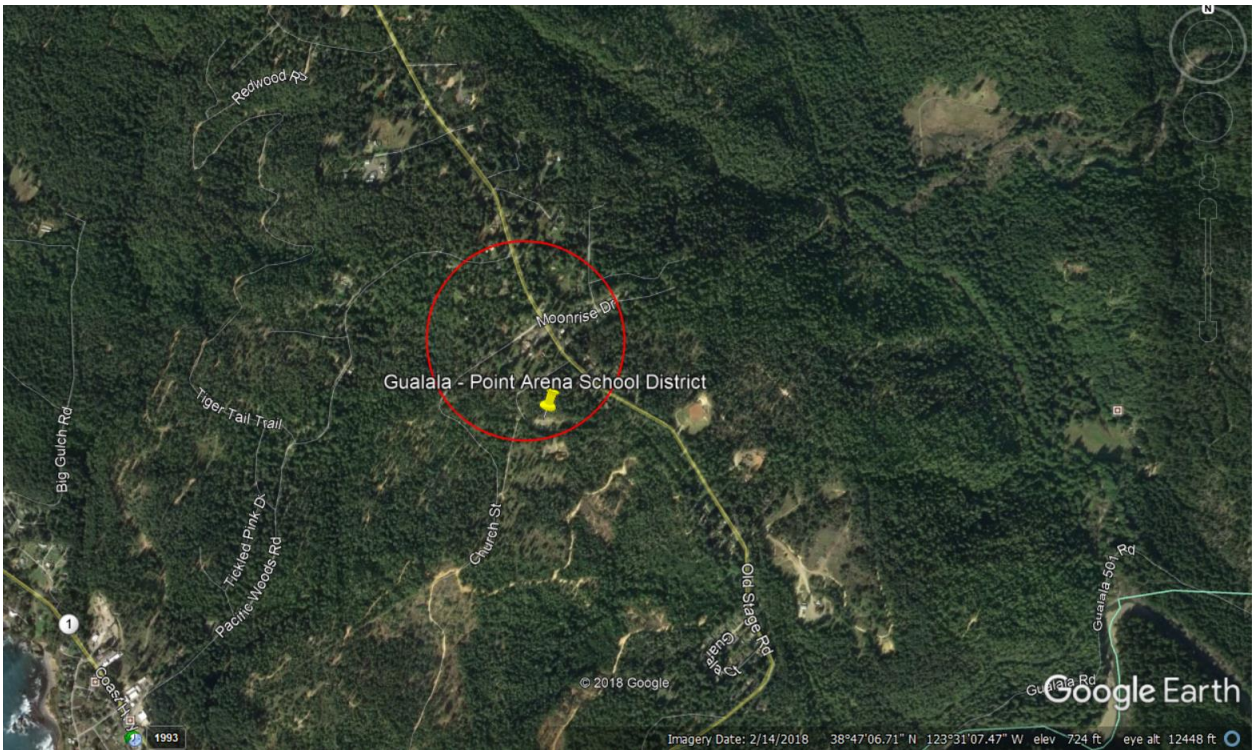
Search Ring's Description and Objectives:



AT&T Mobility is proposing to build and maintain an unmanned wireless telecommunication facility consisting of a 45' x 45', 2,025 square foot enclosed compound (lease area). The compound will include a 123-foot Lattice tower, one equipment shelter, and one 15KW standby DC Diesel Generator. This facility will be located at 39290 Old Stage Road, Gualala, CA 95445, within Mendocino County's jurisdiction on a 10.5-acre RMR40 zoned property.

AT&T's objective for the Gualala site is to provide wireless hi-speed broadband internet to nearby residences and to fill a significant mobility coverage gap in the service area. The site's elevation is approximately 722 feet while the surrounding community's elevation averages around 700 feet, giving the homes within the surrounding community great potential for line of site to the tower. After running a coverage simulation at the site location, AT&T is anticipating meeting and beating their FCC coverage objective for this search ring.

The site location is the least intrusive option in the area even though the search ring is surrounded to the north by residentially zoned properties. The dense redwood foliage will naturally stealth the Lattice tower from the public right-of-way and nearby dwellings. All properties directly to the east, south, and west are zoned RMR 40.

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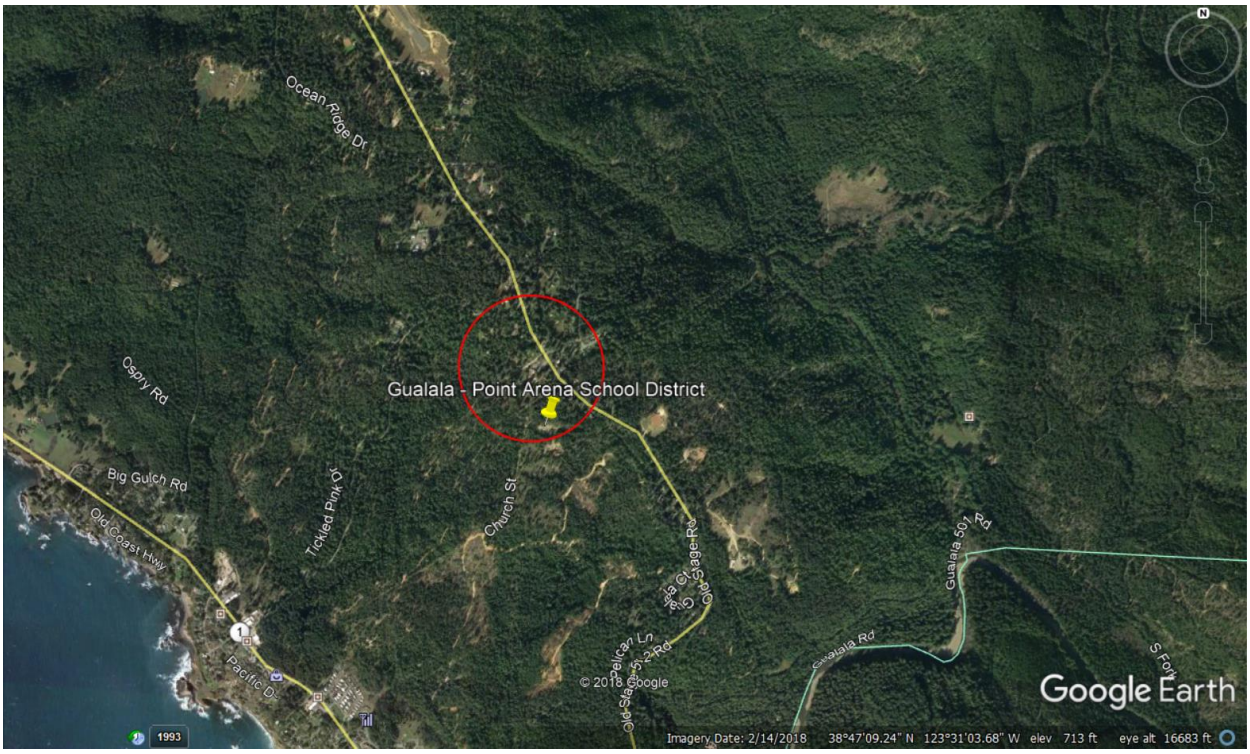
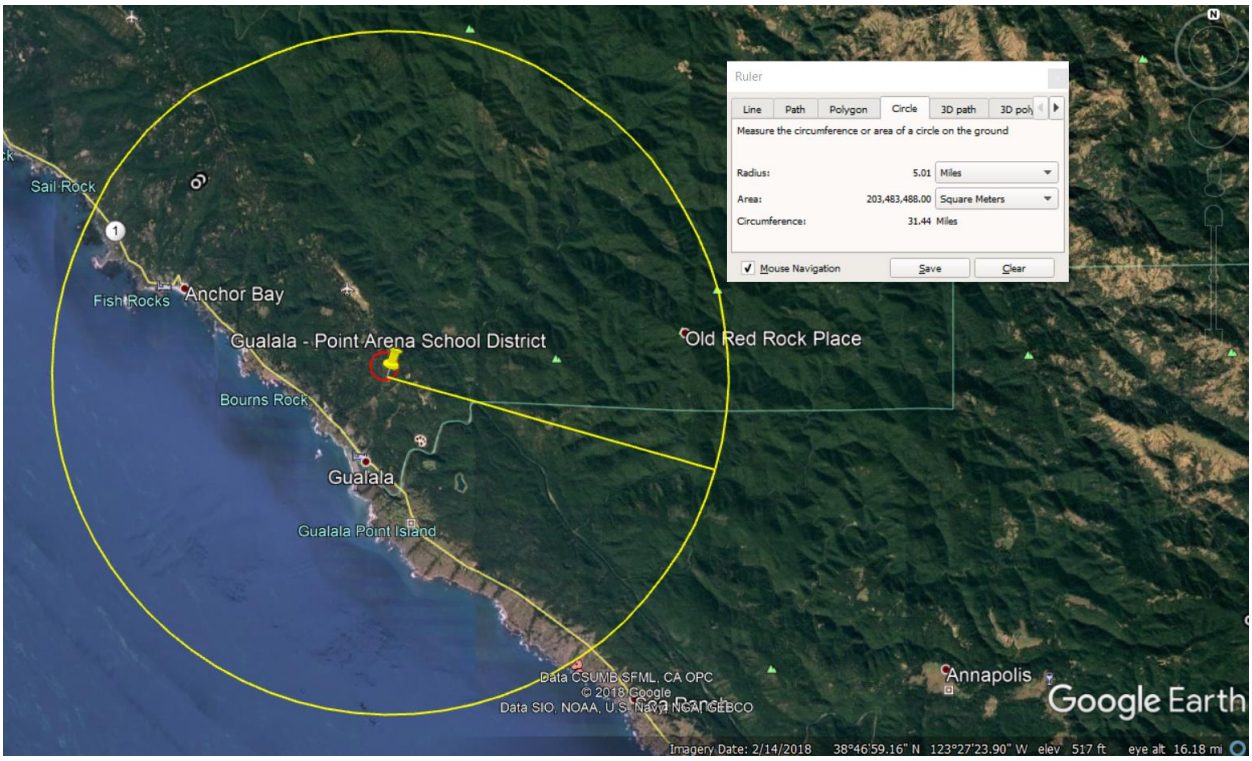
Potential Co-locations:



There are no potential Co-location opportunities in the near vicinity of the provided Search Ring. The targeted area is a relatively low populated area, therefore, typical cellular services are less prone to be present.

Map of all other wireless communications facilities subject to a use permit within five miles of the proposed facility.



According to Mendocino County's GIS map overlay, there are two permitted wireless telecommunication sites within five miles of the proposed facility. Neither of the two facilities would fill the significant mobility coverage gap or fulfill the CAF II LU coverage requirements for the Search Ring. The two existing towers are approximately 4 miles to the northwest. Furthermore, the two towers were not constructed to withstand AT&T's telecommunications equipment load, but rather a load for smaller equipment such as FM Radio and Cable TV equipment.

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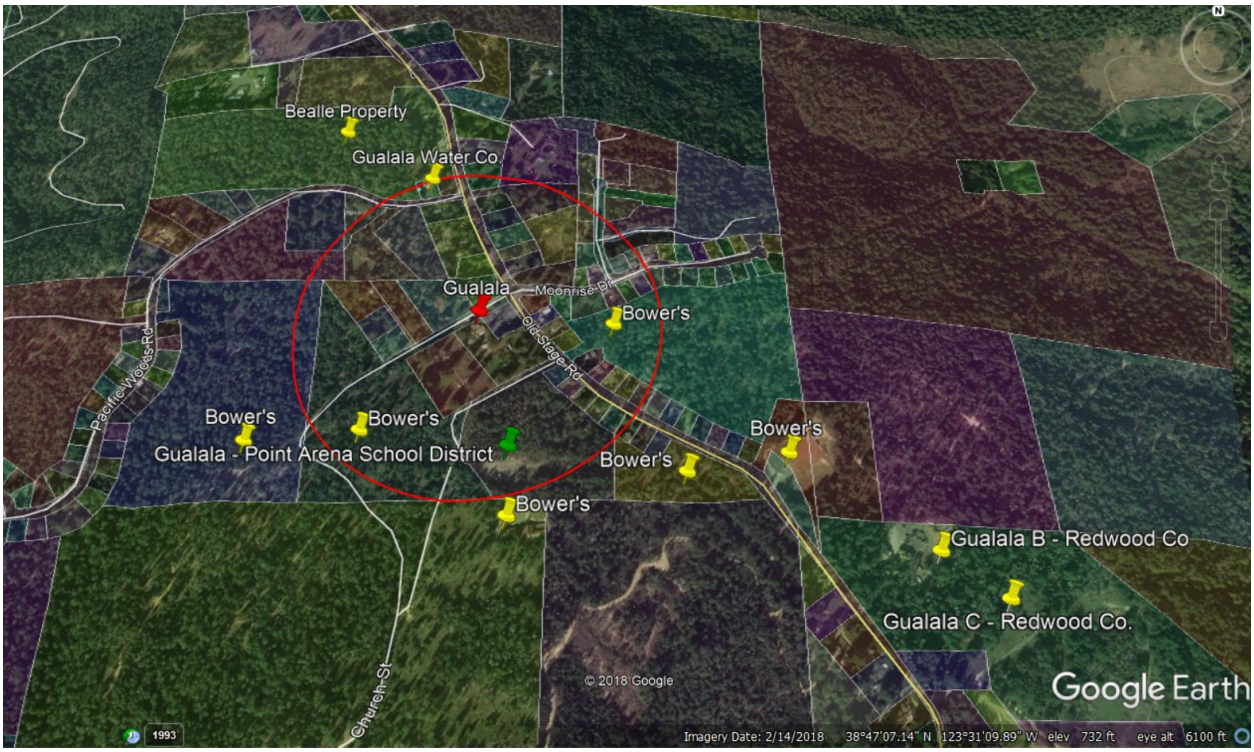
Alternative Site Analysis:



Above is a map showing the Search Ring (center is the red pin), Proposed Site (green pin) and the alternative sites (yellow pins) that were considered for placement of the telecommunications facility. The nature of the Search Ring caused complications while searching for viable candidates. Given the County's 110% and 500% setback requirements, the clear majority of the parcels were automatically disqualified per their size. Only a few select properties were large enough to allow for the setbacks. Most of the large parcels are owned by The Bower Limited Partnership, who at which is not interested in leasing space to AT&T for a wireless facility. Epic/AT&T entertained searching outside of the Search Ring to the southeast within Gualala Redwood Timber's properties and found that the coverage results were not satisfactory. Epic/AT&T then searched to the north at higher grounds but only had one potential viable property – Beall Property. The Beall Property was under probate at the time and therefore was no longer viable. Additionally, the Beall property is surrounded by more dwellings and therefore more visually impactful to the community. The Water Tank site was looked at, however, the parcel is too small per the setback requirements. Epic located Point Arena Elementary School District's property given the size and discreteness of the Property. Epic/AT&T and the School District worked together on finding a location that would be hidden from the public's views and surrounding dwellings. We initially located at the south side of the property directly adjacent to one of the bus parking tents. Unfortunately, the Survey showed the southern property line closer than originally expected which triggered Epic to reach out to Bower's to consent to a Setback Reduction less than 110%. Bower refused to consent to said setback reduction, so, AT&T and the property owner agreed to move north about 100 feet. This move resulted in the 500% setback to be encroached on with the properties to the north. Epic sent out consent letters for a reduction to the 500% setback to five properties, all pending responses by the owners. Epic finds the current

location to be the least intrusive location on the property, and, in the entire search ring. Each Alternative Site is further discussed below:

Gualala Alternative Candidate B:

39635 Old Stage Road, Gualala, CA 95445

Latitude/Longitude: 38.782333, -123.513853

Proposal – New Tower

Considerations:

Candidate B is located approximately 0.45 miles southeast of the center of AT&T's search ring. The proposed tower would be located on a 40 acre, RR zoned property owned by Gualala Redwood Timber Co.. The property is located on the east side of Old Stage Road and the site was proposed on the north side of the property. Candidate B was chosen as AT&T's second preferred candidate as the RF Engineer's simulation yielded fewer LU's than the subject site located at 39290 Old Stage Road. Since this site is outside of AT&T's Search Ring/Targeted Area, and therefore, produced insufficient coverage results, AT&T disqualified the location and deemed it nonviable.

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Gualala Alternative Candidate C:

39635 Old Stage Road, Gualala, CA 95445

Latitude/Longitude: 38.781778, -123.512244

Proposal – New Tower

Considerations:

Candidate C is located approximately 0.52 miles southeast of the center of AT&T's search ring. The proposed tower would be located on a 40 acre, RR zoned property owned by Gualala Redwood Timber Co.. The property is located on the east side of Old Stage Road and the site was proposed in the center of the property. Candidate C was chosen as AT&T's third preferred candidate as the RF Engineer's simulation yielded fewer LU's than the subject site located at 39290 Old Stage Road. Since this site is outside of AT&T's Search Ring/Targeted Area, and therefore, produced insufficient coverage results, AT&T disqualified the location and deemed it nonviable.

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Actual View of the Proposed Location:

The proposed lease area is rather centrally located on the property. The site will not interfere with the existing use of the property. Access will be directly off of Old Stage Road. The site is elevated just above the surrounding area and has great potential for line of site to the communities near the subject parcel. The property is covered with redwood foliage creating natural stealthing of the Facility and Tower from the public right of way and dwellings.

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Overhead View of Lease Area and Distances to nearby residences:

Emergency 15kw Diesel Generator and 1 Ton HVAC Noise Analysis:

- **Equation and Calculation Method:**

The sound analysis methods and results are hypothetical only, using Sound Level and Distance calculations. These calculations do not take outside sounds, trees, hills, buildings, and other sound dampening variables into consideration, but, only raw sound levels after specific traveled distances which results in the worst case scenario for the sounds of the onsite backup generator and HVAC systems.

Formulas to calculate the sound level L in dB (sound pressure level or sound intensity level) in dependence of the distance r.

Sound level L and Distance r

$$L_2 = L_1 - \left|20 \cdot \log\left(\frac{r_1}{r_2}\right)\right| \qquad L_2 = L_1 - \left|10 \cdot \log\left(\frac{r_1}{r_2}\right)^2\right|$$

$$r_2 = r_1 \cdot 10^{\left(\frac{|L_1 - L_2|}{20}\right)} \qquad r_1 = \frac{r_2}{10^{\left(\frac{|L_1 - L_2|}{20}\right)}}$$

Sound pressure level (dB)	=	Sound intensity level (dB)
$L_2 = L_1 - \left\|20 \cdot \log\left(\frac{r_1}{r_2}\right)\right\|$		$L_2 = L_1 - 10 \cdot \lg\left(\frac{r_1}{r_2}\right)^2$

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Sound Specifications:

- Emergency Generator Model: SD015 Generac (Spec Sheet included with Packet)
  - Average decibel (dBa) level at 23 feet = 65 dBa
- 1 Ton HVAC Model: HVAC MarvairSlimPacECUA12ACA
  - Average decibel (dBa) level at 30 feet = 46.5 dBa

Findings:

1. Distance to the nearest adjacent Property Line = 450'
   a. Generator Decibel level at 450' = 39.17 dBa
   b. HVAC Decibel level at 450' = 22.98 dBa
2. Distance to the nearest Residence = 480'
   a. Generator Decibel level at 480' = 38.61 dBa
   b. HVAC Decibel level at 480' = 22.42 dBa

Conclusion:

After calculating decibel levels at the nearest property line and nearest residence, the onsite Emergency Backup Generator and the HVAC unit is within Mendocino County's noise level standards according to Mendocino County's Wireless Guidelines – Noise Standards.

l. Generators shall be equipped with mufflers and spark arresters, and shall not produce noise levels exceeding 50 dba at the nearest off site residence. Routine testing and maintenance shall be limited to weekdays between 8:30 a.m. and 4:30 p.m. Repairs and emergency use are not included in this limitation.

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Operation Statement:

This project is an AT&T Mobility unmanned Telecommunication Wireless Facility. It will consist of the following:

NEW SITE BUILD UNMANNED TELECOMMUNICATIONS FACILITY.

1. GRAVEL ROAD IMPROVEMENT
2. 45' X 45' FENCED LEASE AREA
3. INSTALL AT&T APPROVED PRE-MANUFACTURED WALK IN EQUIPMENT CABINET AND ASSOCIATED INTERIOR EQUIPMENT
4. ADD (1) NEW GPS UNITS
5. ADD 123'-0" LATTICE TOWER
6. ADD (12) PROPOSED & (4) FUTURE ANTENNAS
7. ADD (24) PROPOSED RRUS
8. ADD (4) SURGE SUPPRESSORS
9. ADD (2) FUTURE 4' MICROWAVE DISHES
10. ADD 6'-0" HIGH CHAIN LINK FENCE W/ VINYL SLATS
11. ADD 15KW DC DIESEL GENERATOR WITH ATTACHED DIESEL STORAGE TANK

The facility will operate 24 hours a day 7 days a week. Maintenance workers will visit the site approximately once a month. A 15-foot-wide access route will be created directly from Old Stage Road. There will be minimal noise from the standby generator, turning on once a week for 15 minutes for maintenance purposes limited to Monday through Friday between 8:30am and 4:30pm and during emergency power outages. The Facility is approximately 480 feet west to the nearest residences. The location is surrounded by tall and thick foliage which will naturally stealth the Facility and Tower.

The tower will be built to provide co-location opportunities for future carriers or public safety entities.

Fire Suppression System:

A 15-foot-wide access route will be created directly from Old Stage Road. A Hammer Head Fire Turnaround will be proposed within the access route proceeding the driveway. A Fire Department Knox Box will be located at the Facility's access gate. Additionally, a 2A:20BC Rated Fire Extinguisher in a weather resistant cabinet will be mounted on the exterior wall of the proposed shelter.

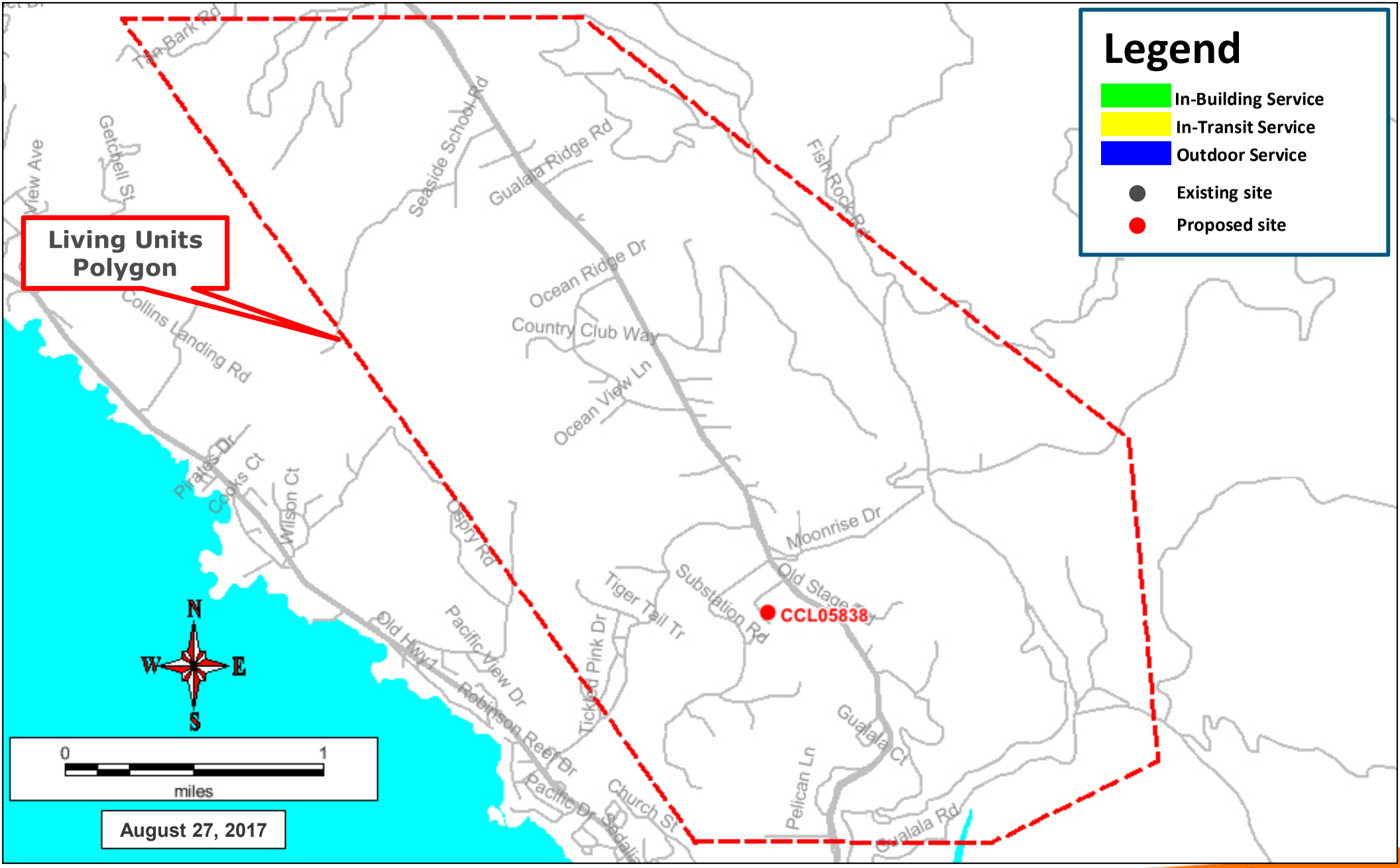
Conclusion:

Candidate A, 39290 Old Stage Road., meets and exceeds the FCC's mandated objectives for the targeted area of Gualala providing wireless services to the nearby community. The Lattice Tower design has been chosen to blend into the existing surrounding environment and sets beyond the required county setback of 110% of the tower's height. The site is also environmentally friendly given no trees or mature foliage will be removed. The site has been designed per fire code and is designed for future colocation opportunities. Overall this site location is the least impactful and least visually intrusive location within the Search Ring.

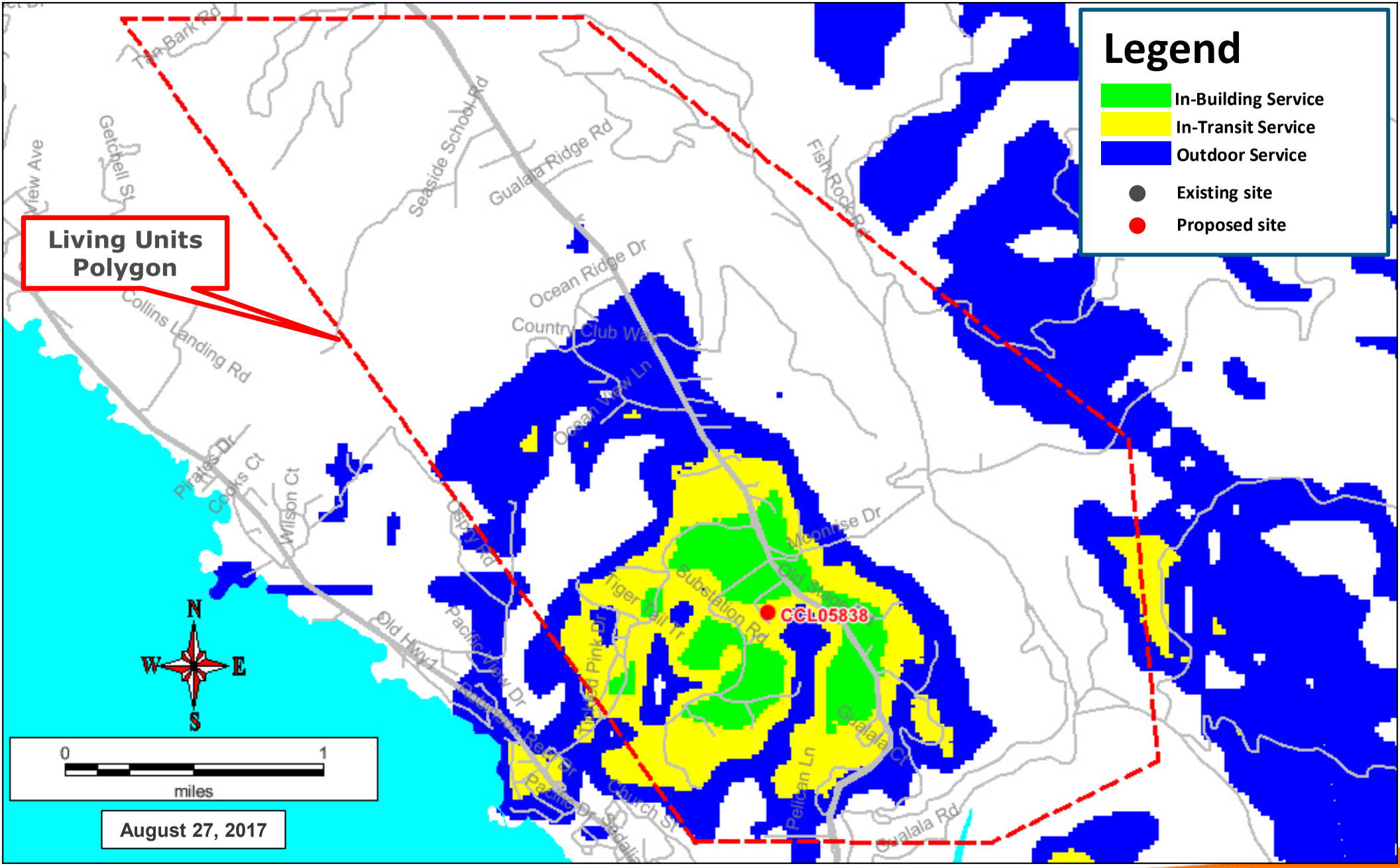
CCL05838 Zoning Propagation Map

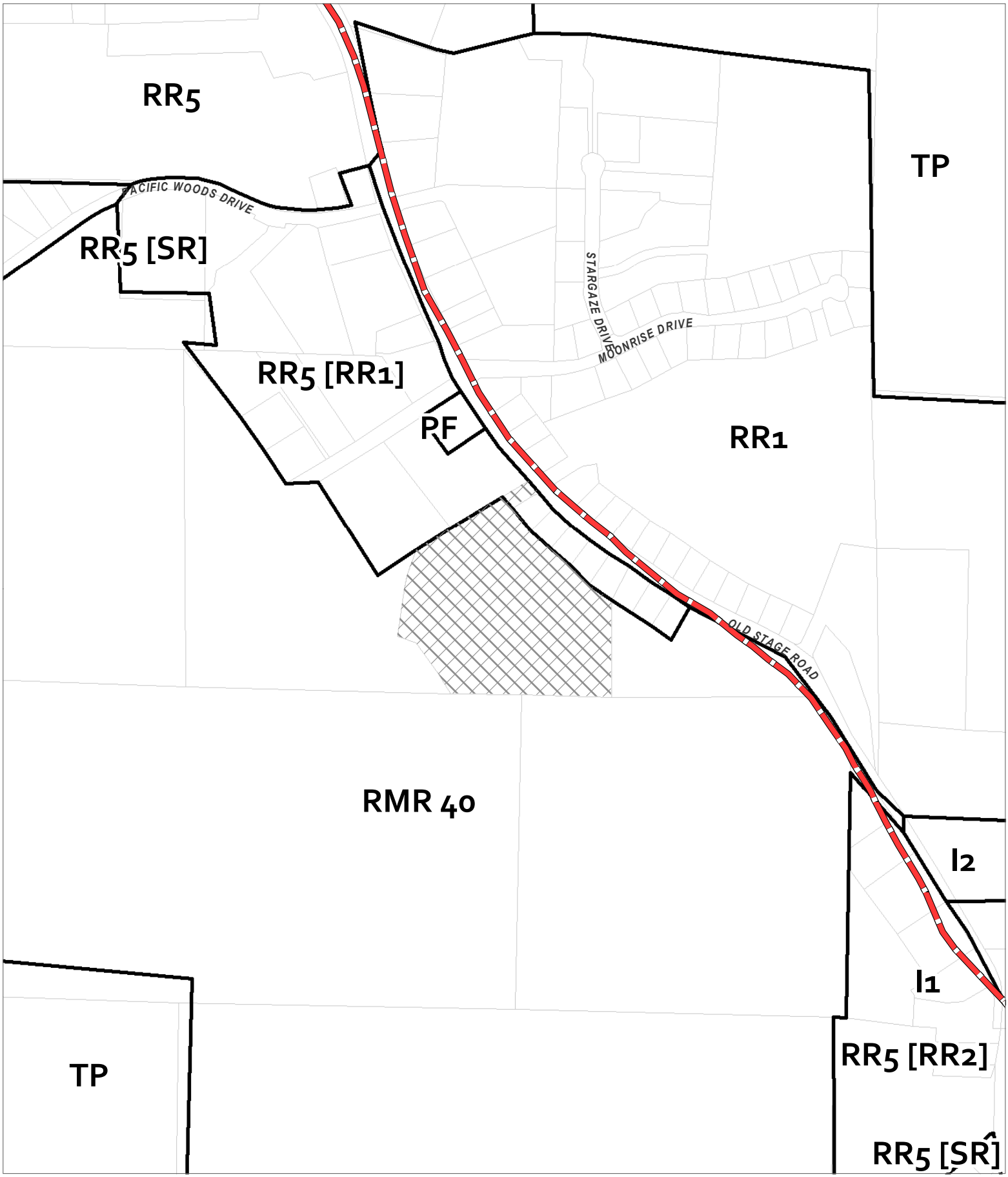
August 27, 2018

Existing LTE 700 Coverage



Proposed LTE 700 Coverage (RC = 120')



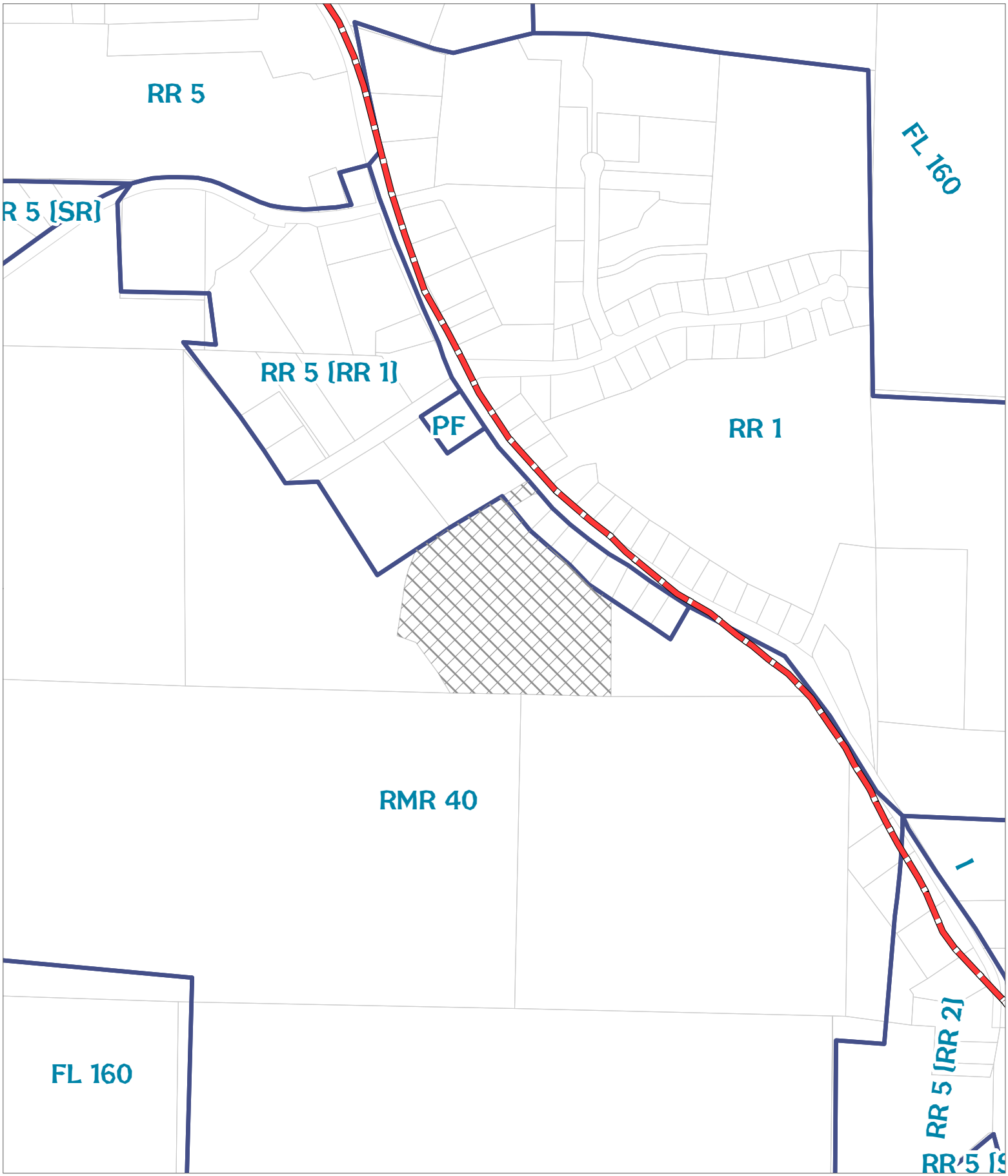


CASE: U 2018-0020
OWNER: Arena Elementary School Dist.
APN: 145-091-22
APLCT:
AGENT:
ADDRESS: 39290 Old Stage Road, Gualala

Coastal Zone Boundary
Zoning Districts
Public Roads

0 250 500 Feet
0 0.0425 0.085 Miles
1:6,000

ZONING DISPLAY MAP



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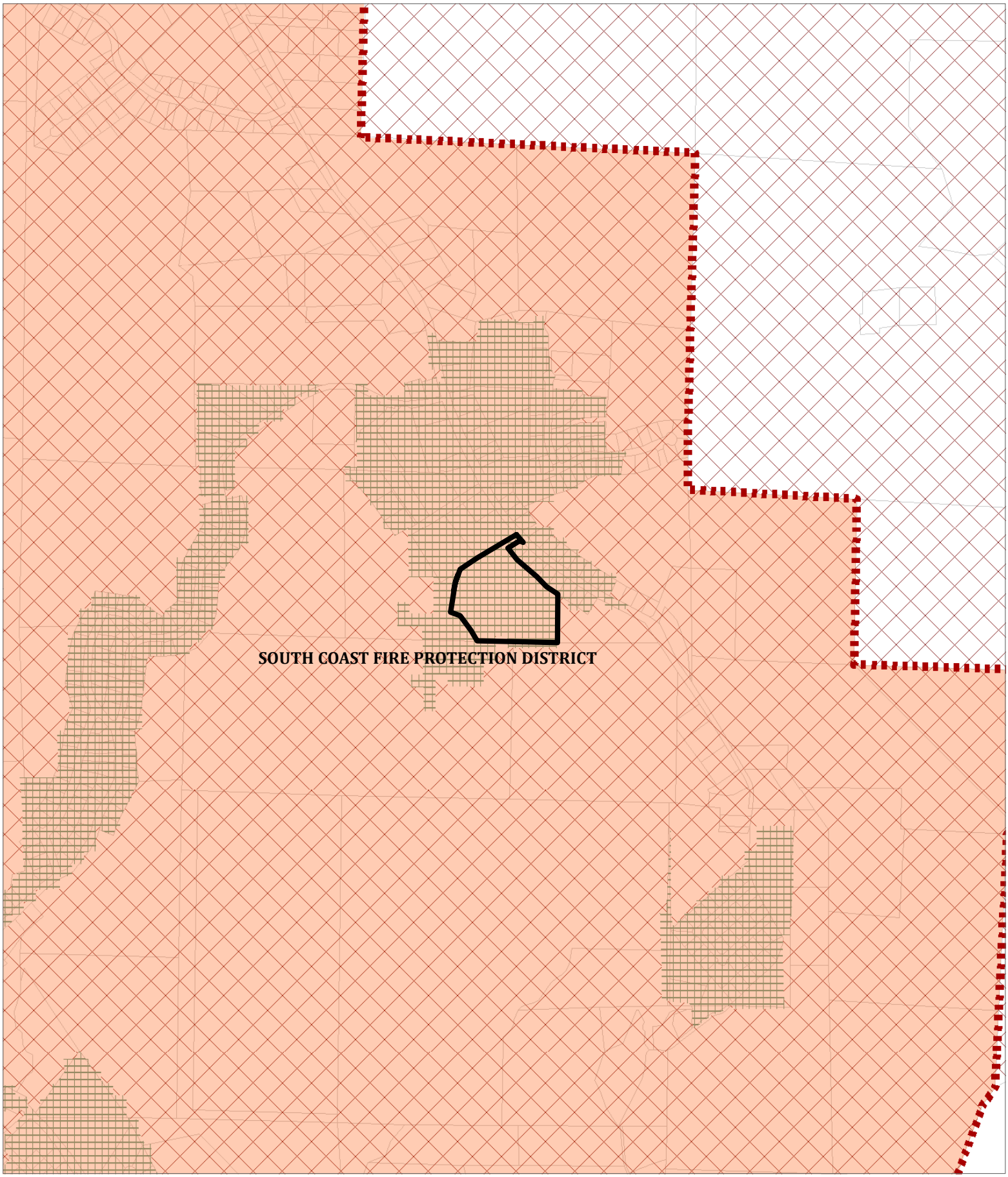
Coastal Zone Boundary

General Plan Classes

0 250 500 Feet
0 0.0425 0.085 Miles
1:6,000

GENERAL PLAN CLASSIFICATIONS



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OWNER: Arena Elementary School Dist.
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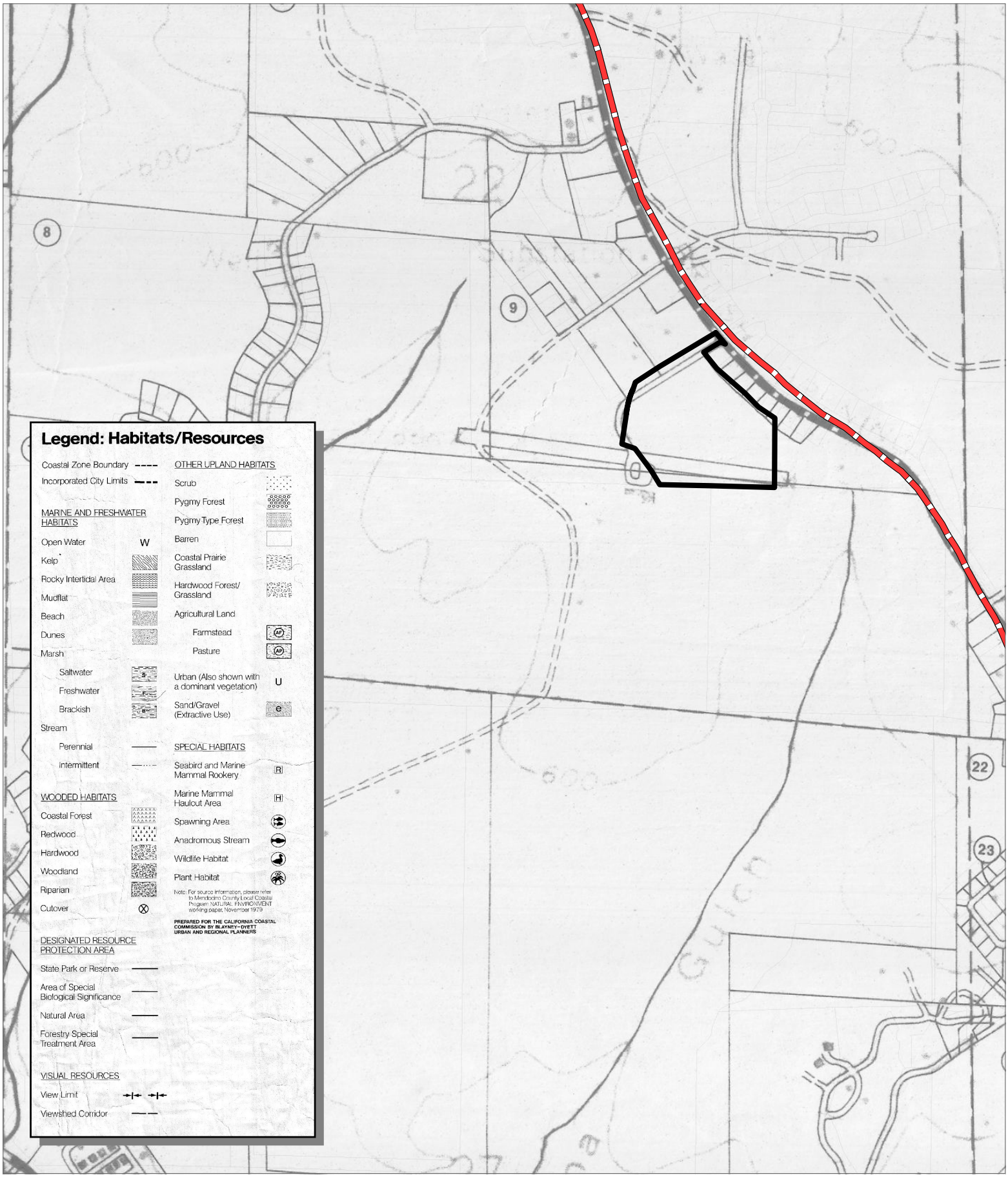
AGENT:
ADDRESS: 39290 Old Stage Road, Gualala

County Fire Districts
High Fire Hazard
Moderate Fire Hazard

0 500 1,000 Feet
0 0.075 0.15 Miles
N W E S
1:12,000

FIRE HAZARD ZONES & RESPONSIBILITY AREAS
STATE RESPONSIBILITY AREA



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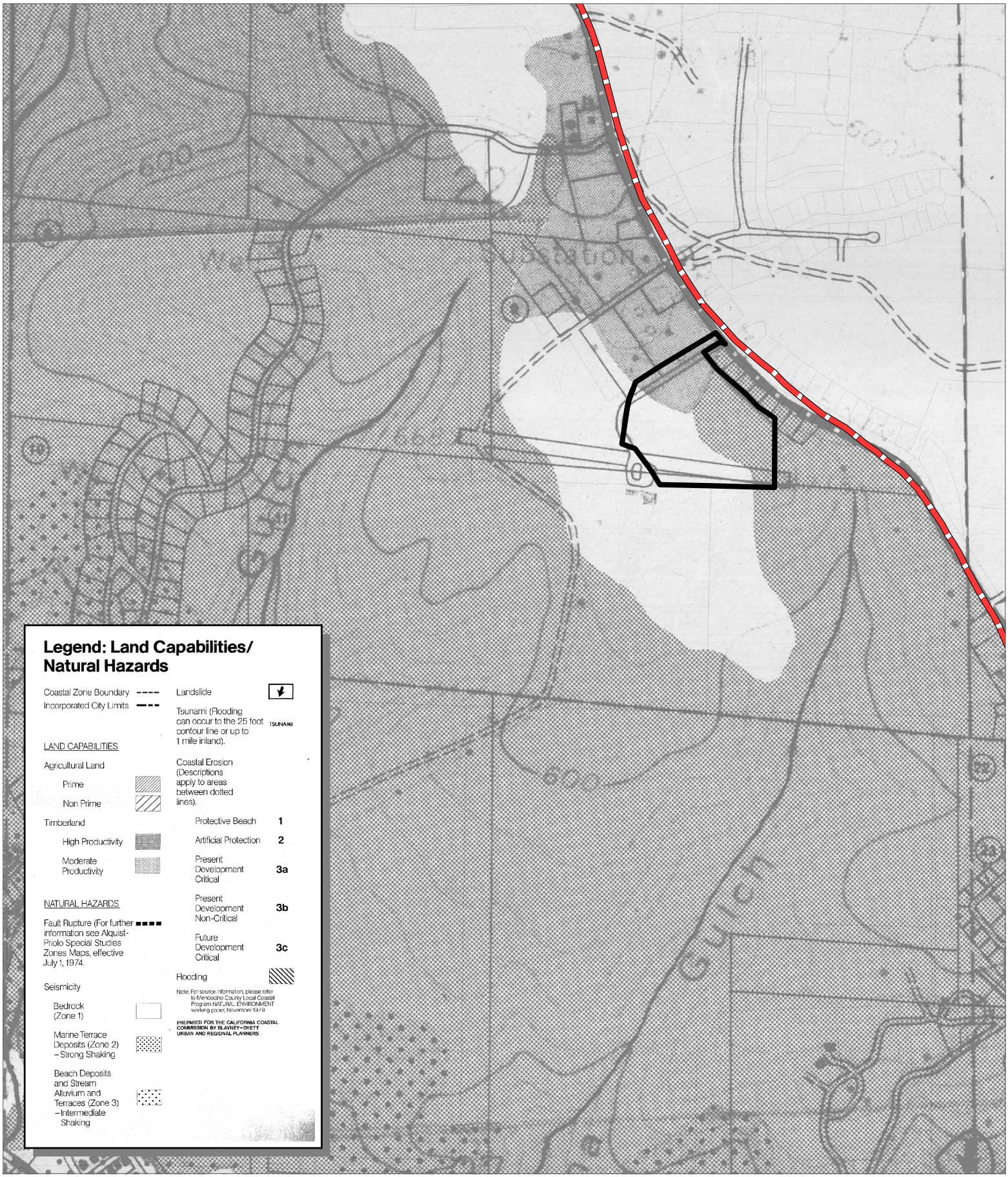
0 350 700 Feet
0 0.05 0.1 Miles
1:8,400

Coastal Zone Boundary

LCP HABITATS & RESOURCES



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AGENT:
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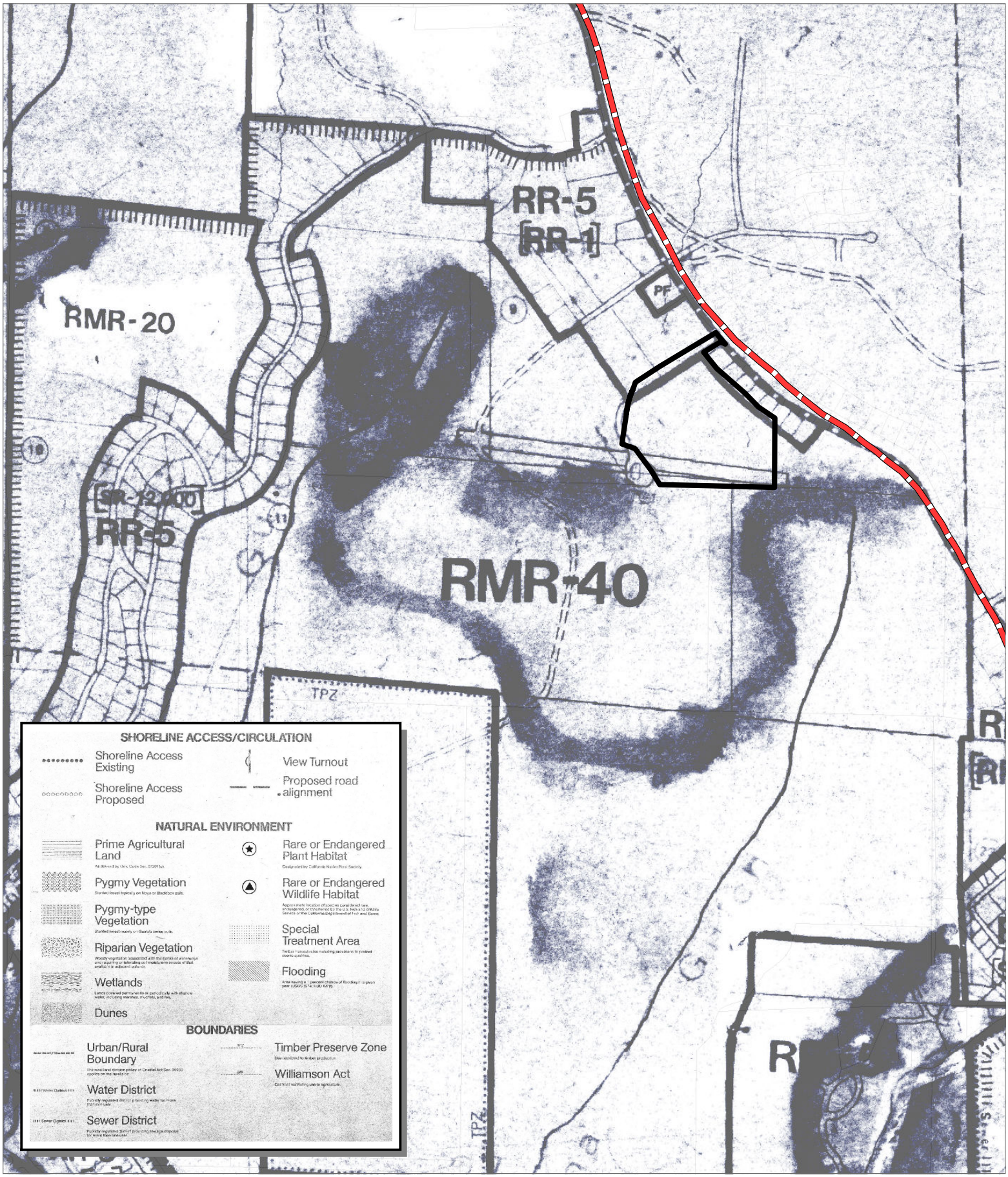
0 350 700 Feet
0 0.05 0.1 Miles
N W E S
1:8,400

Coastal Zone Boundary

LCP LAND CAPABILITIES & NATURAL HAZARDS



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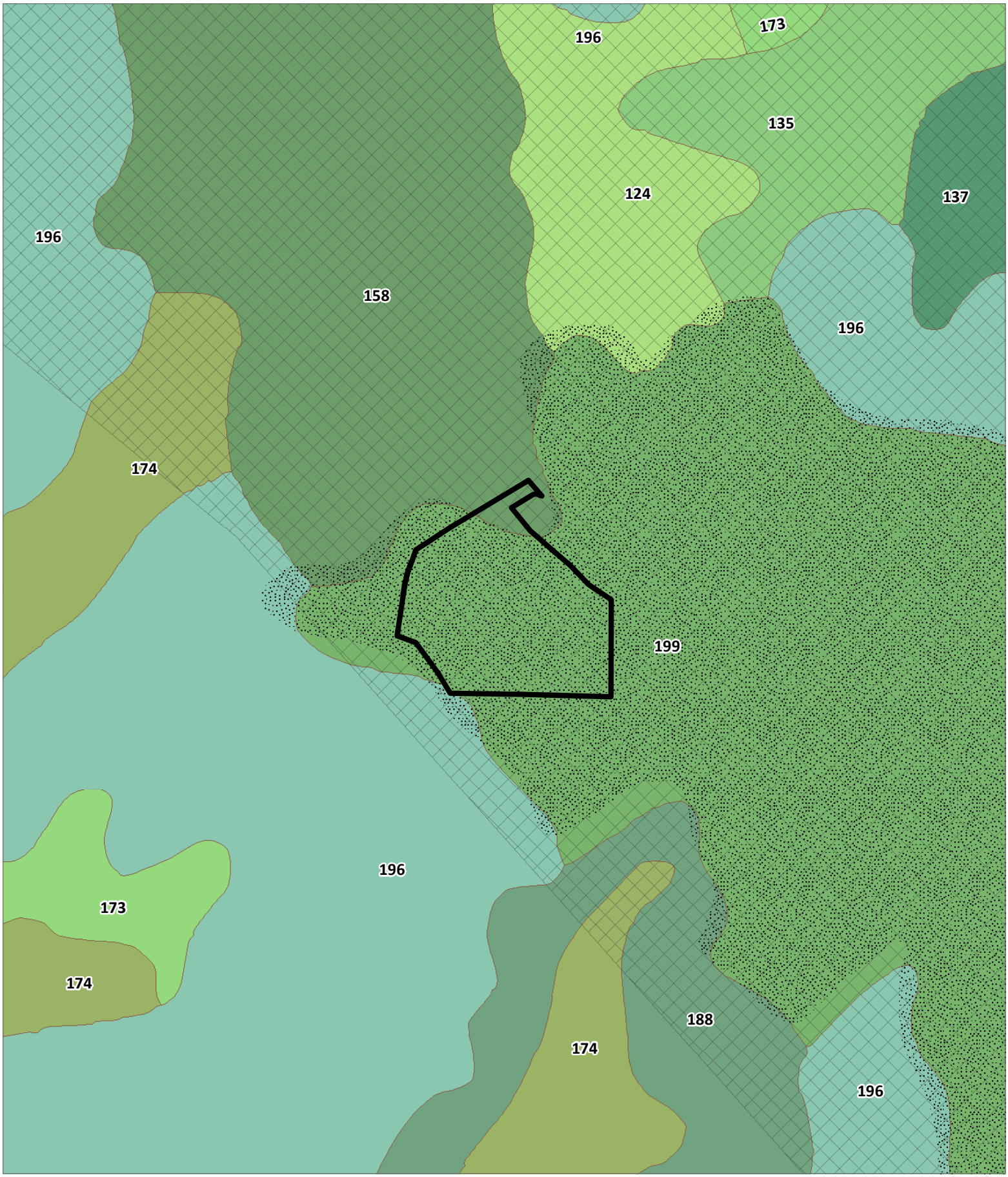
0 350 700 Feet
0 0.05 0.1 Miles
N W E S
1:8,400

Coastal Zone Boundary

LCP LAND USE MAP 31: GUALALA



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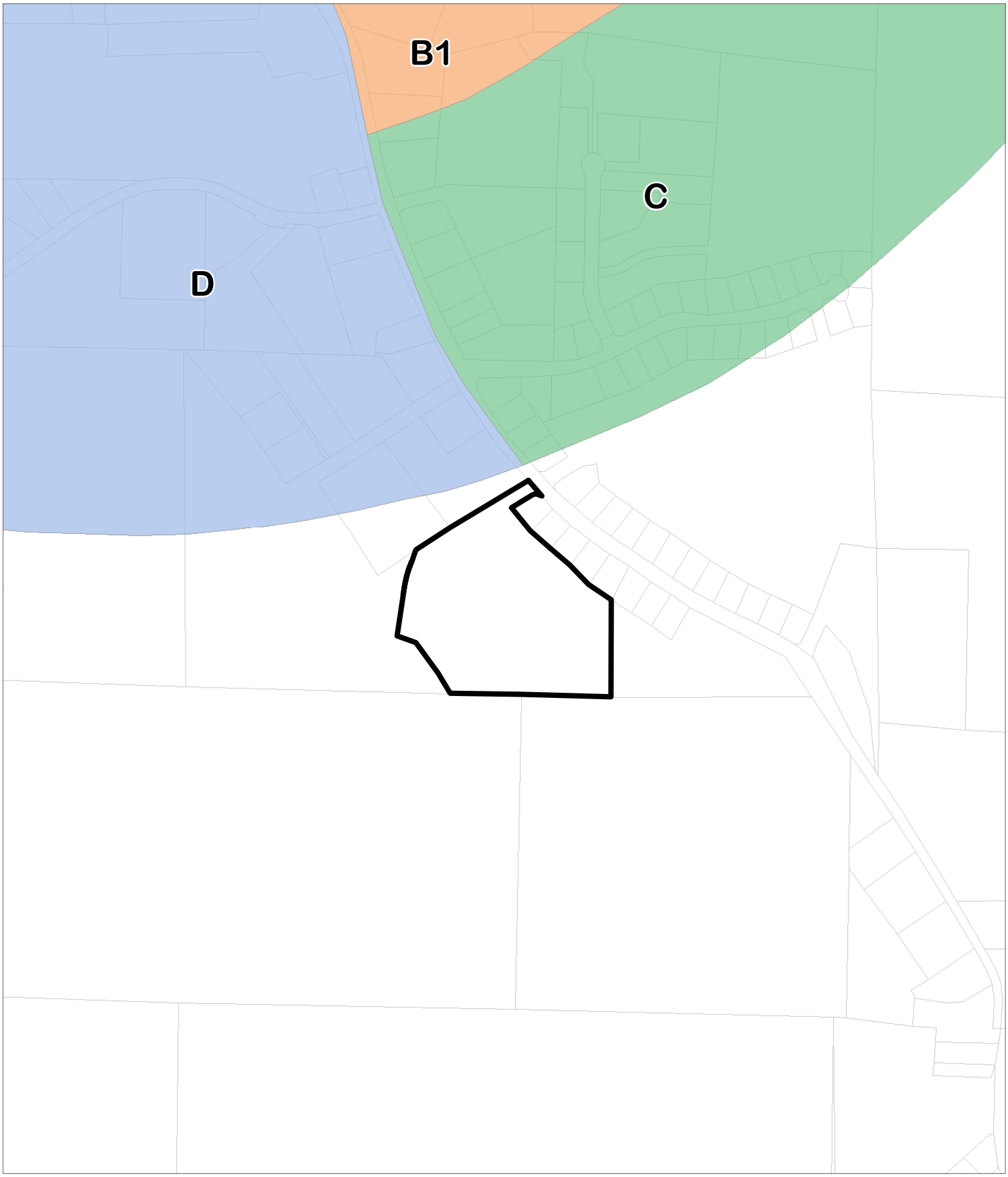
Shinglemill-Gibney Complex
Bishop Pine
Western Study Soil Types

0 250 500 Feet
0 0.0425 0.085 Miles
1:6,000

LOCAL SOILS



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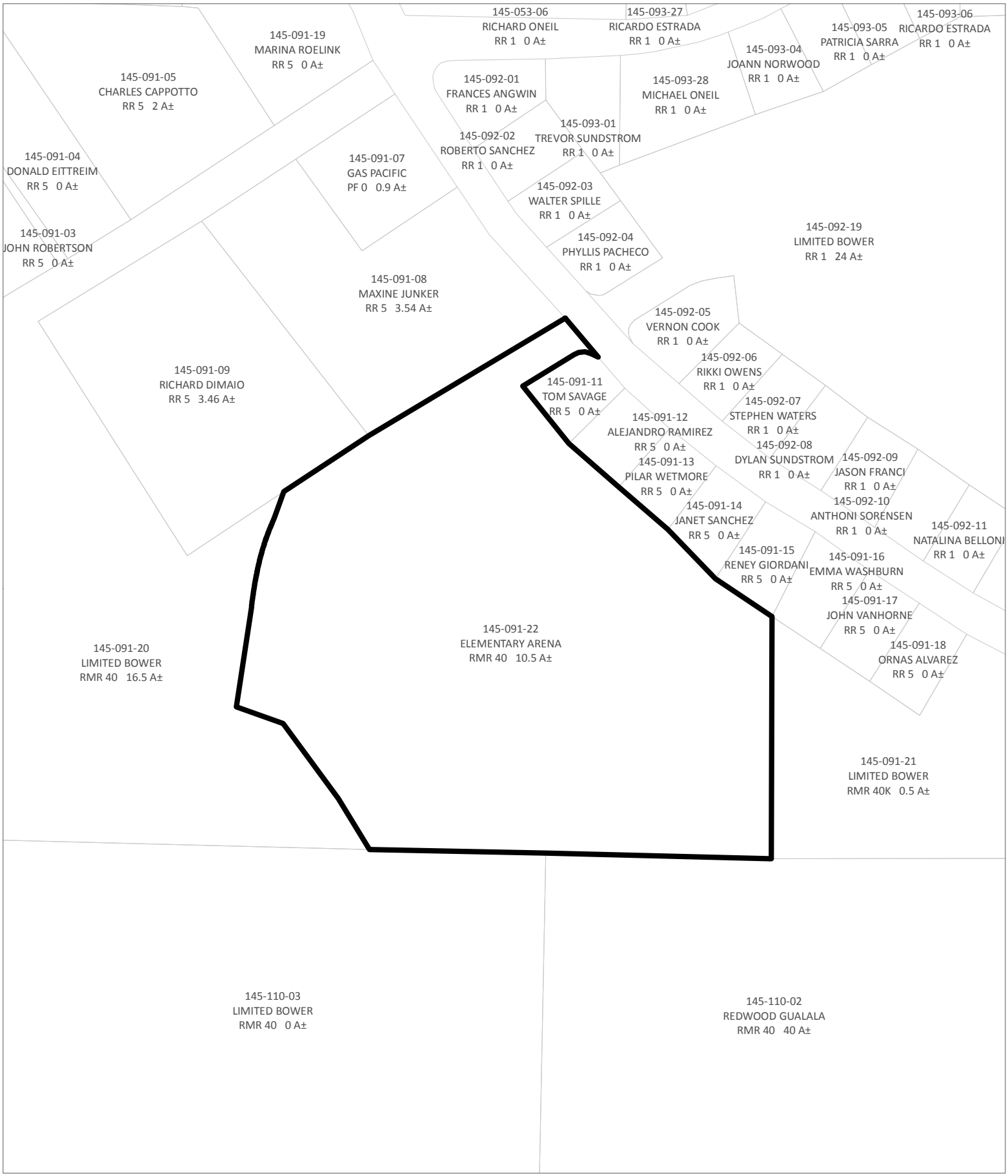
AGENT:
ADDRESS: 39290 Old Stage Road, Gualala

0 250 500 Feet
0 0.0425 0.085 Miles
N W E S
1:6,000

AIRPORT ZONES



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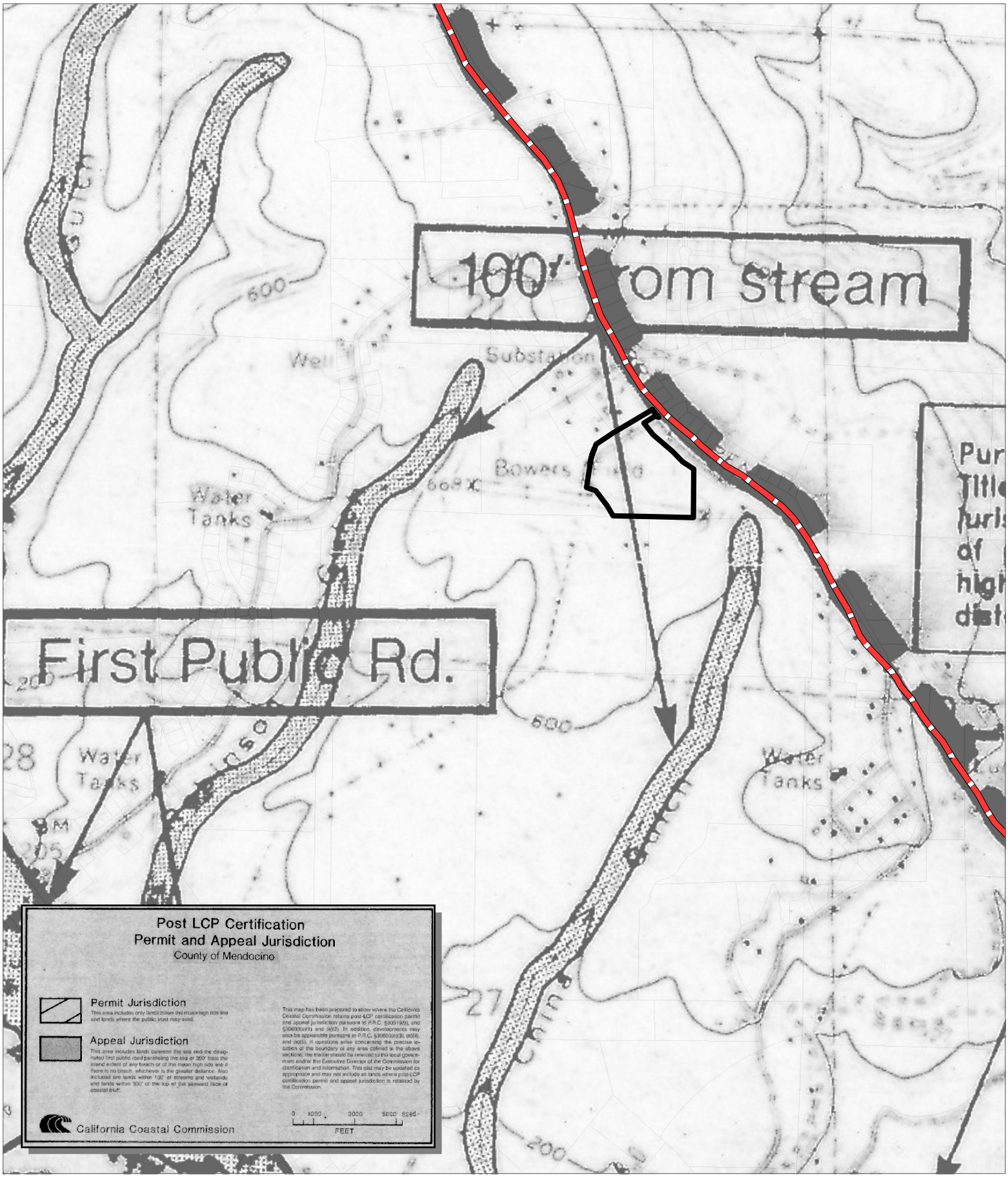
APN: 145-091-22
APLCT:
AGENT:
ADDRESS: 39290 Old Stage Road, Gualala

0 100 200 Feet
0 0.015 0.03 Miles
1:2,400

ADJACENT PARCELS



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0 500 1,000 Feet
0 0.075 0.15 Miles
N W E S
1:12,000

Coastal Zone Boundary

APPEALABLE AREAS

CASE: U 2018-0020
OWNER: Arena Elementary School Dist.
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AGENT:
ADDRESS: 39290 Old Stage Road, Gualala

Critical Water Areas

Critical Water Resources Bedrock

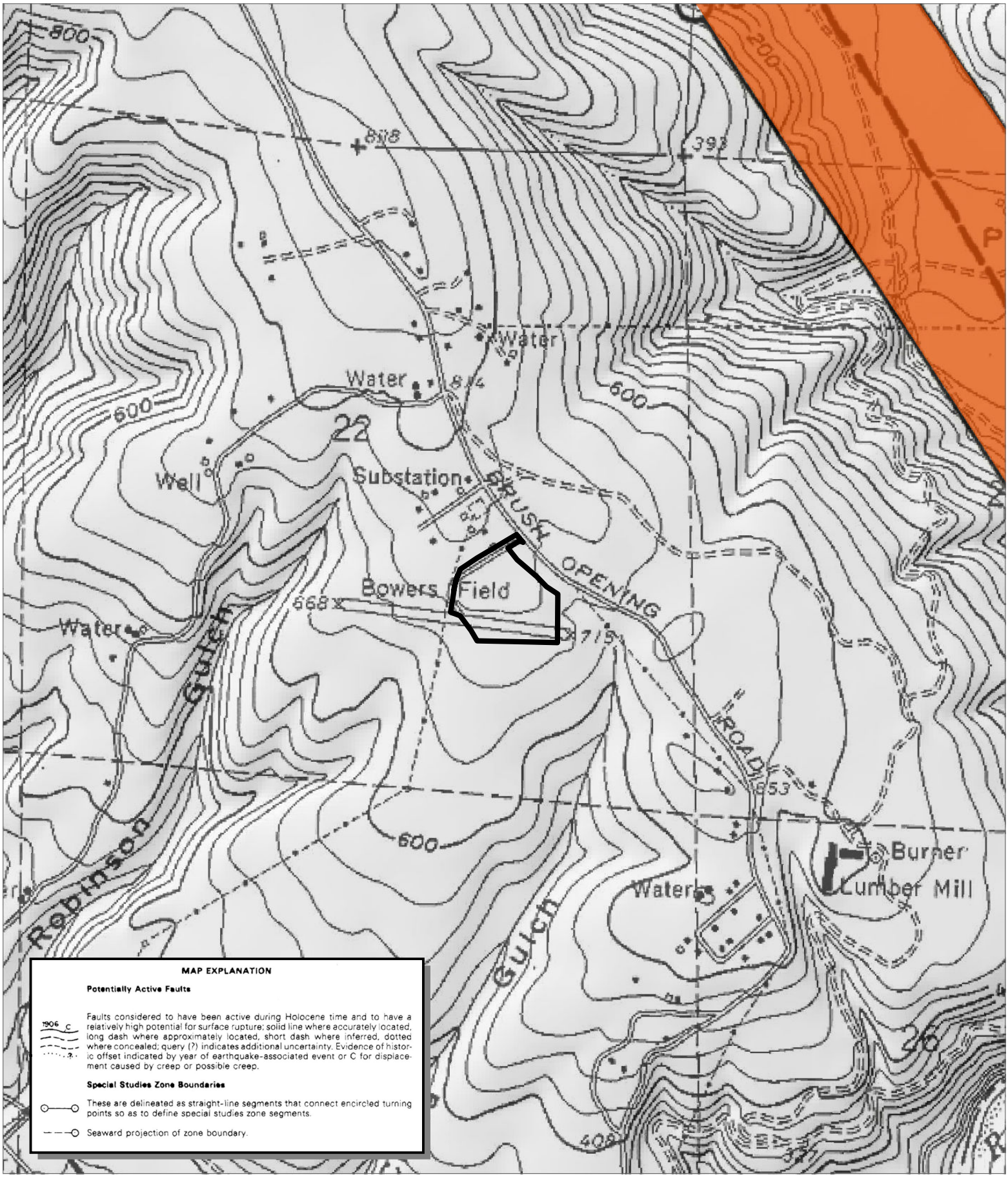
0 500 1,000 Feet

0 0.075 0.15 Miles

N W E S

1:12,000

GROUND WATER RESOURCES



CASE: U 2018-0020
OWNER: Arena Elementary School Dist.
APN: 145-091-22
APLCT:
AGENT:
ADDRESS: 39290 Old Stage Road, Gualala

San Andreas Fault Zone

0 500 1,000 Feet
0 0.075 0.15 Miles
N W E S
1:12,000

EARTHQUAKE FAULT ZONES

GEIST ENGINEERING & ENVIRONMENTAL GROUP INC

December 10, 2018

Epic Wireless Group, LLC
(On behalf of AT&T Mobility, LLC)

RE: Biological Resource Assessment
Proposed AT&T New Site Build- New Tower & Ground Improvements
AT&T Site Number: CCL05838
AT&T Site Name: Gualala
AT&T FA: 14442803
39290 Old Stage Road, Gualala, Mendocino County, California 95445
GE²G Project # 311115

Geist Engineering and Environmental Group, Inc. (GE²G), appreciates the opportunity have assisted Epic Wireless Group, LLC by having a Biological Resource Assessment completed for the above listed proposed AT&T Mobility, LLC undertaking.

Executive Summary:
The Site Parcel does not currently contain any permanent buildings. Exisiting improvements include a partial paved and gravel access road and a long graded flat area. The graded area is currently utilized by the school district for school bus parking with three semi-portable sheds. The large flat graded area was formerly utilized as a private airport runway "Bowers Field" from the mid-1950s through the mid-1970s. Use of the airport runway was discontinued when a new airport "Ocean Ridge Airport" was built approximately 1-mile to the northwest.

No Federal critical habitat for any special-status species was identified within the proposed project site and buffer area. Three (3) vegetation community types were observed within the study area. As part of this Biological Resource Assessment, we also evaluated the potential for occurrence of special-status plant species and special-status wildlife species. A delineation of wetlands and watercourses within the project study identified a narrow band of freshwater emergent wetland approximately 60 feet north of the proposed tower site and existing access road. The wetland habitat will not be impacted during project construction or operations. Because common wildlife species found in the project area are locally and regionally common, potential impacts to these resources are considered less than significant. Therefore, no avoidance or minimization measures are proposed at this time. Per the completed Biological Resources Assessment Report it is our finding that potential impacts to wildlife or plants can be avoided provided the Standard Construction Conditions outlined below are followed, it is our opinion the proposed project would: 1) Have less than significant impacts upon federal and California endangered, threatened, proposed or candidate species; 2) Not result in destruction or adverse modification of a critical habitat area of a federal or California endangered or threatened species; and 3) Not result in "take" of migratory birds protected under the Migratory Bird Treaty Act and other state, local or federal law.

Recommendations:
None of the species mentioned in the Biological Resource Assessment, or evidence of the species, were observed during biological surveys. No avoidance or minimization measures are proposed at this time.

Best Management Practices & Standard Construction Conditions are briefly summarized below:

1. If construction will start during the breeding or nesting season for Migratory Bird Treaty Act (MBTA) birds than a preconstruction avian survey for nesting birds should be implemented. *(Breeding season starts February 1, nesting season starts March 1st and both continue through until mid-September with special circumstances for individual species).*

2. Surveys for identified special-status species by qualified biologists shall be conducted at the appropriate times before construction starts to determine occupancy at the site.

3. Due to the potential for special-status species to occur, move through, or into the project area, an on-site biological monitor, shall at a minimum, check the ground beneath all equipment and stored materials each morning prior to work activities during disturbing activities to prevent take of individuals.

4. Construction Best Management Practices as well as Standard Construction Conditions will need to be completed to prevent take of individuals discussed are listed in the attached report (Staging and fueling, silt fencing, pre-construction surveys, Environmental Awareness Training for construction workers, and site boundaries shall be clearly delineated by stakes).

If you have any inquiries or would like any additional information, please contact me at (510) 238-8851, or sgeist@geistenvironmental.com.

Sincerely,

Stephen Geist, President,
Geist Engineering and Environmental Group, Inc.

Attached: Biological Resource Assessment as completed by Senior Consulting Wildlife Biologist Mr. Cord Hute, dated December 2018

GEIST ENGINEERING AND ENVIRONMENTAL GROUP, INC.
4200 Park Boulevard #149, Oakland, California 94602
510.238.8851 (p) / 510.238.8644 (f)
Field Offices: Arizona, California, Colorado, Oregon, and Washington

Biological Resource Assessment

CCL05838 Gualala
Communications Tower Telecommunications Project
Mendocino County, California

December 2018

Prepared for:

AT&T Mobility, LLC
2600 Camino Ramon
San Ramon, CA 94583

Prepared by:

Geist Engineering and Environmental Group, Inc.
Phone: (510) 238-8851
&
Synthesis Planning
442 San Marin Drive
Novato, CA 94945
Phone: (415) 328-7923

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Summary

The proposed project is situated 0.9 miles northeast of Gualala and 12.4 miles southeast of the City of Point Arena in unincorporated Mendocino County, California. The project is located on the southwest side of Old Stage Road. This project is being undertaken to provide improved telecommunications services to the local area through the installation of a new communication tower and associated equipment. Synthesis Planning was contracted by Geist Engineering and Environmental Group, Inc. and AT&T Mobility, LLC to perform this Biological Resources Assessment for the proposed project.

Three (3) vegetation communities were observed within the study area and include the following: 1) redwood-fir forest, 2) freshwater emergent wetland, and 3) ruderal vegetation. As part of this Biological Resource Assessment, we also evaluated the potential for occurrence of special-status plant species and special-status wildlife species.

Best Construction Practices as well as Standard Construction Conditions to prevent take of individuals discussed above are included in this report.

List of Acronyms and Abbreviations

BRA	Biological Resource Assessment
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CSC	California Species of Concern
FESA	Federal Endangered Species Act
FGC	Fish and Game Code
MBTA	Migratory Bird Treaty Act
NMFS	National Marine Fisheries Service
RWQCB	Regional Water Quality Control Board
SWPPP	Stormwater Pollution Prevention Plan
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
USACE	US Army Corps of Engineers
UTM	Universal Trans Mercator
WHR	Wildlife Habitat Relationships

1.0 Introduction

The proposed project is situated 0.9 miles northeast of Gualala and 12.4 miles southeast of the City of Point Arena in unincorporated Mendocino County, California (see Appendix A, Figures 1 and 2). This project is being undertaken to provide improved telecommunications services to the local area through the installation of a new communication tower and associated equipment. Synthesis Planning prepared this Biological Resources Assessment (BRA) to provide sufficient detail to determine the potential effects of the proposed project on federally- and state-listed wildlife and plant species. This BRA was conducted to determine the potential for special-status vegetation communities, plant and animal species to occur within the project study area, and to identify the limitations to potential development of the project. The BRA is prepared in accordance with legal requirements found in Section 7 (a)(2) of the Endangered Species Act (16 U.S. C 1536(c)) and also provides information required for an Initial Study/Mitigated Negative Declaration as part of the California Environmental Quality Act (CEQA) review for the project. The document presents technical information upon which later decisions regarding project affects are developed.

The project is located on the southwest side of Old Stage Road (see Appendix A, Figures 2). The project area is located in Section 22 of the Gualala 7.5- minute topographic quadrangle. The project site is located within Township 11N and Range 15W. Surrounding land uses consist of recreational, rural residences, and open space.

1.1 Project Description

A review of zoning drawings indicated that the proposed action would include:

- Construction of a 45 feet by 45 feet (2,025 square feet) level pad area. The pad area would be covered with gravel on portions not used for equipment installation;
- Installation of 123-foot tall lattice tower;
- Installation of telecommunications equipment and other related equipment within various areas of the gravel pad;
- Installation 6 foot tall chain link fence around telecommunications site;
- Installation of 342 feet of underground power and fiber-optic cable line between tower site and existing power pole; and
- Existing gravel road and turn around area to be improved (15 feet wide by 185 feet long).

The proposed construction of the wireless facilities would permanently displace approximately 4,800 square feet of land (0.11 acres), which would be disturbed as a result of constructing the

facility pad and new access road. The proposed disturbance would occur completely in ruderal non-native habitat.

The Site Parcel does not currently contain any permanent buildings. Improvements include a partial paved access road and a long graded flat area. The graded area is currently utilized by the school district for school bus parking with three semi-portable sheds. The large flat graded area was formerly utilized as a private airport runway "Bowers Field" from the mid-1950s through the mid-1970s. Use of the airport runway was discontinued when a new airport "Ocean Ridge Airport" was built approximately 1-mile to the northwest.

Staging Areas and Fueling

Storage areas for contractor equipment and materials will be determined prior to project construction activities. AT&T, with the assistance of a biologist, will review the local project area and locate staging areas that are in previously disturbed areas that will not have potential to affect wildlife habitat or species. All staging areas must be approved by Mendocino County prior to use. In addition, to prevent contamination of fuel into sensitive habitats, the following measures will apply:

- The use or storage of petroleum-powered equipment shall be accomplished in a manner to prevent the potential release of petroleum materials into waters of the State and U.S.,

- Areas for fuel storage, refueling and servicing of construction equipment must be located in an upland location,

- Wash sites must be located in upland locations to ensure wash water does not flow into the stream channel or adjacent wetlands.

- All construction equipment must be in good working condition, showing no signs of fuel or oil leaks. All questionable motor oil, coolant, transmission fluid, and hydraulic fluid hoses, fittings and seals shall be replaced. The mechanical equipment shall be inspected on a daily basis to ensure no leaks. All leaks shall be repaired in the equipment staging area or other suitable location prior to resumption of construction activity.

- Oil absorbent and spill containment materials shall be located on site when mechanical equipment is in operation within 100 feet of waterway. If a spill occurs, no additional work shall occur in-channel until, 1) the mechanical equipment is inspected by the contractor and the leak has been repaired, 2) the spill has been contained, and 3) CDFW and Mendocino County are contacted and have evaluated the impacts of the spill.

Construction Scheduling

The estimated time period for construction is 90 working days for the entire project. Work will begin as soon as all regulatory clearances and permits are obtained.

Operations and Maintenance

The facilities would be constructed to current construction-industry standards and codes.

Construction Best Management Practices

Construction BMPs will be incorporated in the construction of the project and include, but are not limited to, the following:

- To avoid debris contamination into drainages and other sensitive wildlife habitats, silt fence or other sediment control devices will be placed around construction sites to contain spoils from construction excavation activities.

- Surveys for identified special-status species by qualified biologists shall be conducted at the appropriate times before construction starts to determine occupancy at the site. If no special-status species are found, no further action other than the Best Management Practices identified above are required. If individuals are found, including plants or nesting birds, a buffer zone around the species or nest will be required at a sufficient distance to prevent take of individual plants, or until after the nesting season.

- Due to the potential for special-status species to occur, move through, or into the project area, an on-site biological monitor, shall at a minimum, check the ground beneath all equipment and stored materials each morning prior to work activities during disturbing activities to prevent take of individuals. All pipes or tubing Four (4) inches or greater shall be sealed by the relevant contractor with tape at both ends to prevent animals from entering the pipes at night. All trenches and other excavations shall be backfilled the same day they are opened, or shall have an exit ramp built into the excavation to allow animals to escape.

- Environmental Awareness Training shall be presented to all personnel working in the field on the proposed project site. Training shall consist of a brief presentation in which biologists knowledgeable of endangered species biology and legislative protection shall explain endangered species concerns. Training shall include a discussion of special-status plants and sensitive wildlife species. Species biology, habitat needs, status under the Endangered Species Act, and measures being incorporated for the protection of these species and their habitats shall also be discussed.

- Project site boundaries shall be clearly delineated by stakes and /or flagging to minimize inadvertent degradation or loss of adjacent habitat during project operations. Staff and/or its contractors shall post signs and/or place fence around the project site to restrict access of vehicles and equipment unrelated to project operations.

2.0 Study Methodology

This Biological Resource Assessment used the best available scientific and commercial data to evaluate the potential effects to biological resources from the proposed project. Literature review, aerial imagery and field surveys informed the descriptions of the vegetation communities, identification of present and past occurrences of special-status species in the vicinity of the proposed project, and the assessment of habitats for special-status animal species.

2.1 Literature Search

Information on special-status plant species was compiled through a review of the literature and database searches. Database searches for known occurrences of special-status species focused on the Gualala U.S. Geologic Service 7.5-minute topographic quadrangle. The following sources were reviewed to determine which special-status plant and wildlife species have been documented in the vicinity of the project site:

- U.S. Fish and Wildlife Service (USFWS) quadrangle species lists (USFWS 2018)
- USFWS list of special-status animals for Mendocino County (USFWS 2018)
- California Natural Diversity Database records (CNDDB) (CNDDB 2018)
- California Department of Fish and Wildlife's (CDFW) Special Animals List (CDFW 2018)
- State and Federally Listed Endangered and Threatened Animals of California (CDFW 2018)
- California Native Plant Society (CNPS) Electronic Inventory records (CNPS 2018)
- CDFG publication "California's Wildlife, Volumes I-III" (Zeiner et al. 1990)

The USFWS electronic list of Endangered and Threatened Species was queried electronically (www.fws.gov/sacramento/es_spp_lists-overview.htm). We also reviewed the CalFish IMAPS Viewer (www.calfish.org/DataandMaps/CalFishGeographicData), developed by CDFW Biogeographic Branch for analysis of fisheries.

The CDFW BIOS website and the *California Essential Habitat Connectivity Project: A strategy for conserving a connected California* (Spencer et al. 2010) were reviewed for wildlife movement information. The CDFW BIOS website and the CNDDB were review for documented nursery sites. Other sources of information regarding reported occurrences include locations previously reported to the U.C Berkeley Museum of Vertebrate Zoology and the California Academy of Sciences.

2.2 Personnel and Survey Dates

Cord Hute, wildlife biologist of Synthesis Planning, conducted botanical and biological surveys of the project site on November 7, 2018. Mr. Hute analyzed on-site and buffer area habitats for suitability for special-status plant and animal species during these surveys.

2.3 Impact Assessment Methodology

We examined the on-site vegetation communities, present and past occurrence locations of federally and state listed species and federal and state species of concern within close proximity of the proposed project area, and habitats for special-status plant and animal species. Based on the current site conditions, we evaluated the potential for occurrence on the site for special-status biological resources and used the project description to determine any potential direct or indirect effects.

We based our determination of whether the proposed project may result in adverse impacts to federally-listed special-status species, based on guidelines established by the USFW under Section 7(a) of the Federal Endangered Species Act (FESA), in which a project that may have an adverse effect impact on listed biological resources must be assessed. FESA states that, "each federal agency shall...insure that any *action authorized, funded, or carried out by such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered or threatened or result in the destruction or adverse modification of habitat of such species." Thus, components of the proposed project were deemed to have an adverse impact on special-status biological resources if they could result in effects as described in the above statement to any listed species or its habitat.

We based our determination of whether the proposed project may result in adverse impacts to State special-status species based on CEQA, the CDFW and the CNPS guidelines for special status plants and animals.

We also evaluated potential impacts from the project to habitats not occupied by species but for which habitats occurred.

3.0 Environmental Baseline

The project area is located within the North Coast Bioregion (Welsh 1994), a bioregion that encompasses the area from southwestern Oregon to southern Monterey County and contains the southern extent of the mixed hardwood forest with redwood. The North Coast Bioregion is delineated by the Pacific Ocean on the west and the Coast Ranges Mountains on the east and encompasses those lands west of the highest ridgeline dividing areas that drain directly into the Pacific Ocean from those areas that drain toward the interior (Welsh 1994). Habitats within this bioregion include both mesic (moist) habitats, such as freshwater marsh, and xeric (dry) habitats, such as chaparral, and are typical of a Mediterranean type climate. Average rainfall in the area is 40 inches (NCRCD 2004).

3.1 Wetlands and Waters of the U.S. and State

Wetlands are generally considered to be areas that are periodically or permanently inundated by surface or ground water, and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife, use as storage areas for storm and flood waters, and water recharge, filtration, and purification functions. Technical standards have been developed as a method of defining wetlands through consideration of three criteria: hydrology, soils, and vegetation (USACE 1987).

The U.S. Army Corps of Engineers (USACE), CDFW, and Regional Water Quality Control Board (RWQCB) have jurisdiction over modifications to stream channels, river banks, lakes, and other wetland features. Jurisdiction of the Corps is established through the provisions of Section 404 of the Clean Water Act, which prohibits the discharge of dredged or fill material into "waters" of the United States without a permit, including certain wetlands and unvegetated "other waters of the U.S." The Corps also has jurisdiction over navigable waters, including tidally influenced ones below Mean High Water, under Section 10 of the Rivers and Harbors Act. Jurisdictional authority of the CDFG is established under Section 1602 of the Fish and Game Code, which pertains to activities that would disrupt the natural flow or alter the channel, bed, or bank of any lake, river, or stream. The Fish and Game Code states that it is "unlawful to substantially divert or obstruct the natural flow or substantially change the bed, channel or bank of any river, stream or lake" without notifying the Department, incorporating necessary mitigation, and obtaining a Streambed Alteration agreement. The Wetlands Resources Policy of the CDFW states that the Fish and Game Commission will "strongly discourage development in or conversion of wetlands... unless, at a minimum, project mitigation assures there will be no net loss of either wetland habitat values or acreage." Jurisdictional authority of the RWQCB is established pursuant to Section 401 of the Clean Water Act, which typically requires a water quality certification when an individual or nationwide permit is issued by the Corps. The RWQCB also has jurisdiction over "waters of the State" under the Porter-Cologne Water Quality Control Act.

A delineation of wetlands and watercourses within the project study area was conducted by Synthesis Planning wetland ecologists during the November 7, 2018 site visit. Synthesis Planning

identified a narrow band of freshwater emergent wetland approximately 60 feet north of the proposed tower site and access road (see Appendix D for location of wetland feature). The wetland habitat will not be impacted during project construction or operations.

3.2 Vegetation Communities and Wildlife Habitats

Three (3) vegetation community types were observed within the study area. Where appropriate vegetation community types are described using The Manual of California Vegetation (Sawyer, et. al. 2009). Vegetation types observed were: 1) Redwood-Fir Forest, 2) Freshwater Emergent Wetland, and 3) ruderal vegetation.

Wildlife habitat classifications for this report is based on the California Department of Fish and Game's Wildlife Habitat Relationships (WHR) System (CDFG 1988) which places an emphasis on dominant vegetation, vegetation diversity and physiographic character of the habitat. The value of a site to wildlife is influenced by a combination of the physical and biological components of the immediate environment, and includes such features as type, size, and diversity of vegetation communities present and their degree of disturbance. As a plant community is degraded by loss of understory species, creation of openings, and a reduction in canopy area, a loss of structural diversity generally results. Degradation of the structural diversity of a community typically diminishes wildlife habitat quality, often resulting in a reduction of wildlife species diversity.

Vegetation communities are often classified based on the dominant plant species within the community. Wildlife habitats are typically distinguished by vegetation type, with varying combinations of plant species providing different resources for use by wildlife. As a result, wildlife habitats are often classified on a more inclusive manner of the structure of the habitat rather than the specifics of the plant species, resulting in several vegetation communities occurring under one type of wildlife habitat.

1. Redwood-fir forest was observed within the majority of project buffer area. The forest is dominated by second- growth Sequoia sempervirens and *Pseudotsuga menziesii. Lithocarpus densifloras var. densifloras* is common in the understory. *Pinus muricata* is common on the poor, drier soil of the ridge and it and *Arbutus menziesii* are pioneers in extending the forest down slope along the water courses. *Abies grandis* is found on the lower west facing slopes. Understory shrubs include *Gaultheria shallon, Vaccinium ovatum* and *Rhododendron macrophyllum. Polystichum munitum* and *Oxalis oregana* are abundant on the Redwood forest floor. This vegetative community is restricted to coastal areas of California where temperature regimes are relatively stable and within the influence of summer coastal fog and inland marine air flows. This community is often comprised of redwoods and other conifers and hardwood tree species. Physical stand features vary from old growth characteristics of uniform size and height, dense crown, with dense understory shrubs; second-growth structure of even-aged trees with an open, park-like appearance; and stands intermixed with annual grassland and/or other forest communities.

2. Freshwater emergent wetland was observed within a narrow strip approximately 60 feet north of the proposed tower site and running in a generally east-west orientation (see Appendix D (Engineering Drawings) for a map indicating the location of this habitat feature. Freshwater emergent wetlands are characterized by erect, rooted herbaceous hydrophytes. All emergent wetlands are flooded frequently, enough so that the roots of the vegetation prosper in an anaerobic (oxygen lacking) environment. Vegetation may vary in size from small clumps to vast areas of coverage. Fresh emergent wetland occurs on virtually all exposures and slopes, provided a basin or depression is saturated or at least periodically flooded. There is an approximate 2 m (6.6 ft) water depth limit for emergent wetlands that represents the maximum depth to which emergent plants normally grow.

Fresh emergent wetlands are among the most productive wildlife habitats in California. They provide food, cover, and water for more than 160 species of birds and numerous mammals, reptiles, and amphibians. Many species rely on fresh emergent wetlands for their entire life cycle. Wildlife species commonly found in this community include song sparrows (*Melospiza melodia*), red-winged blackbirds (*Agelaius phoeniceus*), raccoons (*Procyon lotor*), California voles (*Microtus californicus*), California ground squirrel (*Spermophilus beecheyi*), black-tailed jackrabbit (*Lepus californicus*), black-tailed deer (*Odocoileus hemionus*), and skunks (*Mephitis* sp.). This community is a sensitive community because of historic and continuing loss of wetland habitats from agricultural conversion, urbanization, and flood control development.

Plant Species that were observed within this vegetative community during biological surveys included: sedge (*Carex amplifolia*), sedge (*Carex densa*), woodland sedge (*Carex globosa*), torrent sedge (*Carex nudata*), linear-leaf miner's lettuce (*Claytonia parviflora* ssp. *parviflora*), broadleaf miner's lettuce (*Claytonia perfoliata* ssp. *perfoliata*), umbrella sedge (*Cyperus eragrostis*), Douglas iris (*Iris douglasiana* var. *major*), toad rush (*Juncus bufonius* var. *bufonius*), rush (*Juncus effuses*), rush (*Juncus patens*), California buttercup (*Ranunculus californicus*), narrowleaf cattail (*Typha angustifolia*), and broadleaf cattail (*Typha latifolia*).

3. Ruderal vegetation was observed within the proposed project site, access roads, utility right-of-ways, and the project buffer area. This vegetation type is comprised mostly of non-native weedy herbaceous forb plants.

4.0 Special-Status Species and Their Habitats

4.1 Regulatory Requirements

4.1.1 Federal Endangered Species Act (FESA)

To determine whether the proposed project may result in adverse effects to federally listed species, the criteria used was based on guidelines established by the USFW under Section 7(a) of the FESA, in which a project that may have an adverse effect on listed biological resources must be assessed. FESA (16 U.S. Code [USC 1531–1544) provides for the conservation of species that are Endangered or Threatened throughout all or a significant portion of their range, as well as the protection of habitats on which they depend.

Section 7 requires federal agencies to consult with USFWS or NMFS, or both, before performing any action (including actions such as funding a program or issuing a permit) that may affect listed species or designated Critical Habitat. The section 7 consultations are designed to assist Federal agencies in fulfilling their duty to ensure federal actions "do not jeopardize" the continued existence of a species or destroy or adversely modify Critical Habitat.

The USFWS defines temporary and permanent effects as areas denuded, manipulated, or otherwise modified from their pre-project conditions, thereby removing one or more essential components of a listed species' habitat as a result of project activities that include, but are not limited to, construction, staging, storage, lay down, vehicle access, parking, etc. According to the USFWS, temporary effects are limited to one construction season and, at a minimum, are fully restored to baseline habitat values or better within one year following initial disturbance. Permanent effects are not temporally limited and include all effects not fulfilling the criteria for temporary effects.

4.1.2 Federal Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (Title 16, United States Code [USC], Part 703) enacts the provisions of treaties between the United States, Great Britain, Mexico, Japan, and the Soviet Union and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703, 50 Code of Federal Regulations [CFR] 21, 50 CFR 10). Most actions that result in taking of, or the permanent or temporary possession of, a protected species constitute violations of the MBTA. The MBTA also prohibits destruction of occupied nests. The Migratory Bird Permit Memorandum (MBPM-2) dated April 15, 2003, clarifies that destruction of most unoccupied bird nests (without eggs or nestlings) is permissible under the MBTA; exceptions include nests of federally threatened or endangered migratory birds, bald eagles (*Haliaeetus leucocephalus*), and golden eagles (*Aquila chrysaetos*). USFWS is responsible for overseeing compliance with the MBTA.

4.1.3 California Endangered Species Act (CESA)

The California Endangered Species Act (CESA (FGC §§ 2050–2116) is administered by CDFW. The CESA prohibits the "taking" of listed species except as otherwise provided in state law. The CESA includes FGC Sections 2050–2116, and policy of the state to conserve, protect, restore, and enhance any endangered species or any threatened species and its habitat. The CESA requires mitigation measures or alternatives to a proposed project to address impacts to any State listed endangered, threatened or candidate species, or if a project would jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of habitat essential to the continued existence of those species, if there are reasonable and prudent alternatives available consistent with conserving the species or its habitat which would prevent jeopardy. Section 86 of the FGC defines take as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." Unlike the ESA, CESA applies the take prohibitions to species under petition for listing (state candidates) in addition to listed species. Section 2081 of the FGC expressly allows CDFW to authorize the incidental take of endangered, threatened, and candidate species if all of the following conditions are met:

- The take is incidental to an otherwise lawful activity.
- The impacts of the authorized take are minimized and fully mitigated.
- Issuance of the permit will not jeopardize the continued existence of the species.
- The permit is consistent with any regulations adopted in accordance with §§ 2112 and 2114 (legislature-funded recovery strategy pilot programs in the affected area).
- The applicant ensures that adequate funding is provided for implementing mitigation measures and monitoring compliance with these measures and their effectiveness.

The CESA provides that if a person obtains an incidental take permit under specified provisions of the ESA for species also listed under the CESA, no further authorization is necessary under CESA if the federal permit satisfies all the requirements of CESA and the person follows specified steps (FGC § 2080.1).

4.1.4 California Fish and Game Code

The California Constitution establishes the California Fish and Game Commission (Commission) (CA Constitution Article 4, § 20). The California Fish and Game Code (FGC) delegates the power to the Commission to regulate the taking or possession of birds, mammals, fish, amphibian and reptiles (FGC § 200). The Commission has adopted regulations setting forth the manner and method of the take of certain fish and wildlife in the California Code of Regulations, Title 14.

4.1.5 California Fish and Game Code- Species Protection

The FGC establishes CDFW (FGC § 700) and states that the fish and wildlife resources of the state are held in trust for the people of the state by and through CDFW (FGC § 711.7(a)). All licenses, permits, tag reservations and other entitlements for the take of fish and game authorized by FGC are prepared and issued by CDFW (FGC § 1050 (a)).

Provisions of the FGC provide special protection to certain enumerated species such as:

§ 3503 protects eggs and nests of all birds.
§ 3503.5 protects birds of prey and their nests.
§ 3511 lists fully protected birds.
§ 3513 protects all birds covered under the federal Migratory Bird Treaty Act.
§ 3800 defines nongame birds.
§ 4150 defines nongame mammals.
§ 4700 lists fully protected mammals.
§ 5050 lists fully protected amphibians and reptiles.
§ 5515 lists fully protected fish species.

4.2 Special-Status Species Reviewed

For the purposes of this Biological Resources Assessment, special-status species include those that are federally listed as Endangered, Threatened or Proposed for federal listing (candidate) under the USFWS. Other species also evaluated in this Biological Assessment include non-listed federal and California Special Species of Concern (CSC) and those species that fall under the jurisdiction of the USFWS such as the Migratory Bird Treaty Act (MBTA) and the CDFW, such as CEQA Section 15380(d).

Impacts to special-status species were assessed if: (1) those species occurred in habitats similar to those of the project sites and buffer areas, and (2) were known to occur within the general vicinity of the proposed project sites.

Federally and State-Listed Plant Species. Review of the USFWS (USFWS 2018), the CNPS (CNPS 2018), and the CNDDB (CNDDB 2018) revealed that 36 listed plant species and species of concern have potential to occur in the general project area. Please refer to Table 1 for a list of these species and their habitat requirements. Potential habitat is present for 22 of these 36 plant species. Botanical surveys were conducted on November 7, 2018. These surveys were conducted within the blooming period of 1 of these 22 special-status plant species (pygmy cypress).

Survey findings for the 1 targeted special-status plant species that had a blooming period during our survey was negative. Therefore, no impacts to this species are expected due to project implementation.

Because our botanical surveys were conducted outside of the blooming period of the remaining 21 special-status plant species that bloom outside of our survey dates, we cannot say with certainty that these species do not occur within the proposed project site and buffer area. Potential habitat was observed for these species within the proposed project site and buffer area.

Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
Birds					
Marbled Murrelet	*Brachyramphus marmoratus*	FT	CE	Feed on fish and invertebrates in the nearshore marine environment, but fly up to 50 miles inland to nest in conifer forests. Murrelets utilize forests with mature- or old-growth characteristics, including large trees, a generous amount of canopy closure, and complex under- and overstory structure. Nest trees must have trunk or branch formations, such as large horizontal branches, that can serve as nest platforms.	**Potentially present.** This species may be present feeding in the general project buffer area, but is not likely to be found in the proposed project site. No nesting habitat observed in the general project area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3a).
Western snowy plover	*Charadrius alexandrinus nivosus*	FT	CSC	Sandy beaches, salt pond levees, and shores of large alkali lakes. Require sandy, gravelly or friable soils for nesting.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Yellow-billed cuckoo	*Coccyzus americanus*	FT	CE	Riparian forest.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Tufted puffin	*Fratercula cirrhata*	-	CSC	Ocean, nesting colonially in burrows on sea cliffs. Ranges widely at sea, from fairly near shore to far out of sight of land. Even during breeding season, may be at sea far from nesting colonies. Nests on islands, primarily on grassy steep slopes or cliff tops (steep dropoff may help birds take flight). Throughout range, prefers treeless islands. Audubon.org	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Northern spotted owl	*Strix occidentalis caurina*	FT	CT	Northern spotted owls are very territorial and intolerant of habitat disturbance. They prefer old-growth forests with tree canopies that are high and open enough for the owls to fly between and underneath the trees. Preferred areas have large trees with broken tops, deformed limbs or large	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.

Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
				holes used as nesting sites. Each pair needs a large amount of land for hunting and nesting, and although they do not migrate, spotted owls may shift their ranges in response to seasonal changes that make hunting difficult.	
Mammals					
Point Arena mountain beaver	*Aplodontia rufa nigra*	FE	CSC	Coastal areas of Point Arena with springs or seepages. Found on north-facing slopes of ridges and gullies with friable soils and thickets of undergrowth.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Sonoma tree vole	*Arborimus pomo*	-	CSC	Found in North coast fog belt from Oregon border to Sonoma County. In Douglas-fir, redwood & montane hardwood-conifer forests. It Feeds almost exclusively on Douglas-fir needles, but will occasionally take needles of grand fir, hemlock or spruce.	**Potentially Present.** Potential habitat suitable for this species was observed within the proposed project site and buffer area. No sign of this species was observed during biological surveys nor were any roosting/maternity sites identified. This species has not been documented within the immediate vicinity of proposed project site (CDFW 2018) (see Figure 3a).
Townsend's big-eared bat	*Corynorhinus townsendii*	-	CSC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance.	**Potentially Present.** Potential foraging habitat is present in the proposed project site and buffer area. Potential roosting habitat is present in the proposed project site and buffer area. No sign of this species was observed during biological surveys nor were any roosting/maternity sites identified. This species has been documented within the immediate vicinity of proposed project site (CDFW 2018) (see Figure 3a).
Amphibians and Reptiles					
Pacific tailed frog	*Ascaphus truei*	-	CSC	Occurs in montane hardwood-conifer, redwood, Douglas fir and Ponderosa pine habitats. Restricted	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.

Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
				to perennial montane streams. Tadpoles require water below 15 degrees Celsius.	
Green sea turtle	*Chelonia mydas*	FT	-	Found in fairly shallow waters (except when migrating) inside reefs, bays, and inlets. The turtles are attracted to lagoons and shoals with an abundance of marine grass and algae. Open beaches with a sloping platform and minimal disturbance are required for nesting.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Leatherback sea turtle	*Dermochelys coriacea*	FE	-	Most pelagic [open ocean dwelling] of the sea turtles. Adult females require sandy nesting beaches backed with vegetation and sloped sufficiently so the distance to dry sand is limited. Their preferred beaches have proximity to deep water and generally rough seas.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
California giant salamander	*Dicamptodon ensatus*	-	CSC	The Pacific giant salamander is found in a variety of aquatic habitats, including lakes, ponds, rivers, and streams. They prefer fast moving water to slow moving water. Cover is another vital characteristic of this Salamander's habitat. Cover is used for hiding, protection from the sun, and brooding eggs.	**Potentially Present.** Potential aestivation habitat suitable for this species was observed within the proposed project site and buffer area. No adequate aquatic habitat was observed in the proposed project site or buffer area. No sign of this species was observed during biological surveys. This species has been documented approximately 0.24 miles southeast of the proposed project site (CDFW 2018) (see Figure 3a).
California red-legged frog	*Rana draytonii*	FT	CSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11 to 20 weeks of permanent water for larval development. Must have access to aestivation habitat, consisting of small mammal burrows and moist leaf litter.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Foothill yellow-legged frog	*Rana boylii*	-	CSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.

Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
				some cobble-sized substrate for egg-laying. Require at least 15 weeks to attain metamorphosis.	
Red-bellied newt	*Taricha rivularis*	-	CSC	Adults migrate from terrestrial to aquatic habitats seasonally for breeding. There are no detailed descriptions of terrestrial habitats, and what information is available is somewhat inconsistent between sources. Several sources state that this species' range is confined to the coast redwood belt, but Riemer (1958) notes that red-bellied newts are not restricted to redwood forests, nor are they particularly abundant in that habitat. However, none of these authors specifically describe the terrestrial habitat for this species. Twitty (1966) comments that California laurel (*Umbellularia californica*) trees are common near his study site at Pepperwood Creek, but no other tree species are mentioned. Petranka (1998) states that red-bellied newts are found predominantly in redwood forests. I (S.B.M.) have observed terrestrial adults in forest dominated by Douglas-fir (*Pseudotsuga menziesii*), tan oak (*Lithocarpus densiflorus*), and madrone (*Arbutus menziesii*) in southern Humboldt County, and colleagues have seen them within redwood forest in Mendocino County (S. Sillett and J. Spickler, personal communication). Clearly, multiple forest types are used by this species. Adults use terrestrial sites for underground retreats during the dry season (May–October) and for foraging and migration prior to winter breeding. Both Twitty (1966) and Licht and Brown (1967) mentioned that red-bellied newts at their study sites (Pepperwood Creek and Skaggs Springs, respectively, both in Sonoma County) were found on steep, heavily wooded slopes that rise from the south bank of the breeding stream (i.e., north-	**Potentially Present.** Potential habitat suitable for this species was observed within the proposed project site and buffer area. No sign of this species was observed during biological surveys nor were any roosting/maternity sites identified. This species has not been documented within the immediate vicinity of proposed project site (CDFW 2018) (see Figure 3a).

Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
				facing slopes). Packer (1960) noted that at Pepperwood Creek, the banks and north-facing slopes are littered with many fallen trees and branches that provide cover for red-bellied newts and other amphibians. Aquatic habitats include streams and rivers; red-bellied newts apparently do not use ponds or other standing water habitats for breeding (Riemer, 1958; Stebbins, 1985; Petranka, 1998). Males tend to enter the streams before females and therefore spend more time in the aquatic habitat (Twitty, 1942, 1955; Packer, 1963). Males also tend to breed more frequently than females; males breed usually every 1–2 years, whereas females usually breed only ≥ 2 years. Consequently, females may spend several years on land before entering the water again for breeding.	
Fish					
Gualala roach	*Lavinia symmetricis parvipinnis*	-	CSC	Clear Lake roach occupy diverse stream habitats, from cool headwater reaches to warm, low-elevation mainstem reaches. They are most abundant in warm, exposed, mid to low-elevation stream reaches where they prefer quiet water, especially pools. In the Clear Lake basin, roach abundance is positively correlated with stream temperature, conductivity, gradient, coarse substrates and bedrock, and negatively correlated with depth, cover, canopy (shade), and fast water.	**No Potential.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Coho salmon, Central California Coast Population	*Oncorhynchus kisutch*	FE	CE	Occupy coastal drainages. Coho have an anadromous life cycle. They hatch in freshwater streams, migrate to live for two years in the ocean, and then return to breed, or spawn, in freshwater, almost always returning to the same river in which they were born. Returning adults typically enter freshwater rivers in the late fall, and spawning occurs	**No Potential.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.

Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
				throughout the fall and winter. Eggs hatch in the early spring, and juveniles then live in the river-bottom gravel for 10 weeks before emerging. After maturing for about a year in freshwater, coho migrate downstream to coastal estuaries and enter the ocean in the spring.	
Tidewater goby	*Eucyclogobius newberryi*	FE	-	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches. Require fairly still but not stagnant water and high oxygen levels.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Steelhead – Northern California DPS	*Onocorhynchus mykiss irideus population 16*	FT	-	After maturing for 1 to 3 years in the ocean, adult steelhead typically begin their spawning migration into the Sacramento and San Joaquin Delta System in fall and winter. Adult steelhead enter the mainstream Sacramento River in July, peak in abundance in the fall, and continue migrating through February and March. Juvenile steelhead will remain in fresh water and continue to rear for 1 to 3 years before migrating to the ocean in November through May to mature. Smolt typically migrate to the ocean during March through June.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Insects					
Lotis blue butterfly	*Lycaeides argyrognomon lotis*	FE	-	This species has a single generation per year, with a relatively long adult flight period, extending from mid-April to early July. Eggs are likely laid during the adult flight season. Newly hatched larvae begin to feed immediately, then overwinter in dormancy (diapause) as small larvae, then resume feeding the next spring. The larvae (caterpillars) probably feed for about 4-6 weeks in the spring before pupating. Lotis blue larvae have apparently not been observed; therefore we do not know what plants the larvae require for food. Based on closely related	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.

Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
				species, native plants in the pea family (Fabaceae) are likely candidates. The coast trefoil (also known as seaside bird's-foot trefoil) (*Lotus formosissimus*) is thought to be a larval food plant. The coast trefoil is a small perennial plant that generally occurs in damp areas in meadows, roadside ditches, and forest edges and clearings. This plant grew at the last known lotis blue site, and there is a report of a lotis blue butterfly showing egg-laying behavior on coast trefoil, although no egg was observed. Other possible food plants include herbaceous species of lupine.	
Behren's silverspot butterfly	*Speyeria zerene behrensii*	FE	-	Inhabits coastal terrace prairie habitat Food plant is *Viola spp.*	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
California freshwater shrimp	*Syncaris pacifica*	FE	-	Habitat conditions include streams of 30 to 91 cm (12 to 36) inches in depth with exposed live roots of trees such as alder and willow along undercut banks greater than 15 cm (6 inches). The banks have overhanging woody debris or stream vegetation and vines such as stinging nettles, grasses, vine maple and mint.	**None.** No potential habitat suitable for this species was observed within the proposed project site or buffer area.
Plants					
Blasdlae's bent grass	*Agrostis blasdalei*	-	List 1B.2	Coastal bluff scrub, coastal dunes, and coastal prairie. Blooms May to July. Elevation: 5-365 m.	**None.** No habitat in project area.
Humboldt County milk-vetch	*Astragalus agnicidus*	-	CE,List 1B.1	Broadleafed upland forest and north coast coniferous forest. Blooms April to September. Elevation: 120-800 m.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).

Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
Rattan's milk-vetch	*Astragalus rattanii var. rattanii*	-	List 4.3	Chaparral, cismontane woodland, and lower montane coniferous forest. Blooms April to July. Elevation: 30-825 m.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).
Bolander's reed grass	*Calamagrostis bolanderi*	-	List 4.2	Coastal scrub, bogs, fens, broadleafed upland forest, closed cone coniferous forest, meadows, seeps, freshwater marsh and swamps, and north coast coniferous forest. Blooms May to August. Elevation: 0-455 m.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).
Coastal bluff morning-glory	*Calystegia purpurata ssp. saxicola*	-	List 1B.2	Coastal dunes, coastal scrub, coastal bluff scrub, and north coast coniferous forest. Blooms April to September. Elevation: 4-165 m.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).
Swamp harebell	*Campanula californica*	-	List 1B.2	Bogs and fens, closed-cone coniferous forest, coastal prairie, meadows and seeps, freshwater marsh, and north coast coniferous forest. Blooms June to October. Elevation: 1-520 m.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).
California sedge	*Carex californica*	-	List 2B.3	Bogs, fens, closed-cone coniferous forest, coastal prairie, meadows, seeps, marshes, and swamps.	**Potentially present.** Potential habitat for this species occurs within the proposed

Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
				Blooms May to August. Elevation: 90-335 m.	project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).
Johnny-nip	*Castilleja ambigua var. ambigua*	-	List 4.2	Coastal bluff scrub, coastal prairie, coastal scrub, marshes, swamps, vernal pools, and valley and foothill grasslands. Blooms March to July. Elevation: 0-435 m.	**None.** No habitat in project area.
Mendocino Coast paintbrush	*Castilleja mendocinensis*	-	List 1B.2	Coastal bluff scrub, closed-cone coniferous forest, coastal prairie, coastal dunes, and coastal scrub. Blooms April to August. Elevation: 0-160 m.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).
Glory brush	*Ceanothus gloriosus var. exaltatus*	-	List 4.3	Chaparral. Blooms March to June. Elevation: 30-610 m.	**None.** No habitat in project area.
Point Reyes Ceanothus	*Ceanothus gloriosus var. gloriosus*	-	List 4.3	Coastal bluff scrub, closed-cone coniferous forest, coastal dunes, and coastal scrub. Blooms March to May. Elevation: 5-520 m.	**None.** No habitat in project area.
Mendocino dodder	*Cuscuta pacifica var. papillata*	-	List 1B.2	Coastal dunes. Blooms June to October. Elevation: 0-50 m.	**None.** No habitat in project area.
Streamside daisy	*Erigeron biolettii*	-	List 3	Broadleafed upland forest, cismontane woodland, and north coast coniferous forest. Blooms June to October. Elevation: 30-1,100 m.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).

Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
Supple daisy	*Erigeron supplex*	-	List 1B.2	Coastal bluff scrub and coastal prairie. Blooms May to July. Elevation: 5-185 m.	**None.** No habitat in project area.
Bluff wallflower	*Erysimum concinnum*	-	List 1B.2	Coastal bluff scrub, coastal dunes, and coastal prairie. Blooms February to July. Elevation: 0-185 m.	**None.** No habitat in project area.
Roderick's fritillary	*Fritillaria roderickii*	-	CE,List 1B.1	Coastal bluff scrub, coastal prairie, and valley and foothill grassland. Blooms March to May. Elevation: 15-610 m.	**None.** No habitat in project area.
Pacific gilia	*Gilia capitata ssp. pacifica*	-	List 1B.2	Coastal bluff scrub, chaparral, coastal prairie, and valley and foothill grassland. Blooms April to August. Elevation: 5-1,345 m.	**None.** No habitat in project area.
Short-leaved evax	*Hesperevax sparsiflora var. brevifolia*	-	List 1B.2	Coastal bluff scrub, coastal dunes, and coastal prairie. Blooms March to June. Elevation: 0-640 m.	**None.** No habitat in project area.
Pygmy cypress	*Hesperocyparis pygmaea*	-	List 1B.2	Closed-cone coniferous forest. Blooming period: None. Elevation: 30-600 m.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).
Point Reyes horkelia	*Horkelia marinensis*	-	List 1B.2	Coastal dunes, coastal prairie, and coastal scrub. Blooms May to September. Elevation: 5-755 m.	**None.** No habitat in project area.
Thin-lobed horkelia	*Horkelia tenuiloba*	-	List 1B.2	Broadleafed upland forest, chaparral, and valley and foothill grassland. Blooms May to July. Elevation: 50-500 m.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has been documented approximately 250 feet southwest of the proposed accessed road (CDFW 2018) (see Figure 3b).
Harlequin lotus	*Hosackia gracilis*	-	List 4.2	Broadleafed upland forest, coastal bluff scrub, closed-cone coniferous forest, cismontane woodland, coastal prairie, coastal scrub, meadows,	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No

Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
				seeps, marshes, swamps, north coast coniferous forest, and valley and foothill grassland. Blooms March to July. Elevation: 0-700 m.	individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).
Small groundcone	*Kopsiopsis hookeri*	-	List 2B.3	North coast coniferous forest. Blooms April to August. Elevation: 90-885 m.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).
Burke's goldfields	*Lasthenia burkei*	FE	CE, List 1B.1	Vernal pools, meadows, and seeps. Blooms April to June. Elevation: 15-600 m.	**None.** No habitat in project area.
Baker's goldfields	*Lasthenia californica ssp. bakeri*	-	List 1B.2	Closed-cone coniferous forest, coastal scrub, meadows and seeps, and marshes and swamps. Blooms April to October. Elevation: 60-520 m.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).
Perennial goldfields	*Lasthenia californica ssp. macrantha*	-	List 1B.2	Coastal bluff scrub, coastal dunes, and coastal scrub. Blooms January to November. Elevation: 5-185 m.	**None.** No habitat in project area.
Contra Costa goldfields	*Lasthenia conjugens*	FE	List 1B.1	Valley and foothill grassland, vernal pools, alkaline playas, and cismontane woodland. Blooms March to June. Elevation: 1-450 m.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).

Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
Marsh pea	*Lathyrus palustris*	-	List 2B.2	Mesic, bogs and fens, coastal prairie, coastal scrub, lower montane coniferous forest, marshes and swamps, North Coast coniferous forest. Blooms March to August. Elevation: 1-100 m.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).
Coast lily	*Lilium maritimum*	-	List 1B.1	Closed-cone coniferous forest, coastal prairie, coastal scrub, broadleafed upland forest, north coast coniferous forest, marshes, and swamps. Blooms May to August. Elevation: 4-475 m.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).
Running-pine	*Lycopodium clavatum*	-	List 4.1	Often edges, openings and roadsides, lower montane forest (mesic), marshes and swamps, North Coast coniferous forest (mesic). Blooms June to September. Elevation 45-1225 m.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).
White-flowered rein orchid	*Piperia candida*	-	List 1B.2	North coast coniferous forest, lower montane coniferous forest, and broadleaved upland forest. Elevational range: 0 to 1,200 meters. Blooming period: March through September.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).
Maple-leaved checkerbloom	*Sidalcea malachroides*	-	List 4.2	Broad-leaved upland forest, coastal prairie, coastal scrub, north coast coniferous forest, and riparian	**Potentially present.** Potential habitat for this species occurs within the proposed

Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
				forest. Blooms March to August. Elevation: 0 – 730 m.	project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).
Purple-stemmed checkerbloom	*Sidalcea malviflora ssp. purpurea*	-	List 1B.2	Broad-leaved upland forest and coastal prairie. Blooms May to June. Elevation: 15 – 85 m.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).
Showy Indian clover	*Trifolium amoenum*	FE	List 1B.1	Coastal bluff scrub, valley and foothill grassland. Blooms April to June. Elevation: 5-415 m.	**None.** No habitat in project area.
Santa Cruz clover	*Trifolium buckwestiorum*	-	List 1B.1	Found in broadleafed upland forest, cismontane woodland, and coastal prairie. Elevational range: 105 to 610 meters. Blooming period: April through October.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).

Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area
Fringed false-hellebore	*Veratrum fimbriatum* Gray	-	List 4.3	Bogs, fens, coastal scrub, meadows, seeps, and north coast coniferous forest. Blooms July to September. Elevation: 3-300 m.	**Potentially present.** Potential habitat for this species occurs within the proposed project site and buffer area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3b).
Sensitive Vegetative Communities					
Northern Coastal Bluff Scrub (Not present in project site or buffer area)					
Coastal Terrace Prairie (Not present in project site or buffer area)					
Northern Coastal Salt Marsh (Not present in project site or buffer area)					
Coastal Brackish Marsh (Not present in project site or buffer area)					
Coastal and Valley Freshwater Marsh (Present in project buffer area)					

Status Codes:

Federal
FE = Federally listed as Endangered
FT = Federally listed as Threatened
FC = Federal Candidate species

State
CE = California listed as Endangered
CT = California listed as Threatened
CR = California listed as Rare
CFP = California Fully Protected
CSC = Species of Special Concern
WL = CDFW Watch List

California Rare Plant Rank (formerly known as CNPS Lists)
California Rare Plant Rank 1A = Plants presumed extinct in California
California Rare Plant Rank 1B = Plants rare, threatened, or endangered in California and elsewhere
California Rare Plant Rank 2A = Plants presumed extirpated from California, but more common elsewhere
California Rare Plant Rank 2B = Plants rare or endangered in California, but more common elsewhere
California Rare Plant Rank 3 = Plants about which we need more information; a review list
California Rare Plant Rank 4 = Plants of limited distribution; a watch list.

Table 1
Special-Status Species Potentially Occurring in the Proposed Project Site and Buffer Area

Common Name	Scientific Name	Federal Status	State Status	Habitat/Observances	Potential to Occur on Project Site and Buffer Area

California Rare Plant Rank Rarity Status of .1 = Seriously endangered in California
California Rare Plant Rank Rarity Status of .2 = Fairly endangered in California

Status, distribution, and habitat information from the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database RareFind 5 (CDFW 2018); California Native Plant Society, California Rare Plant Electronic Inventory (CNPS 2018); and USFWS Online Endangered Species Database (USFWS 2018).

4.3 SPECIAL-STATUS WILDLIFE SPECIES

The following is a discussion of species having potential to occur on site and/or are species that are prominent in today's regulatory environment. This document does not address impacts to species that may occur in the region but for which no habitat occurs on site. Species-specific information described below is primarily from USFWS 2018 and CDFW 2018, unless otherwise noted.

Marbled Murrelet - The marbled murrelet is a Federally Threatened and California Endangered bird species. The marbled murrelet is a small (25 cm), chunky auk with a slender black bill. It has pointed wings and plumage that varies by season. The non-breeding plumage is typically white underneath with a black crown, nape, wings and back. The bird closely resembles its closest relative, the Long-billed murrelet. In breeding plumage, both have a brown mottled body and face. The Long-billed has a pale white throat, lacking in the Marbled. In winter plumage, the Marbled murrelet has a white neck collar, absent in Long-billed. The Marbled murrelet is shorter-billed and slightly smaller than the Long-billed murrelet.

The marbled murrelet feeds at sea both in pelagic offshore areas (often associating with upwellings) and inshore in protected bays and fiords. Marbled murrelets feed below the water surface on small fish and invertebrates. Some principal foods include sand lance (*Ammodytes hexapterus*), Pacific herring (*Clupea haringus*), capelin (*Mallotus villosus*), shiner perch, and the invertebrates *Euphausia pacifica* and *Thysanoessa spinifera*. Marbled murrelets often forage in pairs but do not feed in large flocks as do other alcids. Loose aggregations of 500 or more birds occasionally occur in winter. Subadults feed singly; but in early July, when pairs of adults are still feeding young, mixed flocks begin to form. Marbled murrelets feed during the day and at night.

The nesting behavior of the marbled murrelet is unusual, since unlike most alcids it does not nest in colonies on cliffs or in burrows, but on branches of old-growth and mature conifers such as western hemlock, Sitka spruce, Douglas-fir and coastal redwood, as far as 80 km inland. It lays one egg on a platform of lichen or moss on these branches (less often on the ground). In northern populations, murrelets nest on the ground among rocks, as do other related murrelet species. The egg is incubated for a month, then fed for around 40 days until the chick is able to fledge. Adults fly from ocean feeding areas to inland nest sites, mostly at dusk and dawn. They feed nestlings at least once and sometimes twice per day or night. Usually only one fish is carried to the young. The chick then leaves the nest and flies unaccompanied to the sea. Breeding success is low and chick mortality high.

Marbled murrelets do not breed until they are at least 2 years old. Marbled murrelets nest from mid-April to late September. Peak activity occurs from mid-June to late July in California, and the second week of July to mid-August in Oregon. Marbled murrelet are semicolonial in nesting habits. Two nests found in Washington were located only 150 feet (46 m) apart. Not all mature adults nest every year. Marbled murrelets lay only one egg. Nestlings fledge in 28 days. Young marbled murrelets remain in the nest longer than other alcids and molt into their juvenile plumage before leaving the nest. Fledglings fly directly from the nest to the ocean.

Marbled murrelets occur in summer from Alaska's Kenai Peninsula, Barren islands, and Aleutian Islands south along the coast of North America to Point Sal, Santa Barbara County, in south-central California. Marbled murrelets winter mostly within the same general area, except that they tend to vacate the most northern sections of their range, especially where ice forms on the surface of the fiords. They have been recorded as far south as Imperial Beach of San Diego County, California.

Marbled murrelets are coastal birds that occur mainly near saltwater within 1.2 miles (2 km) of shore. However, marbled murrelets have been found up to 59 miles (95 km) inland in Washington, 35 miles (56 km) inland in Oregon, 22 miles (37 km) inland in northern California, and 11 miles (18 km) inland in central California. Over 90% of all marbled murrelet observations in the northern Washington Cascades were within 37 miles (60 km) of the coast. Many marbled murrelets regularly visit coastal lakes. Most lakes used by marbled murrelets are within 12 miles (20 km) of the ocean, but a few birds have been found at lakes as far inland as 47 miles (75 km). All lakes used by marbled murrelets occur within potential nesting habitat.

From southeast Alaska southward, marbled murrelets use mature or old-growth forest stands near the coastline for nesting. These forests are generally characterized by large trees (>32 inches [80 cm] diameter at breast height), a multistoried canopy, moderate to high canopy closure or an open crown canopy, large snags, and numerous downed snags in all stages of decay. Marbled murrelets tend to nest in the oldest trees in the stand. In Oregon, forests begin to exhibit old-growth characteristics at about 175 to 250 years of age. Moss, on which marbled murrelets nest, forms on the limbs of Douglas-fir that are more than 150 years old.

This species may be present feeding in the general project buffer area, but is not likely to be found in the proposed project site. No nesting habitat observed in the general project area. No individuals of this species were observed during surveys. This species has not been documented within the boundaries of or in proximity to the proposed project site (CDFW 2018) (see Figure 3a). Therefore, it is highly unlikely this species will be impacted by proposed project activities.

Sonoma Tree Vole - The Sonoma tree vole is endemic to California; it is a red, furry nocturnal vole up to 8 inches long. They breed year-round, with gestation typically lasting 4-6 weeks, litter size of two and weaned for another 4-6 weeks. This vole prefers moist, mature or old-growth Douglas-fir or mixed conifer forests with high canopy cover, high density of stumps and low density of snags, but it can use younger forests. It adopts old bird nests, 2-50 meters up in trees (mostly Douglas-fir), and is arboreal with some activity on the forest floor. It mostly eats the needles and inner twig bark of Douglas-fir trees, but also feeds on other firs, Sitka spruce and western hemlock.

Potential habitat suitable for this species was observed within the proposed project site and buffer area. No sign of this species was observed during biological surveys nor were any roosting/maternity sites identified. This species has not been documented within the immediate vicinity of proposed project site (CDFW 2018) (see Figure 3a). No federally-designated critical

habitat is documented in the proposed project area for this species.

Townsend's Big-Eared Bat - Townsend's big-eared bat is found throughout California, but the details of its distribution are not well known. This species is found in all but subalpine and alpine habitats, and may be found at any season throughout its range. Once considered common, Townsend's big-eared bat now is considered uncommon in California. It is most abundant in mesic habitats. This species requires caves, mines, tunnels, buildings, or other human-made structures for roosting. They may use separate sites for night, day, hibernation, or maternity roosts. Hibernation sites are cold, but not below freezing. Individuals may move within the hibernaculum to find suitable temperatures. Maternity roosts are warm. Roosting sites are the most important limiting resource. This species feeds on small moths. Beetles and a variety of soft-bodied insects also are taken. This species mates from November-February, but many females are inseminated before hibernation begins. Sperm is stored until ovulation occurs in spring. Gestation lasts 56 to 100 days, depending on temperature, size of the hibernating cluster, and time in hibernation. Births occur in May and June, peaking in late May. A single litter of 1 is produced annually. Young are weaned in 6 weeks and fly in 2.5 to 3 weeks after birth. Growth rate depends on temperature. The maternity group begins to break up in August. Females mate in their first autumn, males in their first or second autumn. About half of young females return to their birth site after their first hibernation.

Potential foraging habitat is present in the proposed project site and buffer area. Potential roosting habitat is present in the proposed project site and buffer area. No sign of this species was observed during biological surveys nor were any roosting/maternity sites identified. This species has been documented within the immediate vicinity of proposed project site (CDFW 2018) (see Figure 3a).

California Giant Salamander - California giant salamanders are year-round residents of north-central California, from southern Santa Cruz County to extreme southern Mendocino and Lake Counties. They occur up to 6,500 feet primarily in humid coastal forests, especially in Douglas fir, redwood, red fir, and montane and valley-foothill riparian habitats. They live in or near streams in damp forests, and California giant salamanders tend to be common where they occur. They tend to be stream and seep/spring breeder and do not generally utilize stock ponds. Aquatic adults and larvae are found in cool, rocky streams and occasionally in lakes and ponds. Terrestrial adults search for prey such as snails, slugs, other invertebrates, small mice, shrews, possibly reptiles, and other amphibians under surface objects and in tunnels underground. Aquatic adults and larvae eat aquatic invertebrates, fish, and other amphibians. Aquatic adults and larvae hide within spaces between rocks in streambeds. Terrestrial adults are found under surface litter and in tunnels underground. Eggs are laid during spring in concealed locations several feet below the surface in cold, slowly flowing water in springs, channels, under streambanks, and beneath rocks and coarse woody debris in stream bottoms. This species breeds from March to May, with peak in May. Adults have been found associated with nests. Where permanently flowing streams are available, adults may retain gills for an aquatic adult stage (neoteny). In some areas, larvae will transform to terrestrial adult form after 1 to 2 years.

Potential aestivation habitat suitable for this species was observed within the proposed project site and buffer area. No adequate aquatic habitat was observed in the proposed project site or buffer area. No sign of this species was observed during biological surveys. This species has been documented approximately 0.24 miles southeast of the proposed project site (CDFW 2018) (see Figure 3a).

Red-Bellied Newt - The red-bellied newt ranges within Sonoma, Mendocino, Humboldt and Lake Counties. This species inhabits primarily redwood forest, but is also found within mixed conifer, valley-foothill woodland, montane hardwood and hardwood-conifer habitats. This species feed on arthropods, worms and snails in water and on the forest floor within ground litter. They spend the dry season underground within root channels. They require rapid streams with rocky substrate for breeding and egg-laying. They are primarily active at night. They migrate to streams during autumn rains, returning to terrestrial habitat in the spring. Aestivation in terrestrial habitat takes place during the summer months, and they may migrate a mile or more to and from the breeding stream.

Potential habitat suitable for this species was observed within the proposed project site and buffer area. No sign of this species was observed during biological surveys. No individuals of this species were observed during surveys. Potential aestivation habitat for this species was observed within the proposed project buffer area. No potential aquatic breeding habitat was observed within the project site or buffer area. No potential aestivation burrow sites were observed within the project site or buffer area during biological surveys. This species has not been documented within the immediate vicinity of proposed project site (CDFW 2018) (see Figure 3a).

4.4 CRITICAL HABITAT

No Federal critical habitat for any special-status species was identified within the proposed project site and buffer area (USFWS 2018).

4.5 SPECIAL STATUS NATURAL COMMUNITIES

The following special-status natural community is present within the proposed project buffer area as designated by the CNDDB:

- Coastal and Valley Freshwater Marsh

5.0 Impacts Analysis and Standard Construction Conditions

This section summarizes the potential biological impacts from implementation of the proposed project. The analysis of these effects is based on a reconnaissance-level biological survey of the project site and buffer area, a review of existing databases and literature, and personal professional experience with biological resources of the region. Potential effects to federally- and state-listed special-status animal species may occur from the proposed project. Standard Construction Conditions for these biological impacts are provided below. A synopsis of the species potentially affected is presented in Table 2, and is followed by Standard Construction Conditions to avoid "take" of individuals.

Table 2: Special Status Animal Species Potentially Affected by the Proposed Project

Species	Status (Federal/State)	Habitat Present/Absent	Standard Construction Conditions Yes/No
Sonoma tree vole	-/CSC	Present	Yes
Townsend's big-eared bat	-/CSC	Present	Yes
California giant salamander	-/CSC	Present	Yes
Red-bellied newt	-/CSC	Present	Yes

Potential Impacts to Common Wildlife and Plant Populations from Project Activities

Direct mortality or injury to common wildlife and plant populations could occur during ground disturbance activities associated with implementation of the project. Small vertebrate, invertebrate, and plant species are particularly prone to impact during project implementation because they are much less to non-mobile, and cannot easily move out of the path of project activities. Other more mobile wildlife species, such as most birds and larger mammals, can avoid project-related activities by moving to other adjacent areas temporarily. Increased human activity and vehicle traffic in the vicinity may disturb some wildlife species. Because common wildlife species found in the project area are locally and regionally common, potential impacts to these resources are considered less than significant. Therefore, no avoidance or minimization measures are proposed at this time.

Potential Impacts to Nesting Special-Status Avian Species from Project Activities

Implementation of the proposed project could potentially impact individual, foraging, and nesting migratory birds and raptor species should they become established within the proposed project site or buffer area prior to project implementation. Impacts to these species could occur through crushing by construction equipment during implementation of project activities. Actively nesting birds could also be affected due to noise and vibration from project activities, if nests are located close enough to project activities. Project related noise and vibration could cause the

abandonment of active nest sites. Impacts to these species would be considered significant. In the event that nesting birds become established in the proposed project site or buffer area, the following Standard Construction Conditions measures will be implemented.

If ground disturbing activities occur during the breeding season of migratory avian or raptor species (February through mid-September), surveys for active nests will be conducted by a qualified biologist no more than 10 days prior to start of activities. Pre-construction nesting surveys shall be conducted for nesting migratory avian and raptor species in the project site and buffer area. Pre-construction biological surveys shall occur prior to the proposed project implementation, and during the appropriate survey periods for nesting activities for individual avian species. Surveys will follow required CDFW and USFWS protocols, where applicable. A qualified biologist will survey suitable habitat for the presence of these species. If a migratory avian or raptor species is observed and suspected to be nesting, a buffer area will be established to avoid impacts to the active nest site. Identified nests should be continuously surveyed for the first 24 hours prior to any construction-related activities to establish a behavioral baseline. If no nesting avian species are found, project activities may proceed and no further Standard Construction Conditions measures will be required. If active nesting sites are found, the following exclusion buffers will be established, and no project activities will occur within these buffer zones until young birds have fledged and are no longer reliant upon the nest or parental care for survival.

- Minimum no disturbance of 250 feet around active nest of non-listed bird species and 250 foot no disturbance buffer around migratory birds;
- Minimum no disturbance of 500 feet around active nest of non-listed raptor species;
- and 0.5-mile no disturbance buffer from listed species and fully protected species until breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival.
- Once work commences, all nests should be continuously monitored to detect any behavioral changes as a result of project activities. If behavioral changes are observed, the work causing that change should cease and the appropriate regulatory agencies (i.e. CDFW, USFWS, etc.) shall be consulted for potential avoidance and minimization measures.
- A variance from these no disturbance buffers may be implemented when there is compelling biological or ecological reason to do so, such as when the project area would be concealed from a nest site by topography. Any variance from these buffers is advised to be supported by a qualified wildlife biologist and is recommended that CDFW and USFWS be notified in advance of implementation of a no disturbance buffer variance.

Potential Impacts to Red-Bellied Newt from Project Activities

Implementation of the proposed project has the potential to result in direct impacts to red-bellied newt should they be present in the proposed project site during project activities. No individuals of this species were observed during biological surveys and none have been observed within the proposed project site or buffer area. Direct impacts to individuals of these species could result from ground disturbance activities during project implementation. These species could be directly impacted by crushing by construction equipment. These impacts could result in direct mortality of individuals or small populations of these species. In order to reduce potential impacts to these species to a less than significant level, Standard Construction Conditions measures will be implemented.

The following Standard Construction Conditions measure will be implemented: A qualified biologist familiar with the identification of red-bellied newt will conduct pre-construction surveys for their presence. The search area will encompass a 50-foot radius around all work sites. Should any individuals of this species be observed, they will be relocated by the qualified biologist to similar habitats just outside the project work areas.

Potential Impacts to Townsend's Big-Eared Bats from Project Activities

Implementation of the proposed project could potentially impact pallid bat maternity sites if these species are present in the project buffer area during implementation of the project if they have established maternity or roosting sites. Impacts to pallid bat maternity/roost sites would occur primarily from noise and vibration created from project construction equipment and construction related activities. Noise and vibration could lead to this bat species abandoning established roost/maternity sites. Impacts to this species would be considered significant. In the event that bat roost/maternity sites become established in the proposed project buffer area prior to project implementation, the following Standard Construction Conditions measures will be implemented to protect this species from potential impacts:

1. Pre-activity surveys will be conducted for bat species and their roosting/maternity sites in the project site and buffer area. If a bat roosting/maternity site is identified during these survey or suspected to be present, a buffer area will be established to avoid impacts on the burrow/maternity site, and subsequently the bat species. The following exclusion zone will apply:

    - 300 feet for known or potential maternity roosting site. If deemed warranted project proponent will consult with Mendocino County and the appropriate state (CDFW) and Federal (USFWS) regulatory agencies to work out a plan to avoid impacts to the species before work resumes.

Potential Impacts to California Giant Salamander from Project Activities

Implementation of the proposed project has the potential to result in direct impacts to California

giant salamander should they be present in the proposed project site during project activities (in aestivation habitat). No individuals of these species were observed during biological surveys. Direct impacts to individuals of these species could result from ground disturbance activities during project implementation. These species could be directly impacted by crushing by construction equipment. These impacts could result in direct mortality of individuals or small populations of these species. In order to reduce potential impacts to these species to a less than significant level, the following Standard Construction Conditions measures will be implemented.

AT&T will retain a qualified biologist familiar with the identification of California giant salamander will conduct pre-construction surveys for their presence. The search area will encompass a 50-foot radius around all work sites. Should any individuals of this species be observed, they will be relocated by the qualified biologist to similar habitats just outside the project work areas.

Potential Impacts to Sonoma Tree Vole from Project Activities

Implementation of the proposed project could result in potentially significant impacts on Sonoma tree vole and their habitat during proposed project activities. This species has the potential to occur in the proposed project site within montane hardwood forest. These impacts could result in direct mortality to individuals or small populations of these species, disturb breeding and foraging activities, and disturb potential habitat. These potential impacts will be avoided or reduced to a less-than-significant level through the implementation of the following Standard Construction Conditions measures:

- AT&T shall retain a qualified biologist to conduct pre-activity surveys will be conducted for Sonoma tree vole in the proposed disturbance zone prior to any ground disturbing activities.

- If an active Sonoma tree vole nest is identified, a 330-foot buffer area will be established around the nest site to avoid or minimize impacts on the nest. AT&T will consult with the appropriate regulatory agencies on how to protect this individual population of the species. If no active Sonoma tree vole nests are found, project activities may proceed and no further Standard Construction Conditions measures will be required.

Potential Impacts to Special-Status Plant Species from Project Activities

Review of the USFWS (USFWS 2018), the CNPS (CNPS 2018), and the CNDDB (CNDDB 2018) revealed that 36 listed plant species and species of concern have potential to occur in the general project area. Please refer to Table 1 for a list of these species and their habitat requirements. Potential habitat is present in the proposed project site and buffer area for 22 of these 36 plant species. Botanical surveys were conducted on November 7, 2018. These surveys were conducted within the blooming period of 1 of these 22 special-status plant species.

Survey findings for the 1 targeted special-status plant species that had a blooming periods during our surveys were negative. Therefore, no impacts to that species is expected due to project implementation.

Because our botanical surveys were conducted outside of the blooming period of the remaining 21 special-status plant species that bloom outside of our survey dates, we cannot say with certainty that these species do not occur within the proposed project site or buffer area.

Implementation of the proposed project could potentially result in impacts on these 21 special-status plant species if they are located within the proposed project site during project activities. Direct impacts to these plant species could result from ground disturbance activities during project implementation. Special-status plant species could be directly impacted by crushing of plants by construction equipment. These impacts could result in direct mortality of individuals or small populations of special-status plant species.

A qualified botanist will conduct pre-construction field surveys to identify any populations of special-status plant species within the proposed project site that will be disturbed during project activities. These surveys shall be conducted prior to the initiation of any construction activities and coincide with the appropriate flowering period of the special-status plant species with the potential to occur in the project area. If any special-status plant species populations are identified within or adjacent to the proposed disturbance areas, the project proponent shall implement the following Standard Construction Conditions measures to avoid impacts to these species:

- If any population(s) of special-status plant species is identified directly adjacent to the proposed project site, a qualified biologist retained by project proponent will clearly delineate the location of the plant population, and install protective fencing between the disturbance zone and the plant population to ensure that the plant population is adequately protected.

- If a special-status plant population is identified within the proposed disturbance zone, the project proponent will consult with CDFW and USFWS to determine the appropriate measures to avoid or mitigate for impacts to the species or population. The project proponent will adjust the boundaries of the disturbance zone, where feasible, to avoid impacts to the plant species/population. Where avoidance is not feasible, the project proponent will implement one or more of the following measures: (1) transplant potentially affected plants to areas not planned for disturbance. If a plant is transplanted, two more plants shall be planted. Plantings shall be managed and monitored by the applicant and shall survive to 5 years after planting; (2) seed or purchase plants and place them in an area adjacent to the disturbance zone; (3) purchase credits at an approved mitigation bank at a ratio approved by CDFW, USFWS, and the project proponent.

6.0 Conclusions and Determinations

6.1 Conclusions

This project will incorporate reasonable and prudent Standard Construction Conditions measures, described in Section 1.0. As a result, the project is not anticipated to result in take of any of the listed species described in this biological assessment.

Provided the precautions outlined above are followed, it is our opinion the proposed project would:

- Have less than significant impacts upon federal and California endangered, threatened, proposed or candidate species;
- Not result in destruction or adverse modification of a critical habitat area of a federal or California endangered or threatened species; and
- Not result in "take" of migratory birds protected under the Migratory Bird Treaty Act and other state, local or federal laws.

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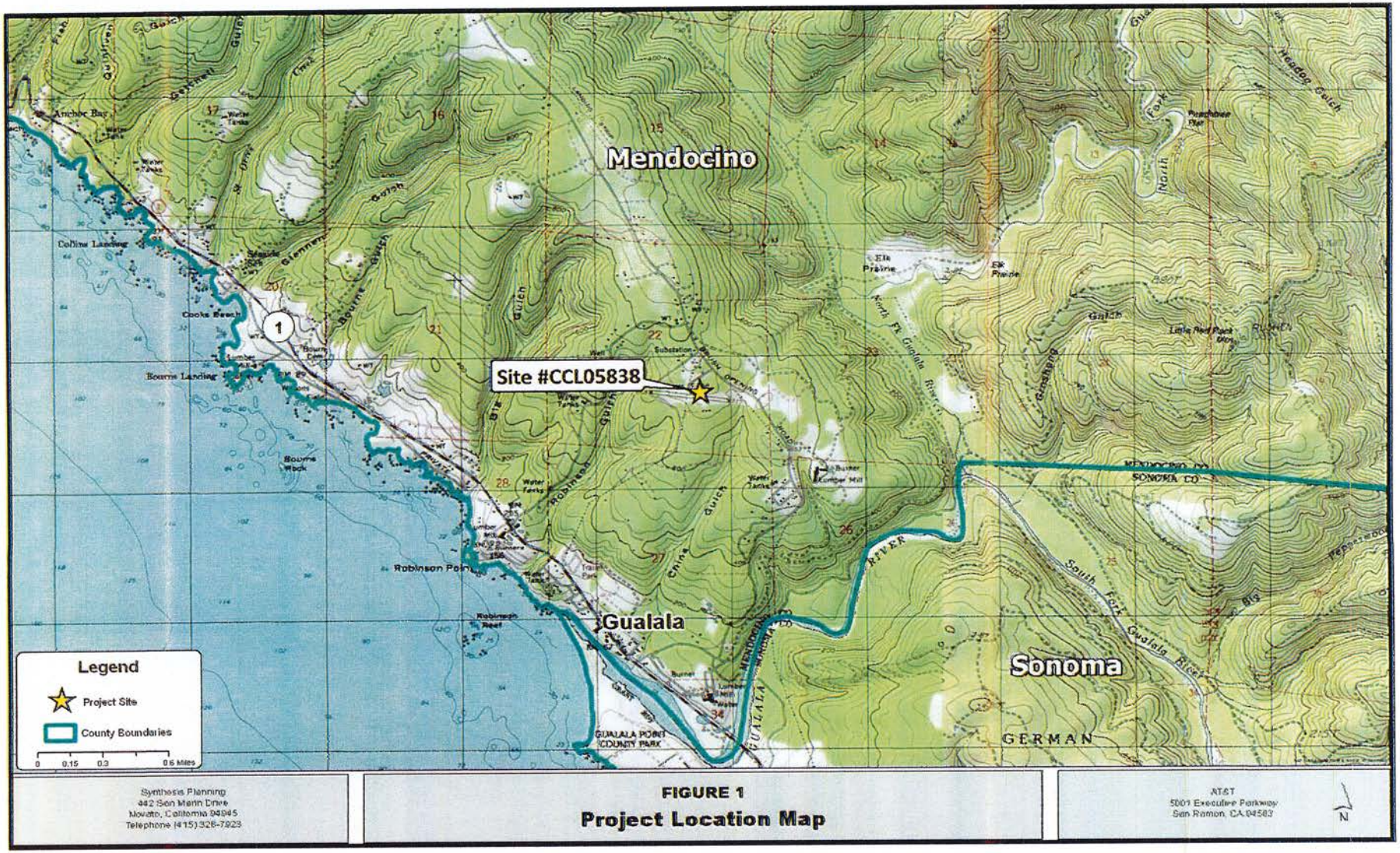
Appendix A: Project Figures


Mendocino
Site #CCL05838
Gualala
Sonoma
GERMAN
Legend
Project Site
County Boundaries
0 0.15 0.3 0.6 Miles
Synthesis Planning
442 San Marin Drive
Novato, California 94945
Telephone (415) 928-7923
FIGURE 1
Project Location Map
AT&T
5001 Executive Parkway
San Ramon, CA 94583
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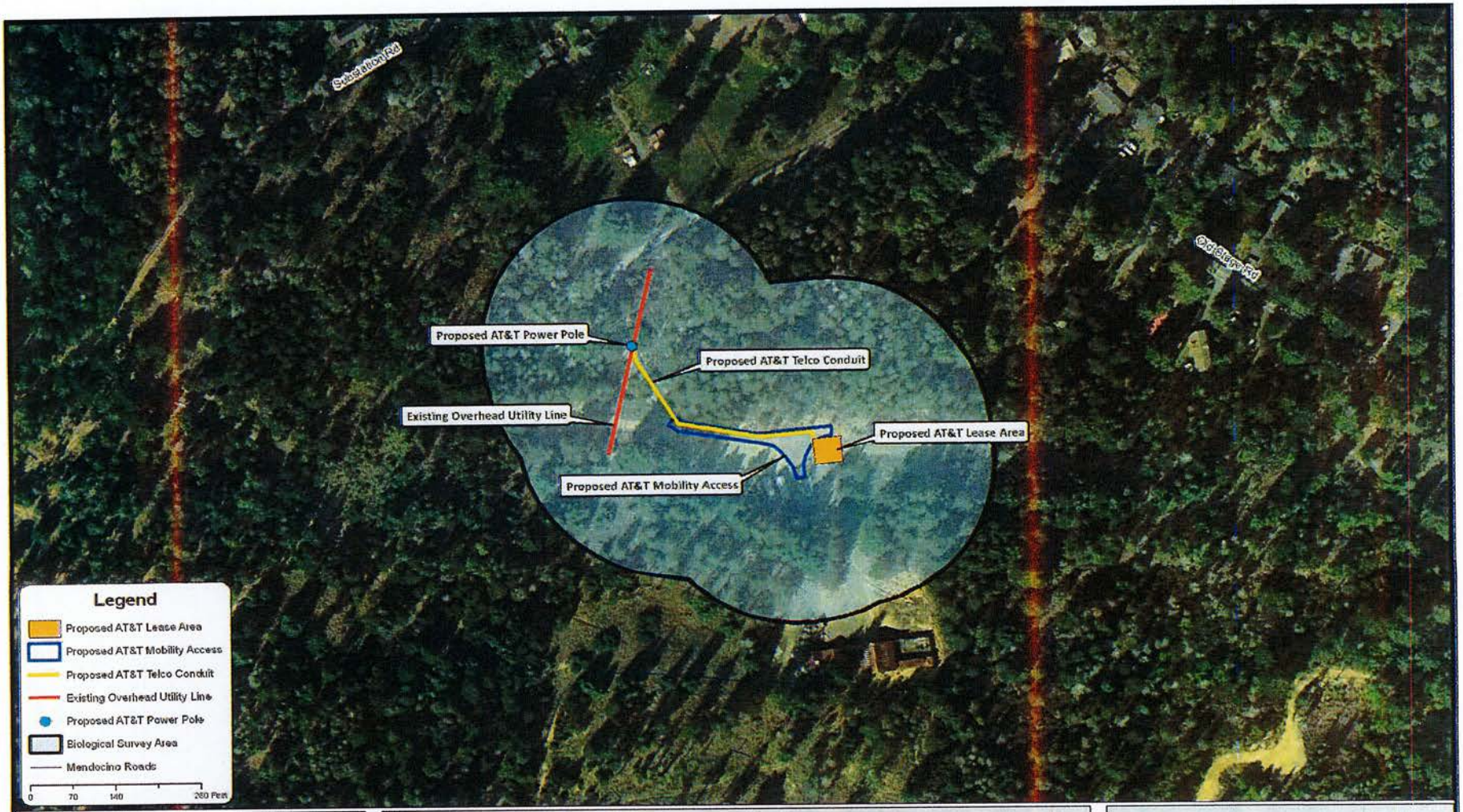
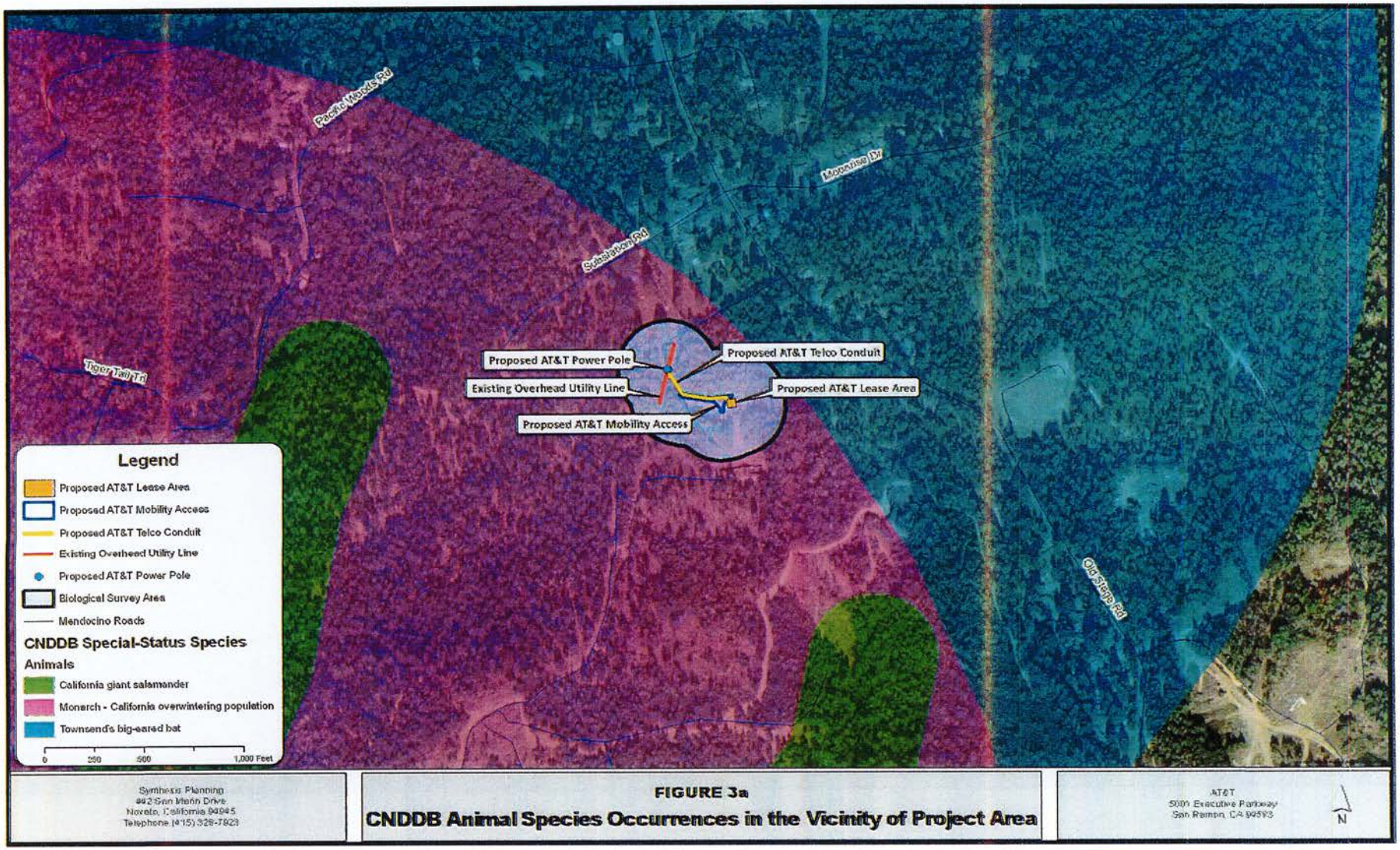


Synthesis Planning
442 San Mann Drive
Novato, California 94945
Telephone (415) 328-7923

FIGURE 2

Project Location Map

AT&T
5001 Executive Parkway
San Ramon, CA 94583



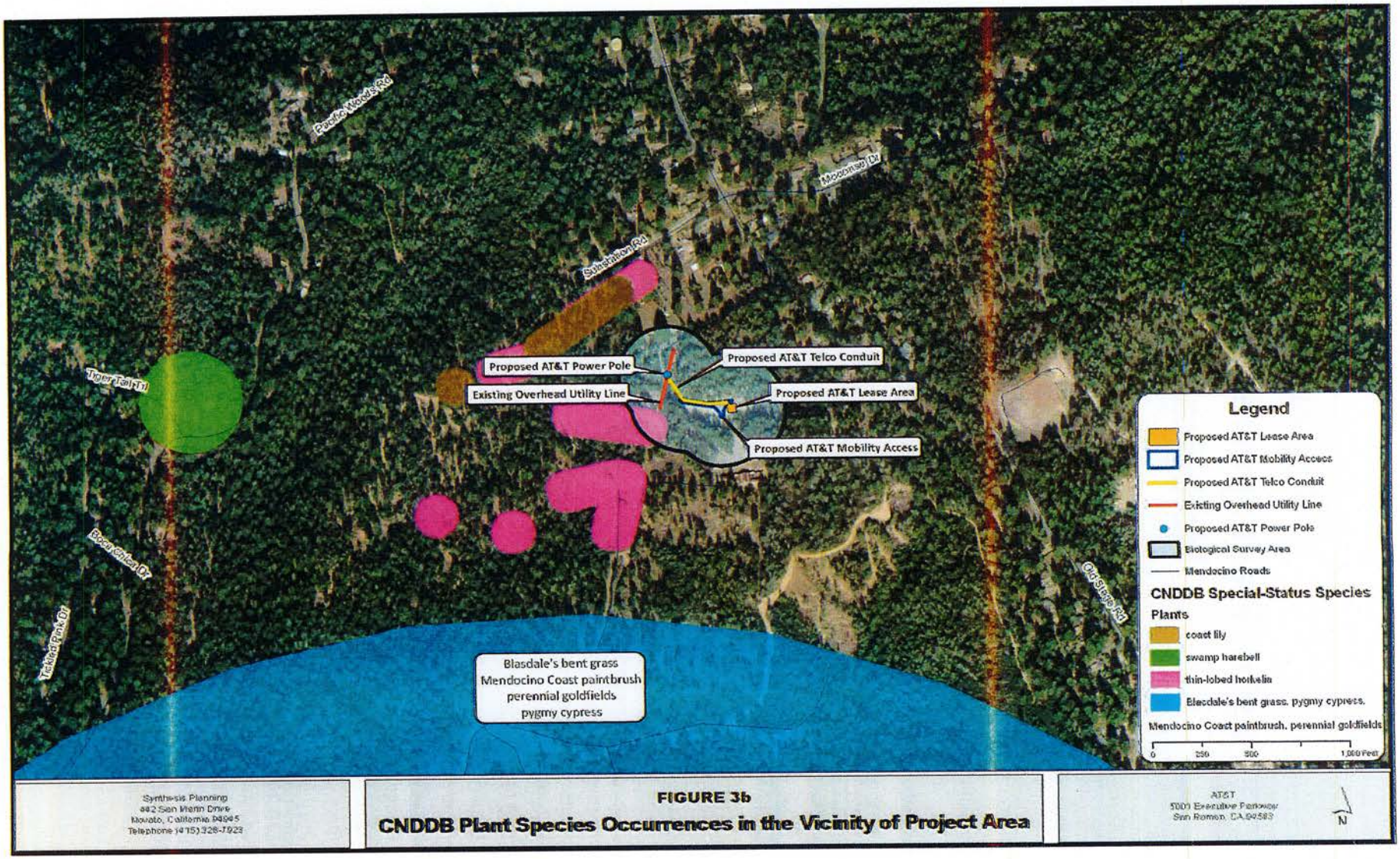
Synthesis Planning
942 Southern Drive
Novato, California 94945
Telephone (415) 328-7823

FIGURE 3a

CNDDB Animal Species Occurrences in the Vicinity of Project Area

AT&T
5001 Executive Parkway
San Ramon, CA 94583

N



Synthesis Planning
882 San Marin Drive
Novato, California 94945
Telephone (415) 328-7923

FIGURE 3b

CNDDB Plant Species Occurrences in the Vicinity of Project Area

AT&T
5001 Executive Parkway
San Ramon, CA 94583

Appendix B
List of Plant Species Observed During Biological Surveys

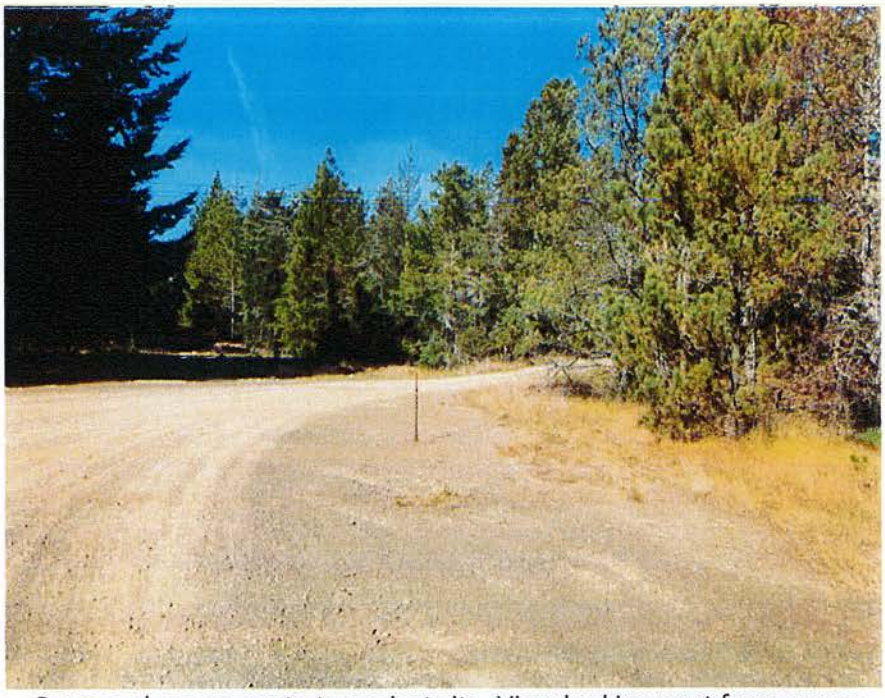
Common Name / Scientific Name
Bigleaf maple (*Acer macrophyllum*)
Five finger fern (*Adiantum aleuticum*)
California buckeye *(Aesculus californica*)
Red alder (*Alnus rubus*)
Pacific madrone (*Artbutus menziesii*)
Coyote brush (*Baccharis pilularis*)
Oregon grape (*Berberis nervosa*)
Deer fern (*Blechnum spicant*)
California brome (*Bromus carinatus carinatus*)
Sedge (*Carex amplifolia*)
Sedge (*Carex densa*)
Woodland sedge (*Carex globosa*)
Torrent sedge (*Carex nudata*)
California lilac (*Ceanthus griseus*)
Linear-leaf miner's lettuce (*Claytonia parviflora* ssp. *parviflora*)
Miner's lettuce (*Claytonia perfoliata*)
Mountain dogwood (*Cornus nuttallii*)
Umbrella sedge (*Cyperus eragrostis*)
California oatgrass (*Danthonia californica*)
Broadleaf filaree (*Erodium botrys*)
Red fescue (*Festuca rubra*)
Salal (*Gaultheria shallon*)
Hayfield tarweed (*Hemizonia congesta*)
Meadow barley (*Hordeum brachyantherum*)
Douglas iris (*Iris douglasiana*)
Toad rush (*Juncus bufonius* var. *bufonius*)
Rush (*Juncus effuses*)
Rush (*Juncus patens*)
Tan oak (*Lithocarpus densiflorus*)
Coast man-root (*Marah oreganus*)
Redwood sorrel (*Oxalis oregana*)
Indian warrior (*Pedicularis densiflora*)
Goldenback fern (*Pentagramma triangularis*)
Pacific ninebark (*Physocarpus capitatus*)
Sitka spruce (*Picea sitchensis*)

Dwarf plantain (*Plantago erecta*)
English plantain (*Plantago lanceolata*)
Tall Coastal Plantain (*Plantago subnuda*)
Western swordfern (*Polystichum munitum*)
Douglas fir (*Pseudotsuga menziesii var. menziesii*)
Western bracken fern (*Pteridium aquilinum*)
California buttercup (*Ranunculus californicus*)
Coffeeberry (*Rhamnus californica*)
Western thimbleberry (*Rubus parviflorus*)
California blackberry (*Rubus ursinus*)
Coast redwood (*Sequoia sempervirens*)
Blue-eyed Grass (*Sisyrinchium bellum*)
Common snowberry (*Symphoricarpos albus*)
Poison-oak (*Toxicodendron diversilobum*)
Clovers (*Trifolium spp.*)
Western wake robin (*Trillium ovatum*)
Narrowleaf cattail (*Typha angustifolia*)
Broadleaf cattail (*Typha latifolia*)
Stinging nettle (*Urtica dioica*)
California huckleberry (*Vaccinium ovatum*)
Redwood violet (*Viola sempervirens*)

Appendix C
Site Photos

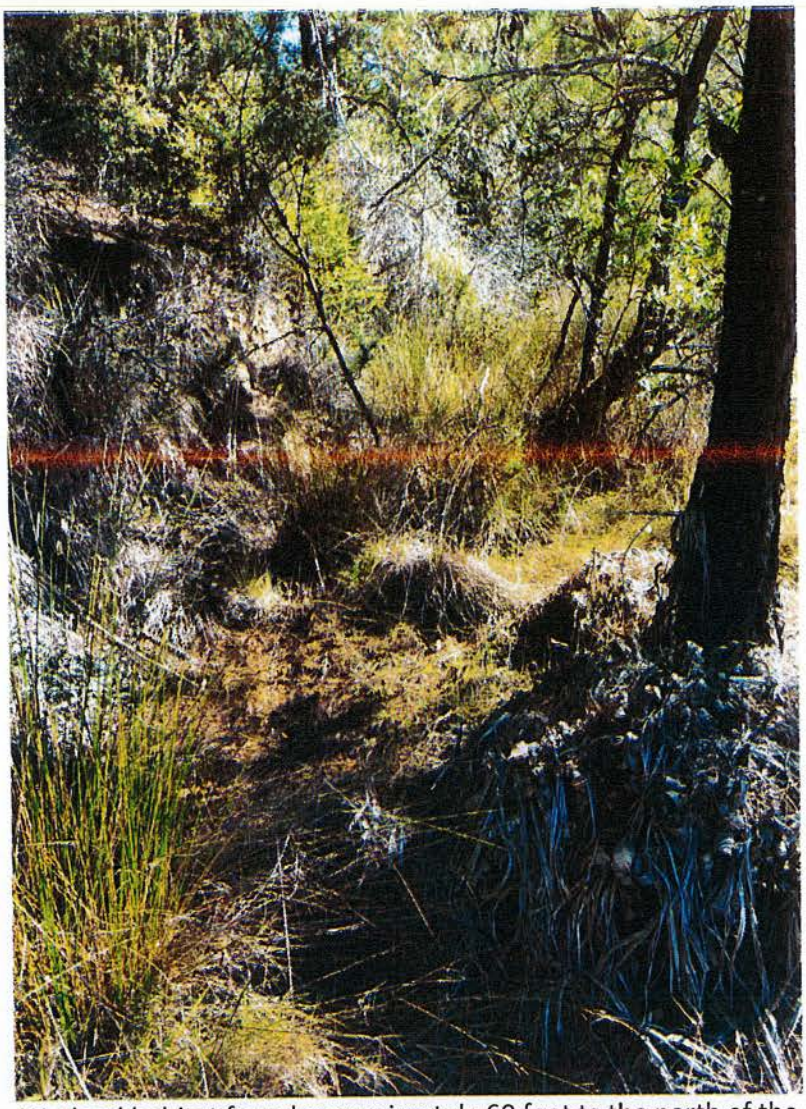
Proposed project site. View looking southwest at project site.

Proposed project site. View looking east from access route towards proposed project site.



Proposed access route to project site. View looking west from access route.

Proposed access route to project site. View looking northwest from access route.



Wetland habitat found approximately 60 feet to the north of the proposed tower site.

SITE NUMBER: CCL05838

SITE NAME: GUALALA

39290 OLD STAGE ROAD
GUALALA, CA 95445
JURISDICTION: MENDOCINO COUNTY

USID: 205189
FA: 14442803

SITE TYPE: LATTICE TOWER/WALK IN EQUIPMENT CABINET

PROJECT DESCRIPTION

PROPOSED SITE BUILD UNMANNED TELECOMMUNICATIONS FACILITY.

1. GRAVEL ROAD IMPROVEMENT
2. 45' X 45' FENCED LEASE AREA
3. INSTALL AT&T APPROVED PRE-MANUFACTURED WALK IN EQUIPMENT CABINET AND ASSOCIATED INTERIOR EQUIPMENT
4. ADD (1) PROPOSED GPS UNITS
5. ADD 123'-0" LATTICE TOWER
6. ADD (12) PROPOSED & (4) FUTURE ANTENNAS
7. ADD (24) PROPOSED RRUS
8. ADD (4) SURGE SUPPRESSORS
9. ADD (2) FUTURE 4' MICROWAVE DISHES
10. ADD 6'-0" HIGH CHAIN LINK FENCE W/ VINYL SLATS
11. ADD 15KW DC DIESEL GENERATOR WITH ATTACHED DIESEL STORAGE TANK

CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUCTED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

1. 2016 CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24, C.C.R. (CALIFORNIA CODE OF REGULATIONS)
2. 2016 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, C.C.R. (VOLUMES 1 & 2), (2015 INTERNATIONAL BUILDING CODE)
3. 2016 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24, C.C.R., (2014 NATIONAL ELECTRICAL CODE)
4. 2016 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, C.C.R., (2015 UNIFORM MECHANICAL CODE)
5. 2016 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, C.C.R., (2015 UNIFORM PLUMBING CODE)
6. 2016 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24, C.C.R.
7. 2016 CALIFORNIA HISTORICAL BUILDING CODE, PART 8, TITLE 24, C.C.R., (2015 INTERNATIONAL BUILDING CODE)
8. 2016 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R., (2015 INTERNATIONAL FIRE CODE)
9. 2016 CALIFORNIA EXISTING BUILDING CODE, PART 10, TITLE 24, C.C.R., (2015 INTERNATIONAL BUILDING CODE)
10. 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24 C.C.R., (CALGreen)
11. 2016 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.
12. ANSI/EIA-TIA-222-G
13. ALONG WITH ANY OTHER APPLICABLE LOCAL & STATE LAWS AND REGULATIONS.

DISABLED ACCESS REQUIREMENTS

THIS FACILITY IS UNMANNED & NOT FOR HUMAN HABITATION. DISABLED ACCESS & REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA STATE BUILDING CODE TITLE 24 PART 2, SECTION 11B-203.4

OCCUPANCY AND CONSTRUCTION TYPE

OCCUPANCY : U (UNMANNED)

CONSTRUCTION TYPE: V-B

PROJECT INFORMATION

PROPERTY INFORMATION:
SITE NAME: GUALALA
SITE NUMBER: CCL05838
SEARCH RING: GUALALA
FA# 14442803
SITE ADDRESS: 39290 OLD STAGE ROAD
GUALALA, CA 95445

A.P.N. NUMBER: 145-091-22-00

CURRENT USE: RMR/ RR
PROPOSED USE: (U) UNMANNED TELECOMMUNICATION FACILITY

JURISDICTION: MENDOCINO COUNTY

LATITUDE: N 38° 47' 01.15" (NAD83)

LONGITUDE: W 123° 31' 18.17"(NAD83)

GROUND ELEVATION: ±722 FT. AMSL

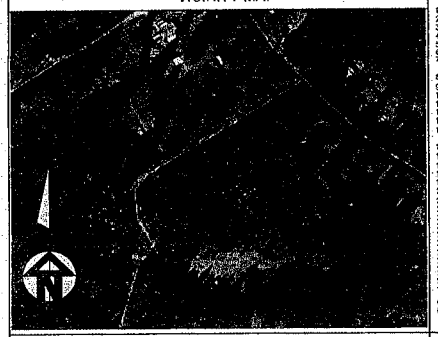
PROPERTY OWNER:
ARENA UNION ELEMENTARY SCHOOL DISTRICT
PO BOX 67
DUBLIN, CA 94568

POWER AGENCY:
PG&E
PG&E CORPORATION
1 MARKET STREET, SPEAR TOWER
SAN FRANCISCO, CA 94105
PH: 1-800-743-5000

TELEPHONE AGENCY:
AT&T
525 MARKET STREET, SPEAR TOWER
SAN FRANCISCO, CA 94105
PH: 1-800-310-2355

RFDS DATED 06-12-2018, ISSUE 1.0
REVISION 1.00.00

VICINITY MAP



SPECIAL INSPECTIONS

PROJECT TEAM

APPLICANT / LESSEE:
AT&T
5001 EXECUTIVE PARKWAY
SAN RAMON, CA 945834

RF ENGINEER:
AT&T CONTACT: STEPHEN NELSON
EMAIL: SN1495@ATT.COM

PROJECT MGR.:
EPIC WIRELESS
CONTACT: NICK TACAS
EMAIL: NICK.TACAS@EPICWIRELESS.NET
PH: (916) 990-1446

SITE ACQUISITION:
COMPANY: EPIC WIRELESS
CONTACT: JARED KEARSLEY (ZONING MGR.)
EMAIL: JARED.KEARSLEY@EPICWIRELESS.NET
CELL: (916) 755-1326

CONSTRUCTION COORDINATOR:
COMPANY: EPIC WIRELESS
CONTACT: PETE MANAS
EMAIL: PETE.MANAS@EPICWIRELESS.NET
PH: (530) 363-5957

A&E DESIGN GROUP:
COMPANY: EPIC WIRELESS
CONTACT: CARL SYLVESTER
CARL.SYLVESTER@EPICWIRELESS.NET
PH: (530) 933-2763

ARCHITECT / ENGINEER:
ADAPTIVE RE-USE ENGINEERING
CONTACT: CRAIG HORNER, PE 84674
EMAIL: CRAIGMHORNER@YAHOO.COM
PH: (214) 407-3184

CIVIL VENDOR/ CONSTRUCTION MGR.:
SAC WIRELESS
CONTACT: RYAN FRUM
EMAIL: RYAN.FRUM@SACW.COM
PH: (847) 363-5745

DIRECTIONS FROM AT&T

DIRECTIONS FROM AT&T'S OFFICE AT 2600 CAMINO RAMON, SAN RAMON, CA

2600 CAMINO RAMON
SAN RAMON, CA 94583

1. GET ON I-680 N FROM CAMINO RAMON AND BOLLINGER CANYON RD 4 MIN (1.2 MI)
2. HEAD EAST 157 FT
3. TURN RIGHT TOWARD CAMINO RAMON 0.2 MI
4. TURN RIGHT ONTO CAMINO RAMON 0.4 MI
5. USE THE RIGHT 2 LANES TO TURN RIGHT ONTO BOLLINGER CANYON RD 0.4 MI
6. USE THE RIGHT 2 LANES TO MERGE ONTO I-680 N VIA THE RAMP TO SACRAMENTO 0.3 MI
7. CONTINUE ON I-680 N. TAKE CA-24 W, I-580 W AND US-101 N TO W RAILROAD AVE IN SONOMA COUNTY. TAKE EXIT 479 FROM US-101 N 1 H 8 MIN (71.5 MI)
8. MERGE ONTO I-680 N 10.8 MI
9. USE THE RIGHT 2 LANES TO TAKE EXIT 46A FOR STATE ROUTE 24 TOWARD OAKLAND/LAFAYETTE 1.1 MI
10. CONTINUE ONTO CA-24 W 8.1 MI
11. KEEP LEFT AT THE FORK TO STAY ON CA-24 W 4.3 MI
12. USE THE RIGHT 2 LANES TO TAKE EXIT 2B FOR INTERSTATE 580 W 1.0 MI
13. USE THE LEFT LANE TO MERGE ONTO I-580 W 0.6 MI
14. USE THE 2ND FROM THE RIGHT LANE TO TAKE THE I-580 W/I-80 E EXIT TOWARD BERKELEY/SACRAMENTO 0.5 MI
15. USE THE LEFT LANE TO MERGE ONTO I-80 E 0.3 MI
16. KEEP LEFT TO CONTINUE ON I-580 W/I-80 E 3.5 MI
17. USE THE RIGHT 2 LANES TO TAKE EXIT 13B FOR I-580 TOWARD SAN RAFAEL/POINT RICHMOND 0.5 MI
18. CONTINUE ONTO I-580 W PARTIAL TOLL ROAD 13.0 MI
19. MERGE ONTO US-101 N 27.8 MI
20. TAKE EXIT 479 FOR RAILROAD AVE 0.2 MI
21. TAKE ROBLAR RD AND VALLEY FORD RD TO CA-1 N 19 MIN (14.1 MI)
22. TURN LEFT ONTO W RAILROAD AVE 0.4 MI
23. TURN RIGHT ONTO STAMY POINT RD 1.7 MI
24. TURN LEFT ONTO ROBLAR RD 6.5 MI
25. TURN RIGHT ONTO VALLEY FORD RD 3.5 MI
26. VALLEY FORD RD TURNS SLIGHTLY LEFT AND BECOMES CA-1 N
27. 1 H 29 MIN (55.7 MI) DRIVE TO OLD STAGE RD 6 MIN (3.5 MI)
28. TURN RIGHT ONTO OLD STATE HWY 0.3 MI
29. CONTINUE ONTO OLD STATE 501 RD 0.2 MI
30. CONTINUE ONTO OLD STAGE 502 RD E 0.5 MI
31. CONTINUE ONTO OLD STAGE RD 2.4 MI

OLD STAGE RD
GUALALA, CA 95445

APPROVALS

APPROVED BY:	INITIALS:	DATE:
AT&T:		
VENDOR:		
R.F.:		
LEASING / LANDLORD:		
ZONING:		
CONSTRUCTION:		
POWER / TELCO:		
PG&E:		

SHEET INDEX

REV		
T-1	TITLE SHEET	
GN-1	GENERAL NOTES	
C-1	SITE SURVEY (BY OTHERS) FOR REFERENCE ONLY	
C-2	SITE SURVEY (BY OTHERS) FOR REFERENCE ONLY	
A-1	OVERALL SITE PLAN – EXTERIOR EQUIPMENT WALK IN EQUIPMENT CABINET	
A-1.1	SITE PLAN – EXTERIOR EQUIPMENT WALK IN EQUIPMENT CABINET	
A-2	EQUIPMENT AREA PLAN – EXTERIOR EQUIPMENT WALK IN EQUIPMENT CABINET	
A-3	ANTENNA PLAN & DETAILS – LATTICE TOWER	
A-4.1	PROPOSED LATTICE TOWER NORTH – SOUTH ELEVATION	
A-4.2	PROPOSED LATTICE TOWER EAST – WEST ELEVATION	

GENERAL CONTRACTOR NOTES

DO NOT SCALE DRAWINGS

THESE DRAWINGS ARE FORMATTED TO BE FULL SIZE AT 24" x 36". CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOBSITE AND SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR MATERIAL ORDERS OR BE RESPONSIBLE FOR THE SAME.

DIGALERT
800-227-2600

Issued For:
GUALALA
39290 OLD STAGE ROAD
GUALALA, CA 95445

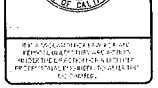
PREPARED FOR
at&t
2600 Camino Ramon, 4W980 N
San Ramon, California 94583

EPIC WIRELESS GROUP LLC

AT&T SITE NO:	CCL05838
PROJECT NO:	14442803
DRAWN BY:	CES
CHECKED BY:	CES

REV	DATE	DESCRIPTION
0	04/26/19	30% DD
A	07/11/19	90% DD
1	10/15/19	90% DD RESUBMITTAL

Licensor:



Engineer:
ADAPTIVE RE-USE ENGINEERING
Craig Horner, PE 84674
214-407-3184
3112 LEATHA WAY
SACRAMENTO, CA 95821
craigmhorner@yahoo.com

SHEET TITLE:
TITLE SHEET

SHEET NUMBER:
T-1

Lease Area Description

All that certain lease area being a portion of that certain 10.54 acre parcel as is shown on that certain Record of Survey filed for record in Maps at Drawer 68, Page 39, Mendocino County Records, located in the County of Mendocino, State of California, and being a portion of Section 22, Township 11 N., Range 15 W., M.D.B.& M. and being more particularly described as follows:

Commencing at a 1/2" pipe with plug labeled LS4873 set for the Southeast terminus of that certain boundary tangent labeled "N 26°51'29" W 103.82" from which a similar monument bears North 26°51'29" West 103.82 feet; thence from said point of commencement North 83°50'48" East 123.05 feet to the True Point of Beginning; thence from said True Point of Beginning North 80°00'00" East 45.00 feet; thence North 10°00'00" West 45.00 feet; thence South 80°00'00" West 45.00 feet; thence South 10°00'00" East 45.00 feet to the point of beginning.

Together with a non-exclusive easement for access and utility purposes fifteen feet in width the centerline of which is described as follows: beginning at a point which bears North 10°00'00" West 7.50 feet from the Northeast corner of the above described lease area and running thence South 80°00'00" West 40.62 feet; thence through a tangent curve to the right having a radius of 57.50 feet for an arc distance of 9.77 feet; thence tangent to the last curve West 55.16 feet; thence through a tangent curve to the right having a radius of 57.50 feet through an arc distance of 27.44 feet; thence tangent to the last curve North 62°39'36" West 38.87 feet; thence through a tangent curve to the left having a radius of 57.50 feet through an arc distance of 11.18 feet; thence tangent to last curve North 73°47'57" West 17.23 feet; thence through a tangent curve to the left having a radius of 57.50 feet for an arc distance of 11.84 feet; thence tangent to last curve North 85°36'01" West 7.43 feet; thence through a tangent curve to the right having a radius of 57.50 feet for an arc distance of 54.11 feet; thence tangent to last curve North 31°40'48" West 105.39 feet; thence through a tangent curve to the right having a radius of 182.00 feet for an arc distance of 53.98 feet thence tangent to last curve North 14°41'16" West 15.30 feet; thence through a tangent curve to the right having a radius of 112.00 feet for an arc distance of 50.66 feet; thence tangent to last curve North 11°17'44" East 2.01 feet; thence through a tangent curve to the right having a radius of 66.00 feet for an arc distance of 23.00 feet thence tangent to last curve North 31°11'57" East 4.59 feet; thence through a tangent curve to the right having a radius of 100.00 feet for an arc distance of 47.34 feet thence tangent to last curve North 58°19'22" East 66.62 feet; thence North 57°15'03" East 81.48 feet; thence North 58°38'24" East 223.97 feet; thence North 58°10'19" East 118.00 feet; thence North 59°13'06" East 85.56 feet; thence North 57°47'18" East 30 feet more or less to the public right of way more commonly known as Old Stage Road. Including the "Turn-Around" as is generally shown hereon.

DATE OF SURVEY: 05-01-18

SURVEYED BY OR UNDER DIRECTION OF: KENNETH D. GEIL R.C.E. 14803

LOCATED IN THE COUNTY OF MENDOCINO, STATE OF CALIFORNIA

BEARINGS SHOWN ARE BASED UPON MONUMENTS FOUND AND RECORD INFORMATION. THIS IS NOT A BOUNDARY SURVEY.

ELEVATIONS SHOWN ON THIS PLAN ARE BASED UPON U.S.G.S. N.A.V.D. 88 DATUM. ABOVE MEAN SEA LEVEL.

N.G.V.D. 1929 CORRECTION: SUBTRACT 2.87' FROM ELEVATIONS SHOWN.

CONTOUR INTERVAL: N/A

CONTRACTOR IS RESPONSIBLE TO VERIFY LEASE AREA PRIOR TO CONSTRUCTION.

ASSESSOR'S PARCEL NUMBER: 145-091-22-00

OWNER(S): ARENA ELEMENTARY SCHOOL DISTRICT
PO BOX 87
OUBLIN, CA 94568

Geil Engineering
Engineering * Surveying * Planning
1226 High Street
Auburn, California 95603-5015
Phone: (530) 885-0426 * Fax: (530) 823-1309

A.T.& T. Mobility

Project No./Name: CCL05838 / GUALALA

Project Site Location: 39290 Old Stage Road
Gualala, CA 95445
Mendocino County

Date of Observation: 04-30-18

Equipment/Procedure Used to Obtain Coordinates: Trimble Pathfinder Pro XL post processed with Pathfinder Office software.

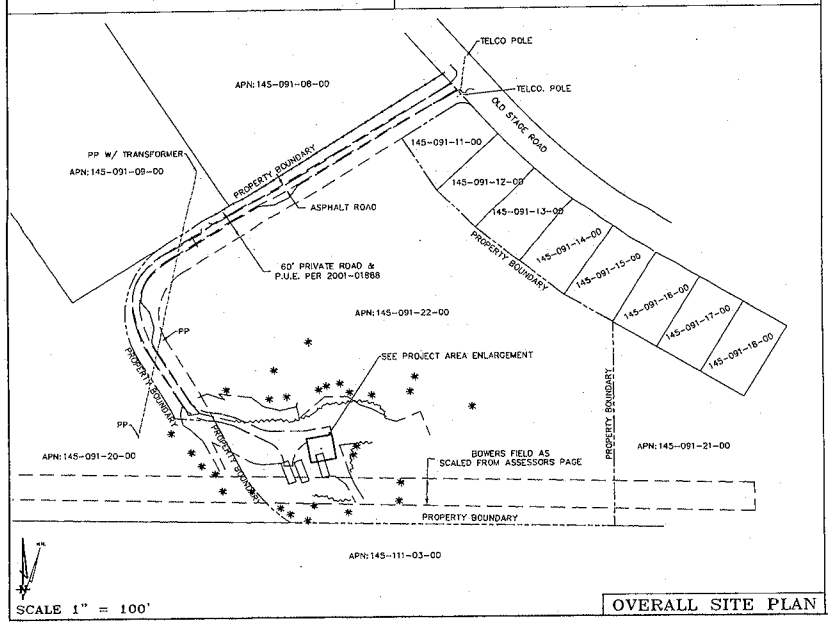
Type of Antenna Mount: Proposed Lattice Tower

Coordinates (Tower)
Latitude: N 38° 47' 01.15" (NAD83) N 38° 47' 01.47" (NAD27)
Longitude: W 123° 31' 18.17" (NAD83) W 123° 31' 14.14" (NAD27)

ELEVATION of Ground at Structure (NAVD88): 722' AMSL

CERTIFICATION: I, the undersigned, do hereby certify elevation listed above is based on a field survey done under my supervision and that the accuracy of those elevations meet or exceed 1-A Standards as defined in the FAA ASAC Information Sheet 91.003, and that they are true and accurate to the best of my knowledge and belief.

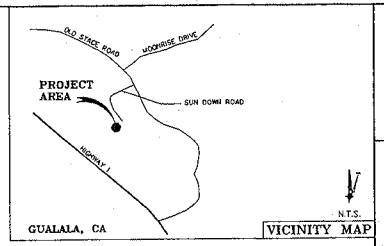
Kenneth D. Geil California RCE 14803

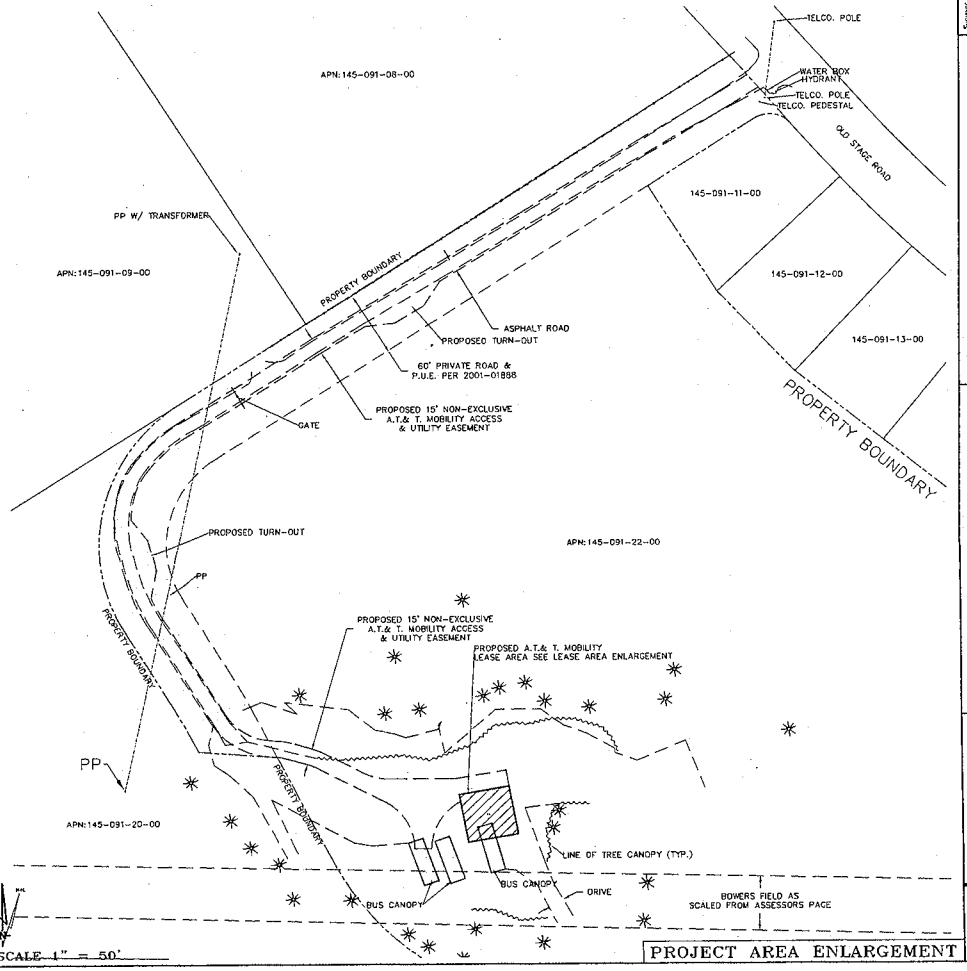


SCALE 1" = 100'

OVERALL SITE PLAN

BOUNDARY SHOWN IS BASED ON MONUMENTATION FOUND AND RECORD INFORMATION. THIS IS NOT A BOUNDARY SURVEY. THIS IS A SPECIALIZED TOPOGRAPHIC MAP WITH PROPERTY LINES AND EASEMENTS BEING A GRAPHIC DEPICTION BASED ON INFORMATION GATHERED FROM VARIOUS SOURCES OF RECORD AND AVAILABLE MONUMENTATION FOUND DURING THE FIELD SURVEY. NO EASEMENTS WERE RESEARCHED OR PLOTTED. PROPERTY LINES AND LINES OF TITLE WERE NOT INVESTIGATED NOR SURVEYED. NO PROPERTY MONUMENTS WERE SET.





SCALE 1" = 50'

PROJECT AREA ENLARGEMENT

DEPT	APPROVED	DATE
A&C		
RE		
RF		
INT		
EE/LM		
GPS		
ENV/OUT		

GEIL ENGINEERING
ENGINEERING * SURVEYING * PLANNING
1226 HIGH STREET
AUBURN, CALIFORNIA 95603
PHONE (530) 885-0426
FAX (530) 823-1309

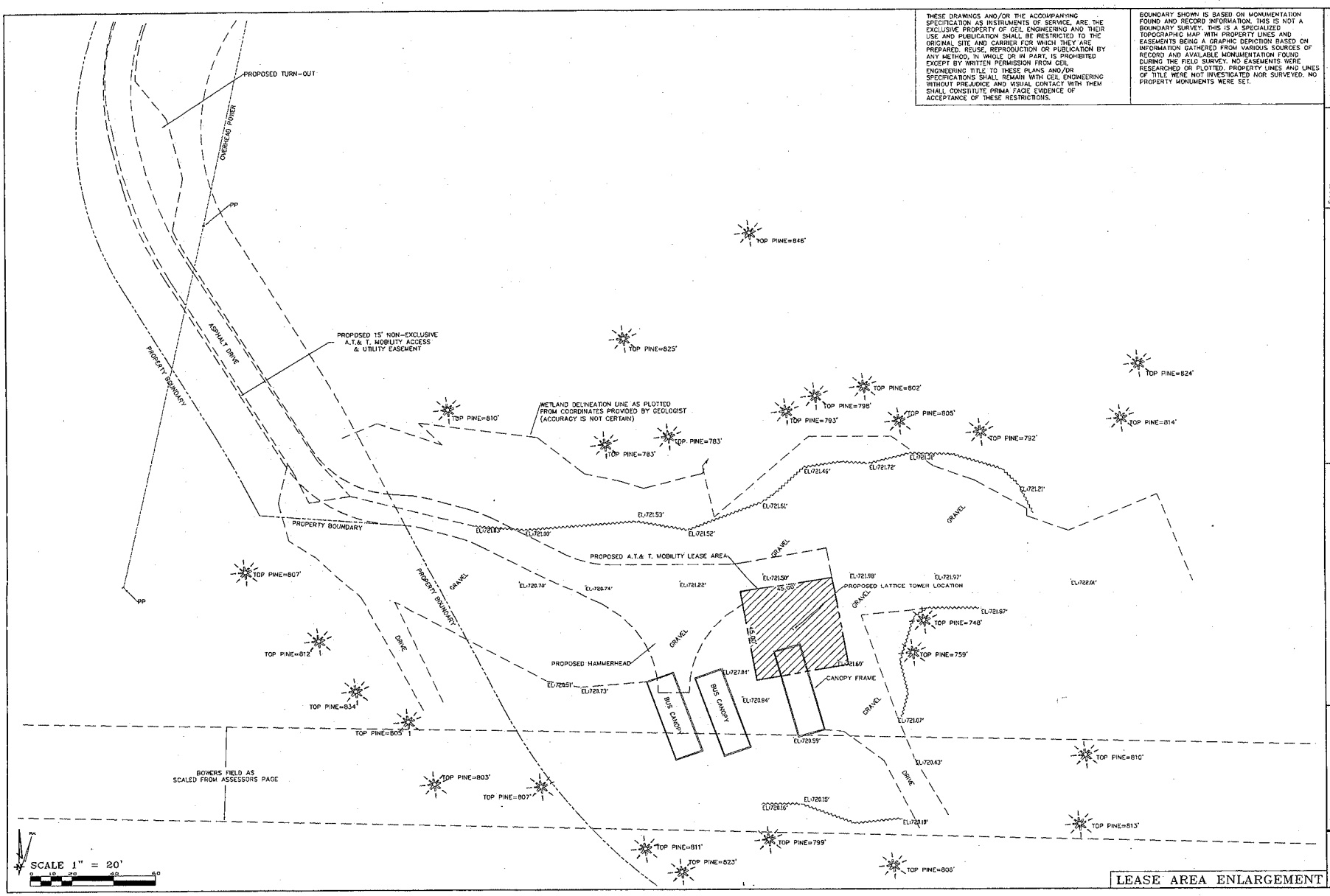
Surveyor

at&t MOBILITY

CCL05838
GUALALA
39290 OLD STAGE RD.
GUALALA, CA 95445
PLOT PLAN AND
SITE TOPOGRAPHY

REVISIONS		
REV	05-01-18	GRADING SUBMITTAL
REV	06-20-18 IN. RONGE	LEASE AREA MOD.
REV	08-21-18 IN. RONGE	RALE WORK
REV	11-26-18 IN. RONGE	FLOOD LINE ADDED
REV	12-04-18 IN. RONGE	LEASE AREA MOD.

Sheet
C-1



THESE DRAWINGS AND/OR THE ACCOMPANYING SPECIFICATION AS INSTRUMENTS OF SERVICE, ARE THE EXCLUSIVE PROPERTY OF GEIL ENGINEERING AND THEIR USE AND PUBLICATION SHALL BE RESTRICTED TO THE ORIGINAL SITE AND CARRIER FOR WHICH THEY ARE PREPARED. REUSE, REPRODUCTION OR PUBLICATION BY ANY METHOD, IN WHOLE OR IN PART, IS PROHIBITED EXCEPT BY WRITTEN PERMISSION FROM GEIL ENGINEERING TITLE TO THESE PLANS AND/OR SPECIFICATIONS SHALL REMAIN WITH GEIL ENGINEERING WITHOUT PREJUDICE AND VISUAL CONTACT WITH THEM SHALL CONSTITUTE PRIMA FACIE EVIDENCE OF ACCEPTANCE OF THESE RESTRICTIONS.

BOUNDARY SHOWN IS BASED ON MONUMENTATION FOUND AND RECORD INFORMATION. THIS IS NOT A BOUNDARY SURVEY. THIS IS A SPECIALIZED TOPOGRAPHIC MAP WITH PROPERTY LINES AND EASEMENTS BEING A GRAPHIC DEPICTION BASED ON INFORMATION GATHERED FROM VARIOUS SOURCES OF RECORD AND AVAILABLE MONUMENTATION FOUND DURING THE FIELD SURVEY. NO EASEMENTS WERE RESEARCHED OR PLOTTED. PROPERTY LINES AND LINES OF TITLE WERE NOT INVESTIGATED NOR SURVEYED. NO PROPERTY MONUMENTS WERE SET.

DEPT	APPROVED	DATE
A&C		
RE		
RF		
INT		
E&LMR		
OPS		
ENVOUT		

Surveyor
GEIL ENGINEERING
PROFESSIONAL LAND SURVEYING
1650 FREEDOM BASE STREET
AUBURN, CALIFORNIA 95603
Phone: (530) 885-1484
Fax: (530) 885-1486

at&t MOBILITY

CCL05838
GUALALA
39290 OLD STAGE RD.
GUALALA, CA 95445
PLOT PLAN AND
SITE TOPOGRAPHY

Sheet
C-2

THIS IS NOT A SITE SURVEY

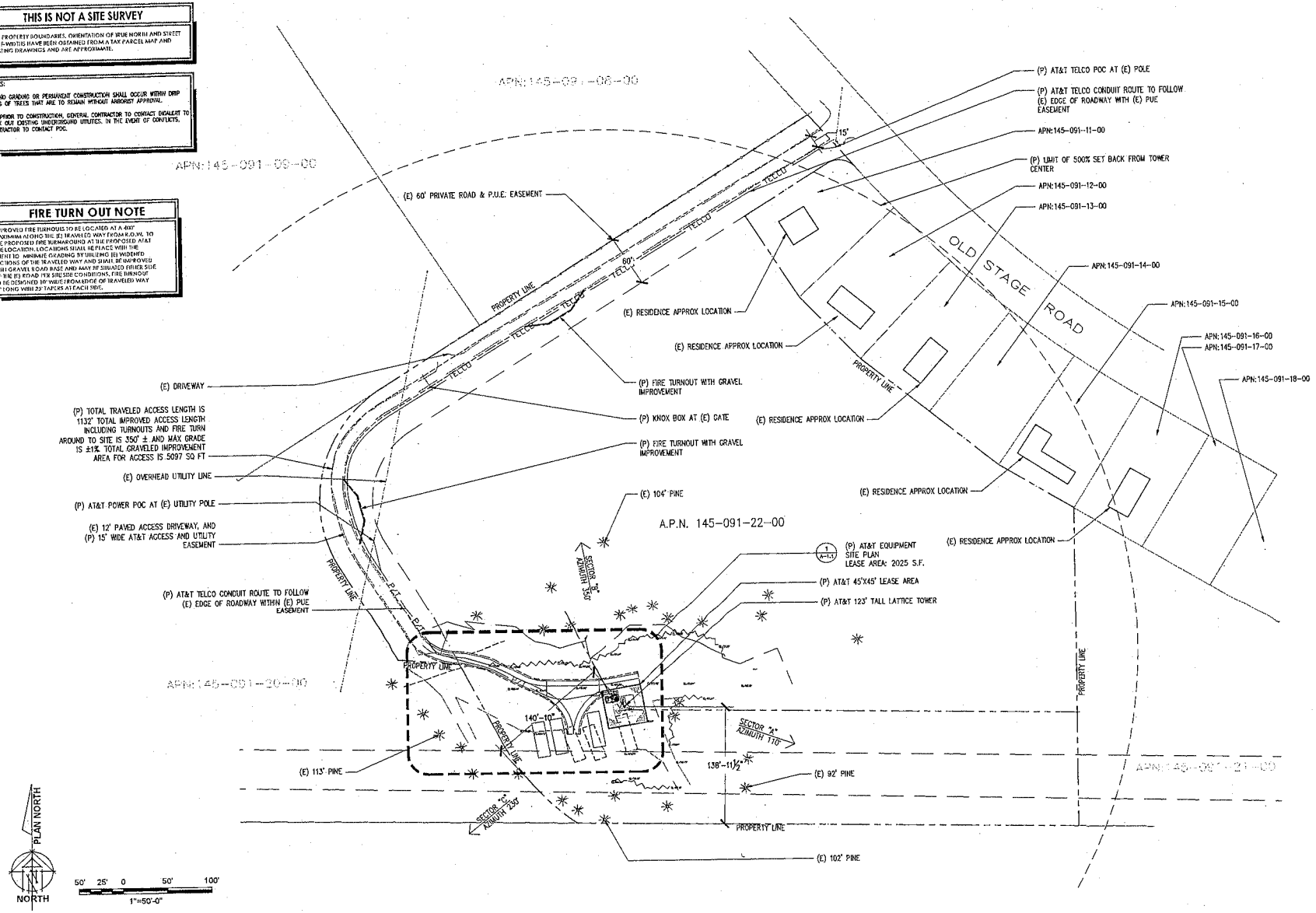
ALL PROPERTY BOUNDARIES, ORIENTATION OF TRUE NORTH AND STREET DATA MAY HAVE BEEN OBTAINED FROM A TAX PARCEL MAP AND EXISTING DRAWINGS AND ARE APPROXIMATE.

NOTES:

1. NO GRADING OR PERMANENT CONSTRUCTION SHALL OCCUR WITHIN DRIP LINES OF TREES THAT ARE TO REMAIN WITHOUT ARBORIST APPROVAL.
2. PRIOR TO CONSTRUCTION, GENERAL CONTRACTOR TO CONTACT DIGALERT TO MARK OUT EXISTING UNDERGROUND UTILITIES. IN THE EVENT OF CONFLICTS, CONTRACTOR TO CONTACT POC.

FIRE TURN OUT NOTE

APPROVED FIRE TURNOUTS TO BE LOCATED AT A 400' MAXIMUM ALONG THE (E) TRAVELED WAY FROM R.O.W. TO THE PROPOSED FIRE TURNAROUND AT THE PROPOSED AT&T SITE LOCATION. LOCATIONS SHALL REPLACE WITH THE INTENT TO MINIMIZE GRADING BY UTILIZING (E) WIDENED SECTIONS OF THE TRAVELED WAY AND SHALL BE IMPROVED WITH GRAVEL ROAD BASE AND MAY BE SITUATED EITHER SIDE OF THE (E) ROAD PER SITE SIDE CONDITIONS. FIRE TURNOUT TO BE DESIGNED 10' WIDE FROM EDGE OF TRAVELED WAY 30' LONG WITH 25' TAPERS AT EACH SIDE.



1 OVERALL SITE PLAN
1"=50'-0"

SITE TYPE: LATTICE TOWER/WALK IN EQUIPMENT CABINET

Issued For:

GUALALA

39290 OLD STAGE ROAD

GUALALA, CA 95445

PREPARED FOR

at&t

2600 Camino Ramon, 4W850 N
San Ramon, California 94583

EPIC WIRELESS GROUP, LLC

AT&T SITE NO:	CCL05838
PROJECT NO:	14442803
DRAWN BY:	CES
CHECKED BY:	CES

#	SUBMITTAL	ISSUANCE
0	07/11/18	ZD ISSUE
1	12/05/18	ZD INCOMPLETE LTR
REV	DATE	DESCRIPTION

Licensor:

REGISTERED PROFESSIONAL ENGINEER CRAIG M. HORNER No. 84674 CIVIL STATE OF CALIFORNIA

Engineer:

ADAPTIVE RE-USE ENGINEERING
Craig Horner, PE 84674
214-407-3184
3112 LEATHA WAY
SACRAMENTO, CA 95821
craigmhorner@yahoo.com

SHEET TITLE:

OVERALL SITE PLAN

SHEET NUMBER:

A-1

THIS IS NOT A SITE SURVEY

ALL PROPERTY BOUNDARIES, ORIENTATION OF TRUE NORTH AND STREET HALF-WIDTHS HAVE BEEN OBTAINED FROM A TAX PARCEL MAP AND EXISTING DRAWINGS AND ARE APPROXIMATE.

NOTES:

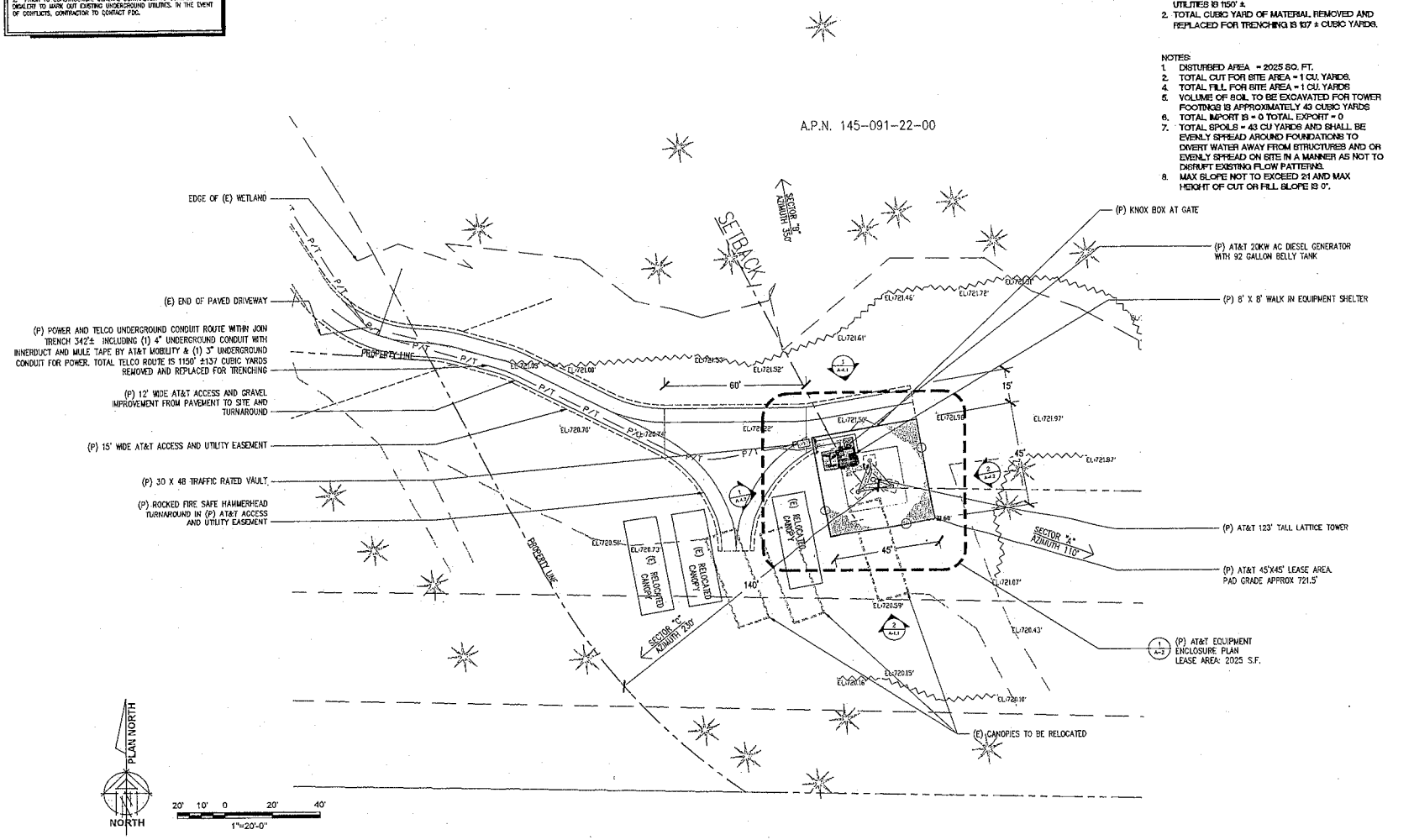
1. NO GRADING OR PERMANENT CONSTRUCTION SHALL OCCUR WITHIN DRIP LINES OF TREES THAT ARE TO REMAIN WITHOUT ARBORIST APPROVAL.
2. PRIOR TO CONSTRUCTION, GENERAL CONTRACTOR TO CONTACT DIGALERT TO MARK OUT EXISTING UNDERGROUND UTILITIES. IN THE EVENT OF CONFLICTS, CONTRACTOR TO CONTACT PDC.

TRENCHING NOTES:

1. TOTAL TRENCH LENGTH FOR UNDER GROUND UTILITIES IS 1150' ±.
2. TOTAL CUBIC YARD OF MATERIAL REMOVED AND REPLACED FOR TRENCHING IS 137 ± CUBIC YARDS.

NOTES:

1. DISTURBED AREA = 2025 SQ. FT.
2. TOTAL CUT FOR SITE AREA = 1 CU. YARDS.
4. TOTAL FILL FOR SITE AREA = 1 CU. YARDS
5. VOLUME OF SOIL TO BE EXCAVATED FOR TOWER FOOTINGS IS APPROXIMATELY 43 CUBIC YARDS
6. TOTAL IMPORT IS = 0 TOTAL EXPORT = 0
7. TOTAL SPOILS = 43 CU YARDS AND SHALL BE EVENLY SPREAD AROUND FOUNDATIONS TO DIVERT WATER AWAY FROM STRUCTURES AND OR EVENLY SPREAD ON SITE IN A MANNER AS NOT TO DISRUPT EXISTING FLOW PATTERNS.
8. MAX SLOPE NOT TO EXCEED 2:1 AND MAX HEIGHT OF CUT OR FILL SLOPE IS 0'.



1 SITE PLAN
1"=20'-0"

SITE TYPE: LATTICE TOWER/WALK IN EQUIPMENT CABINET

Issued For:

GUALALA

39290 OLD STAGE ROAD

GUALALA, CA 95445

PREPARED FOR

at&t

2600 Camino Ramon, 4W850 N
San Ramon, California 94583

EPIC WIRELESS GROUP LLC

AT&T SITE NO:	CCL05838
PROJECT NO:	14442803
DRAWN BY:	CES
CHECKED BY:	CES

REV	DATE	DESCRIPTION
0	09/26/18	ZD SET
1	10/26/18	ZD RESPONSE

Licensor:

REGISTERED PROFESSIONAL ENGINEER CRAIG M. HORNER No. 84674 CIVIL STATE OF CALIFORNIA

Engineer:

ADAPTIVE RE-USE ENGINEERING
Craig Horner, PE 84674
214-407-3184
3112 LEATHA WAY
SACRAMENTO, CA 95821
craigmhorner@yahoo.com

SHEET TITLE:

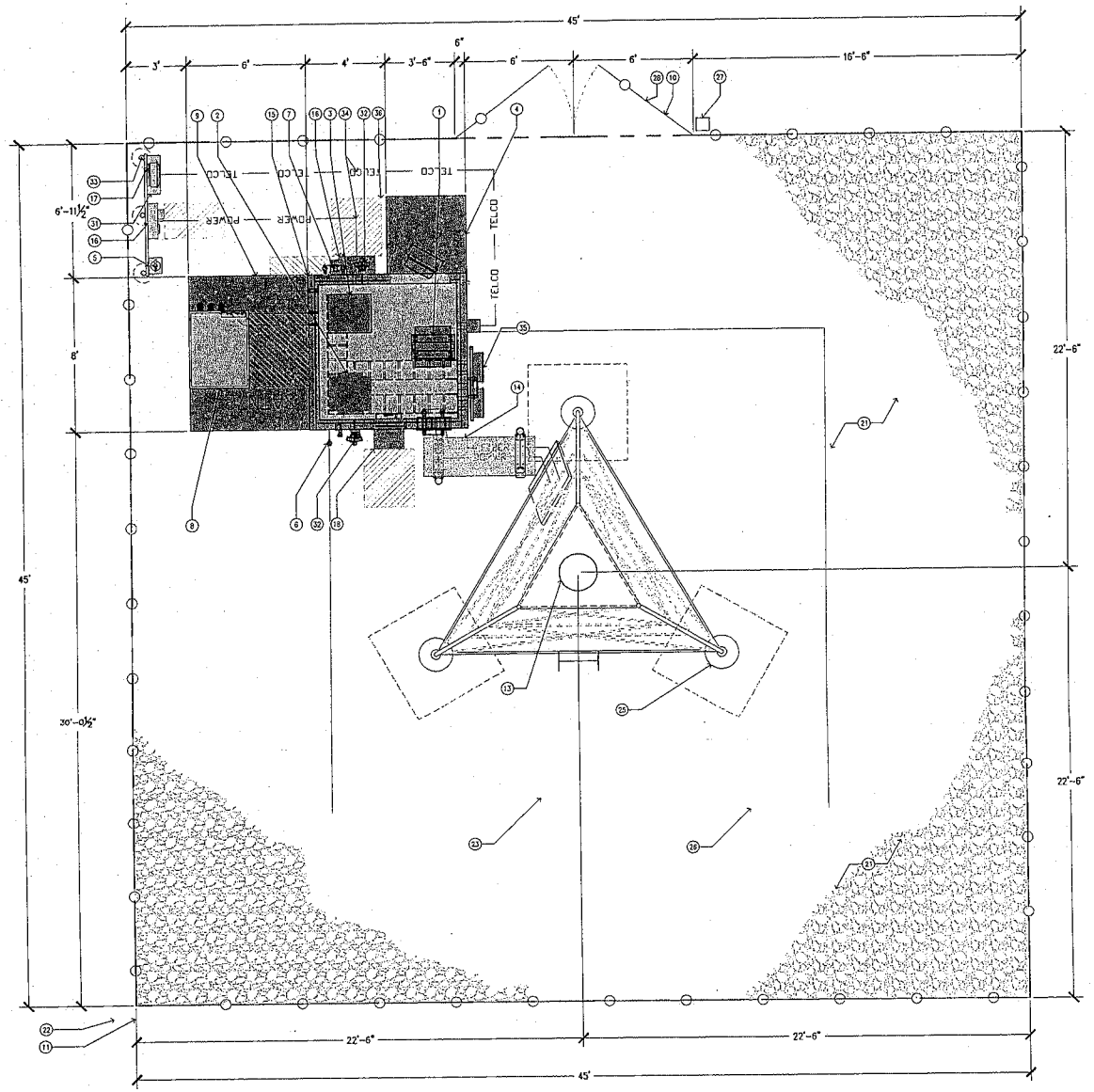
SITE PLAN

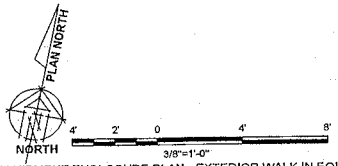
SHEET NUMBER:

A-1.1

KEYNOTES

1. (P) RF RACK #1
2. (P) RF RACK #2
3. (P) POWER PLANT RACK W/ (3) STRING OF BATTERIES
4. (P) 4'X4' CONCRETE STOOP
5. (P) RAYCHEM RXOLD FIRE EXTINGUISHER IN WEATHER RESISTANT CABINET
6. (P) GPS UNIT
7. (P) GAMLOCK GENERATOR INTERFACE
8. (P) 30KW AC DIESEL STANDBY GENERATOR W/ ATTACHED 95 GAL BELLY TANK
9. (P) 8'X12' SHELTER W/ GEN PATIO SLAB
10. (P) 12'-0" WIDE ACCESS GATE
11. (P) 8'-0" CHAIN LINK FENCE W/ 3 STRAND NYC CLIMB BARRIER
12. NOTE NOT USED
13. (P) 125' LATTICE TOWER
14. (P) 10' ICE SHIELD
15. (P) AT&T 8'X8' WALK IN EQUIPMENT SHELTER
16. (P) 200A PANEL W/ MAIN DISCONNECT & AUTOMATIC TRANSFER SWITCH
17. (P) HOFFMAN BOX BELOW CRDMA
18. (P) HVAC UNIT PROVIDED WITH WALK IN EQUIPMENT SHELTER
19. NOTE NOT USED
20. NOTE NOT USED
21. (P) GRAVEL BED OVER WOOD BARRIER
22. (P) AT&T 45'X45' LEASE AREA
23. NOTE NOT USED
24. NOTE NOT USED
25. (P) TOWER PIER (DESIGN BY OTHERS)
26. (P) U/G TOWER MTG SLAB (DESIGN BY OTHERS)
27. (P) FIRE DEPARTMENT KNOX BOX
28. (P) CARRIER CONTACT SIGNAGE AT GATE
29. NOTE NOT USED
30. (P) 200A ELECTRICAL METER/MAIN BKR DISCONNECT AND TEST BYPASS FACILITIES ON (P) H-FRAME
31. (P) CRDMA CABINET BY AT&T LANDLINE ON (P) H-FRAME
32. (P) ENCLOSED DOWN TILT LIGHT MOH MOTION SENSOR AND AUTO SHUTOFF TIMER PROVIDED WITH WALK IN EQUIPMENT SHELTER
33. (P) UTILITY H-FRAME
34. (P) UNDERGROUND UTILITY CONDUITS
35. (P) SURGE SUPPRESSORS
36. MIN CLEAR WORKING AREA TYPICAL





1 EQUIPMENT ENCLOSURE PLAN - EXTERIOR WALK IN EQUIPMENT CABINET
3/8"=1'-0"

SITE TYPE: LATTICE TOWER/WALK IN EQUIPMENT CABINET

Issued For:

GUALALA

39290 OLD STAGE ROAD

GUALALA, CA 95445

PREPARED FOR

at&t

2600 Camino Ramon, 4W850 N
San Ramon, California 94583

EPIC WIRELESS GROUP, LLC

AT&T SITE NO:	CCL05838
PROJECT NO:	14442803
DRAWN BY:	CES
CHECKED BY:	CES

REV.	DATE	DESCRIPTION
0	09/22/15	ZD/CD
1	10/29/15	ZD/CD
2	12/15/15	ZD/CD PER COMMENTS

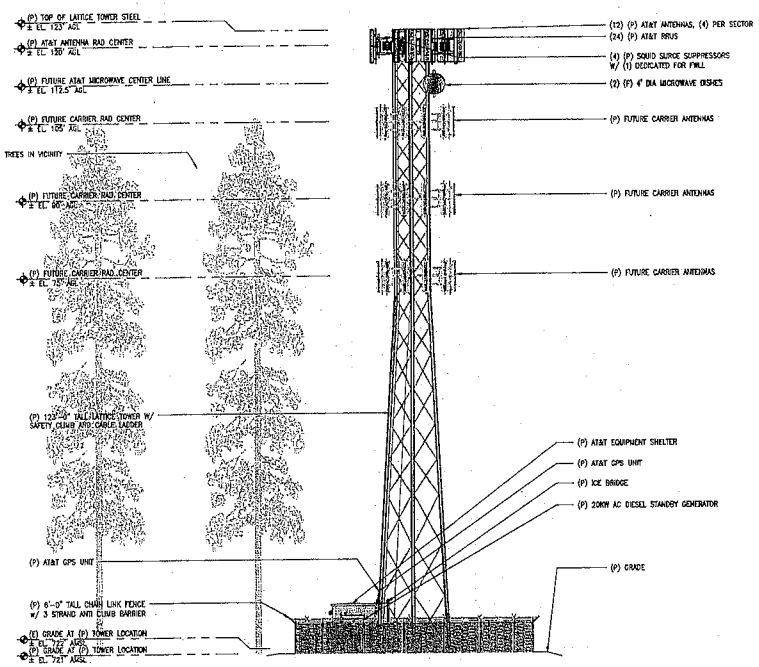
Licensor:

CRAIG M. HORNER No. 84674 CIVIL STATE OF CALIFORNIA PROFESSIONAL ENGINEER

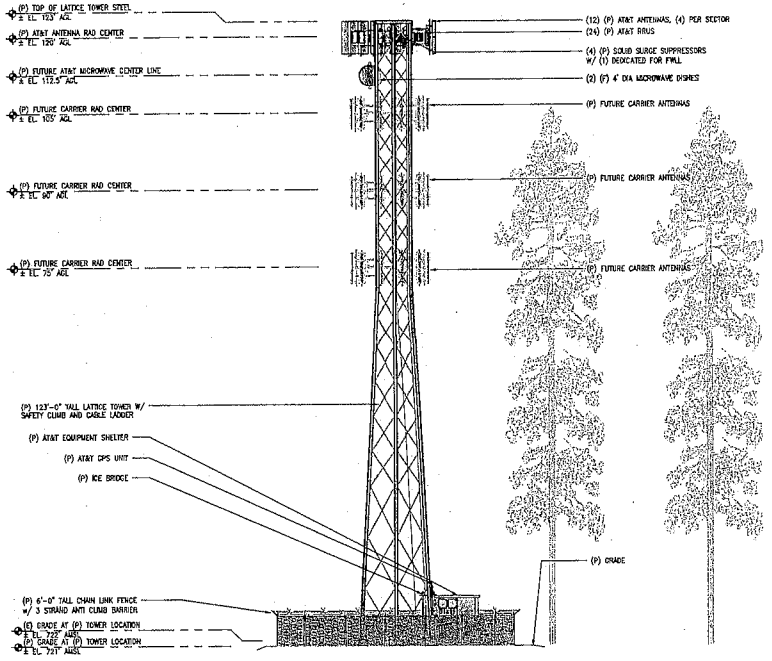
Engineer:
ADAPTIVE RE-USE ENGINEERING
Craig Horner, PE 84674
214-407-3184
3112 LEATHA WAY
SACRAMENTO, CA 95621
craigmhorner@yahoo.com

SHEET TITLE:
EQUIPMENT AREA PLAN

SHEET NUMBER:
A-2



1 PROPOSED NORTH ELEVATION
3/32"=1'-0"



2 PROPOSED SOUTH ELEVATION
3/32"=1'-0"

SITE TYPE: LATTICE TOWER/WALK IN EQUIPMENT CABINET

Issued For:

GUALALA

39290 OLD STAGE ROAD

GUALALA, CA 95445

PREPARED FOR

at&t

2400 Camino Ramon, 4W850 N
San Ramon, California 94583

EPIC WIRELESS GROUP, LLC

AT&T SITE NO:	CCL05838
PROJECT NO:	14442803
DRAWN BY:	CES
CHECKED BY:	CES

REV	DATE	DESCRIPTION
1	10/29/19	ZD RFDS
0	07/17/19	ZD RFDS
2	12/09/19	ZD RFDS PER NSB

Licensor:

REGISTERED PROFESSIONAL ENGINEER CRAIG M. HORNER No. 84674 CIVIL STATE OF CALIFORNIA

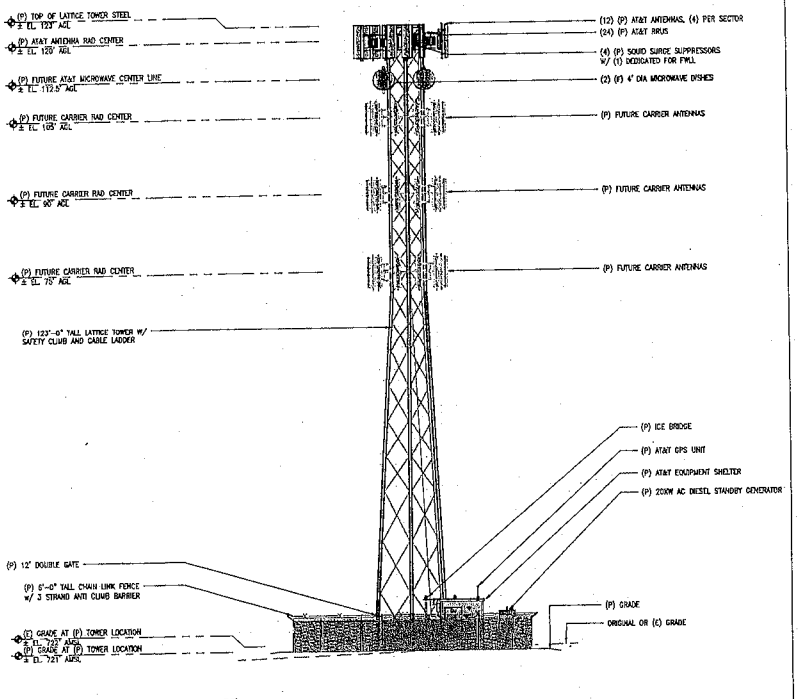
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

Engineer:

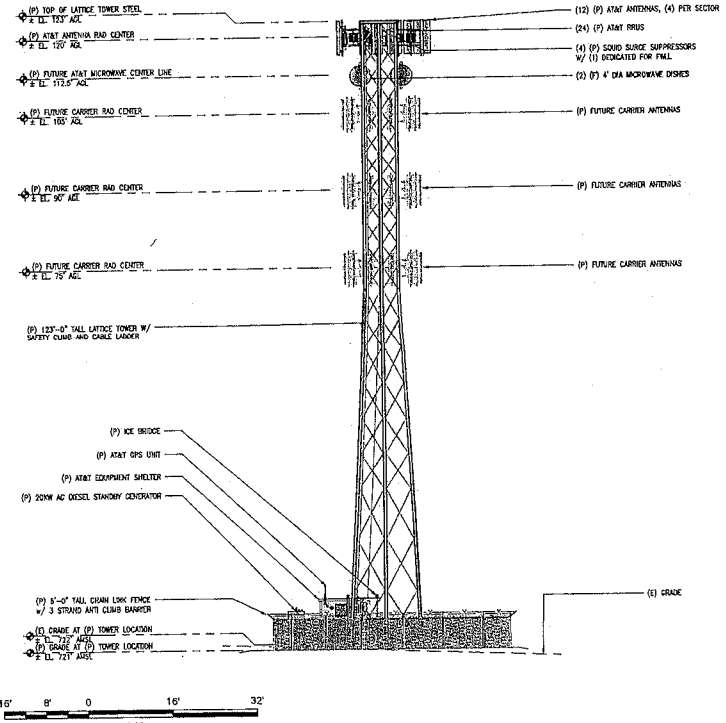
ADAPTIVE RE-USE ENGINEERING
Craig Horner, PE 84674
214-407-3184
3112 LEATHA WAY
SACRAMENTO, CA 95821
craigmhorner@yahoo.com

SHEET TITLE:
PROPOSED LATTICE TOWER NORTH - SOUTH ELEVATION

SHEET NUMBER:
A-4.1



1 PROPOSED EAST ELEVATION
3/32"=1'-0"



2 PROPOSED WEST ELEVATION
3/32"=1'-0"

SITE TYPE: LATTICE TOWER/WALK IN EQUIPMENT CABINET

Issued For:

GUALALA

39290 OLD STAGE ROAD

GUALALA, CA 95445

PREPARED FOR

at&t

2400 Camino Ramon, #W850 M
San Ramon, California 94583

EPIC WIRELESS GROUP LLC

AT&T SITE NO:	CCL05838
PROJECT NO:	14442803
DRAWN BY:	CES
CHECKED BY:	CES

REV	DATE	DESCRIPTION
A	09/21/18	ZD-RFDS
1	12/07/18	ZD-RFDS REVISIONS

Licensor:

CRAIG M. HORNER
No. 84674
CIVIL
STATE OF CALIFORNIA

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Engineer:

ADAPTIVE RE-USE ENGINEERING
Craig Horner, PE 84674
214-407-3184
3112 LEATHA WAY
SACRAMENTO, CA 95821
craigmhorner@yahoo.com

SHEET TITLE:

PROPOSED LATTICE TOWER
WEST - EAST ELEVATION

SHEET NUMBER:

A-4.2

Appendix D
Engineering Drawings