COUNTY OF MENDOCINO
DEPARTMENT OF PLANNING AND BUILDING SERVICES
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November 12, 2020

Planning – FB	Assessor	Coastal Commission
Department of Transportation	Air Quality Management	County Addresser- Russ Ford
Environmental Health - Fort Bragg	Native Plant Society	Mendocino Fire Department
Building Inspection - Fort Bragg	Caltrans	Mendocino Unified School District
Emergency Services	Department of Fish and Wildlife	Manchester Rancheria

CASE#: UR_2020-0009
DATE FILED: 8/18/2020
OWNER: PHILIP & GRACE LAVE SHARPLES
APPLICANT/AGENT: JOHN MERRITT C/O AMERICAN TOWER
REQUEST: Renewal of previously Modified Use Permit (CDU 13-2007) to continue operation of an existing telecommunications facility. There are no proposed changes to the existing 160 foot tall lattice tower, no associated ground equipment or request for any physical modifications to the facility.
ENVIRONMENTAL DETERMINATION: Categorically Exempt
LOCATION: In the Coastal Zone, 1.8± miles southeast of the Town of Mendocino, lying on the north side of Comptche-Ukiah Road (CR #223), 1.4± miles east of its intersection with State HWY 1, located at 43600 Comptche-Ukiah Road, Mendocino; (APN: 119-410-17).
SUPERVISORIAL DISTRICT: 5
STAFF PLANNER: CHEVON HOLMES
RESPONSE DUE DATE: November 30, 2020

PROJECT INFORMATION CAN BE FOUND AT:
https://www.mendocinocounty.org/government/planning-building-services/public-agency-referrals

Mendocino County Planning & Building Services is soliciting your input, which will be used in staff analysis and forwarded to the appropriate public hearing. You are invited to comment on any aspect of the proposed project(s). Please convey any requirements or conditions your agency requires for project compliance to the project coordinator at the above address, or submit your comments by email to pbs@mendocinocounty.org. Please note the case number and name of the project coordinator with all correspondence to this department.

We have reviewed the above application and recommend the following (please check one):

☐ No comment at this time.

☐ Recommend conditional approval (attached).

☐ Applicant to submit additional information (attach items needed, or contact the applicant directly, copying Planning and Building Services in any correspondence you may have with the applicant)

☐ Recommend denial (Attach reasons for recommending denial).

☐ Recommend preparation of an Environmental Impact Report (attach reasons why an EIR should be required).

☐ Other comments (attach as necessary).

REVIEWED BY:

Signature _____ Department _____ Date _____

CASE: UR_2020-0009

OWNER: PHILIP H & GRACE LAVE SHARPLES

APPLICANT: John Merritt c/o American Tower

AGENT: John Merritt

REQUEST: Renewal of previously Modified Use Permit (CDU 13-2007) to continue operation of an existing telecommunications facility. There are no proposed changes to the existing 160 foot tall lattice tower, no associated ground equipment or request for any physical modifications to the facility.

LOCATION: In the coastal zone, 1.8± miles southeast of the Town of Mendocino, lying on the north side of Comptche-Ukiah Road (CR #223), 1.4± miles east of its intersection with State HWY 1, located at 43600 Comptche-Ukiah Road, Mendocino; (APN: 119-410-17).

APN/S: 1194101700

PARCEL SIZE: 12.17

GENERAL PLAN: Rural Residential, 5 Acre Minimum Parcel Size (RR5)

ZONING: Rural Residential, 5 Acre Minimum Parcel Size & Planned Unit Combining District (RR:5 & PD)

EXISTING USES: Residential/ Telecommunications

DISTRICT: 5th (Williams)

RELATED CASES:

Facility Development

- Coastal Development Use Permit (#CDU 13-2007) – Coastal Development Use Permit to allow the construction and operation of a telecommunications facility to support a wireless provider, Verizon Wireless, including a 135-foot tall lattice tower with 12 panel antennas, 2 microwave dishes. Associated ground equipment included a 60 kilowatt generator, a 210 gallon fuel storage tank and a 240 square foot equipment shelter.
**This permit was appealed to the California Coastal Commission (CC) and ultimately approved as A-1-MEN-10-001.*

- Building Permit (BF_2011-0300) – Building Permit to construction a new wireless telecommunications facility consisting of a new 160 foot tall lattice tower, new 12' X 16' equipment shelter, twelve (12) 8-foot tall panel antennas and two (2) 6-foot wide microwave dishes, new 48 KW diesel generator and 210 gallon tank.
**This permit was issued to construct the facility pursuant to A-1-MEN-10-001 which supersedes the County approval.*

- Encroachment Permit (TU_2010-0142) – Mendocino County Department of Transportation Encroachment permit authorized excavation of a 50 foot utility trench and construction of a standard private driveway.

Modifications to Facility

- Building Permit (BF_2018-0622) – Building Permit to remove and replace six (6) panel antennas and install six (6) new panel antennas, six (6) Remote Radio Units (RRUs), one surge protector on the subject tower; install six (6) diplexers in the equipment shelter and two (2) hybrid cables.
**This permit was issued after CC approved Immaterial Amendment A-1-MEN-10-001-A1.*

- Building Permit (BF_2019-0878) – Building Permit to collocate new antennas and cables to existing tower, place radio equipment cabinets on new concrete slab within fenced area and extend fiber optics and electricity from existing vault and pedestal.
**This permit was issued of CC approved Immaterial Amendment A-1-MEN-10-001-A2.*

	ADJACENT GENERAL PLAN	ADJACENT ZONING	ADJACENT LOT SIZES	ADJACENT USES
NORTH:	Forestland (FL160)	Forestland (FL:160)	51.37± Acres	Forestland/Vacant
EAST:	Rural Residential & Planned Un	Rural Residential & Planned Un	1.0 & 8.8± Acres	Residential
SOUTH:	Rural Residential (RR10)	Rural Residential (RR:10)	11.7± Acres	Residential
WEST:	Forestland (FL160)	Forestland (FL:160)	51.37± Acres	Forestland/Vacant

REFERRAL AGENCIES

LOCAL
- ☒ Assessor's Office
- ☒ Air Quality Management District
- ☒ Building Division-Fort Bragg
- ☒ County Addresser
- ☒ Department of Transportation (DOT)
- ☒ Environmental Health (EH) -Fort Bragg
- ☒ County Addresser
- ☒ Office of Emergency Services (OES)
- ☒ Planning Division- Fort Bragg
- ☒ Mendocino Fire Department
- ☒ Mendocino Unified School District

STATE
- ☒ California Coastal Commission
- ☒ California Dept. of Fish & Wildlife
- ☒ California Native Plant Society
- ☒ CALTRANS

TRIBAL
- ☒ Manchester Rancheria

ADDITIONAL INFORMATION: The existing telecomunications facility was originally approved by the Mendocino County Planning Commission on December 17, 2009. Three separate appeals were filed with the California Coastal Commission (CC) . In general, In general, the appeals alleged that approval of CDU 13-2007 was inconsistent with the policies and standards of the certified Local Coastal Program (LCP) with regard to development within proximity of Environmentally Sensitive Habitat Area (ESHA). Pursuant to Section 30603(b) and Section 30621 of the California Coastal Act, the Coastal Commission held a Substantial Issue and de novo hearing July 7, 2010. The Commission found that the project as approved by the County, failed to conform to the policies of the certified LCP protections of visual resources and ESHA and determined that the County approved project raised a Substantial Issue. Since the proposed project is within an area that the Commission has certified a LCP and not between the first public road and the sea, the Commission proceeded to the de novo hearing at which time the applicant, Verizon Wireless, submitted an amended project description and modified site plans that relocated the proposed project to a site located outside of ESHA and more than 50 feet beyond ESHA buffers.

The Coastal Commission ultimately approved A-1-MEN-10-001 which superseded the project approved by the county. As revised, the project site is located outside of ESHA and more than 50 feet outside ESHA buffers, approximately 75 feet north of the County-approved building site, and approximately 3 feet lower in elevation. The County approved tower was also 25 feet lower in height than the revised project which approved the maximum tower height at 160 feet.

Staff notes that when the CC approved A-1-MEN-10-001, the Mendocino County Coastal Development Use Permit and governing entitlement (CDU 13-2007) was not updated to reflect the approved modifications to the subject tower. County staff reviewed the building permit (BF_2011-0300) which accurately detailed the project as approved by the CC and found that at time of construction, the applicant downgraded the back-up diesel generator from 60 KW to 48KW. No other inconsistencies were identified. This Use Permit Renewal therefore aligns the project as approved by the CC with that of the County and subject tower modified as such.

Please see attached draft staff report for additional details.

STAFF PLANNER: CHEVON HOLMES **DATE: 11/10/2020**

ENVIRONMENTAL DATA

1. MAC:
GIS
N/A

2. FIRE HAZARD SEVERITY ZONE:
CALFIRE FRAP maps/GIS
High

3. FIRE RESPONSIBILITY AREA:
CALFIRE FRAP maps/GIS
Mendocino Fire Protection District
State Responsibility Area

4. FARMLAND CLASSIFICATION:
GIS
Grazing Land (G) & Rural Residential & Rural Commercial (R)

5. FLOOD ZONE CLASSIFICATION:
FEMA Flood Insurance Rate Maps (FIRM)
NO

6. COASTAL GROUNDWATER RESOURCE AREA:
Coastal Groundwater Study/GIS
Sufficient Water Resources

7. SOIL CLASSIFICATION:
Mendocino County Soils Study Eastern/Western Part
Western Soil Types

8. PYGMY VEGETATION OR PYGMY CAPABLE SOIL:
LCP maps, Pygmy Soils Maps; GIS
Yes

9. WILLIAMSON ACT CONTRACT:
GIS/Mendocino County Assessor's Office
NO

10. TIMBER PRODUCTION ZONE:
GIS
NO

11. WETLANDS CLASSIFICATION:
GIS
Freshwater Forested/Shrub Wetland along southern property line

12. EARTHQUAKE FAULT ZONE:
Earthquake Fault Zone Maps; GIS
NO

13. AIRPORT LAND USE PLANNING AREA:
Airport Land Use Plan; GIS
NO

14. SUPERFUND/BROWNFIELD/HAZMAT SITE:
GIS; General Plan 3-11
NO

15. NATURAL DIVERSITY DATABASE:
CA Dept. of Fish & Wildlife Rarefind Database/GIS
YES

16. STATE FOREST/PARK/RECREATION AREA ADJACENT:
GIS; General Plan 3-10
NO

17. LANDSLIDE HAZARD:
Hazards and Landslides Map; GIS; Policy RM-61; General Plan 4-44
NO

18. WATER EFFICIENT LANDSCAPE REQUIRED:
Policy RM-7; General Plan 4-34
NO

19. WILD AND SCENIC RIVER:
www.rivers.gov (Eel Only); GIS
NO

20. SPECIFIC PLAN/SPECIAL PLAN AREA:
Various Adopted Specific Plan Areas; GIS
NO

21. STATE CLEARINGHOUSE REQUIRED:
Policy
NO

22. OAK WOODLAND AREA:
USDA

23. HARBOR DISTRICT:
Sec. 20.512
NO

FOR PROJECTS WITHIN THE COASTAL ZONE ONLY

24. LCP LAND USE CLASSIFICATION:
LCP Land Use maps/GIS
Existing Shoreline Access via Comptche-Ukiah Road (CR #223)

25. LCP LAND CAPABILITIES & NATURAL HAZARDS:
LCP Land Capabilities maps/GIS; 20.500
Beach Deposits and Stream Alluvium and Terraces (Zone 3)

26. LCP HABITATS & RESOURCES:
LCP Habitat maps/GIS; 20.496
Coastal Forest

27. COASTAL COMMISSION APPEALABLE AREA:
Post LCP Certification Permit and Appeal Jurisdiction maps/GIS; 20.544
Yes

28. CDP EXCLUSION ZONE:
CDP Exclusion Zone maps/GIS
NO

29. HIGHLY SCENIC AREA:
Highly Scenic & Tree Removal Area Maps/GIS; Secs. 20.504.015, 20.504.020
HIGHLY SCENIC-CONDITIONAL

30. BIOLOGICAL RESOURCES & NATURAL AREAS:
Biological Resources & Natural Area Map; GIS; General Plan 4-9
Yes

31. BLUFFTOP GEOLOGY:
GIS; 20.500.020
NO

PLANNING COMMISSION STAFF REPORT
USE PERMIT RENEWAL UR_2020-0009

SUMMARY

OWNER:	PHILIP & GRACE SHARPLES 100 N FRANKLIN ST FORT BRAGG, CA 95437
APPLICANT/AGENT:	JOHN MERRITT C/O AMERICAN TOWER 630 QUINTANA ROAD MORRO BAY, CA 93442
REQUEST:	Renewal of previously Modified Use Permit (CDU 13-2007) to continue operation of an existing telecommunications facility. There are no proposed changes to the existing 160 foot tall lattice tower, no associated ground equipment or request for any physical modifications to the facility.
LOCATION:	In the coastal zone, 1.8± miles southeast of the Town of Mendocino, lying on the north side of Comptche-Ukiah Road (CR #223), 1.4± miles east of its intersection with State HWY 1, located at 43600 Comptche-Ukiah Road, Mendocino; (APN: 119-410-17).
TOTAL ACREAGE:	Leased area of 1,500 square feet on 12.17± acre parcel
GENERAL PLAN:	Rural Residential, 5 Acre Minimum Parcel Size (RR5)
ZONING:	Rural Residential, 5 Acre Minimum Parcel Size & Planned Unit Combining District (RR:5 & PD)
SUPERVISORIAL DISTRICT:	5th (Williams)
ENVIRONMENTAL DETERMINATION:	Categorically Exempt
RECOMMENDATION:	Approve with Conditions
STAFF PLANNER:	CHEVON HOLMES

BACKGROUND:

On December 17, 2009, the Mendocino County Planning Commission approved Coastal Development Use Permit No. CDU 13-2007 for the construction and operation of a telecommunication facility for Verizon Wireless to be located at 43600 Comptche-Ukiah Road. Three separate appeals of the County's decision were filed with the California Coastal Commission (CC); (1) the California Native Plant Society, Dorothy King Young Chapter; (2) Carol & Robert Zvolensky, D'Ann Finley, Phil Conwell, and Wilbert Horne; and (3) Coastal Commissioners Stone and Sanchez. The appeals generally alleged that approval of CDU 13-2007 was inconsistent with the policies and standards of the certified Local Coastal Program (LCP) with regard to development within proximity of Environmentally Sensitive Habitat Area (ESHA). The CC found that the appeals raised a Substantial Issue of conformance with sections of the Mendocino County Coastal Zoning Code because; (1) the approved development did not provide a buffer between the development and ESHA; (2) only resource dependent uses are allowed in an ESHA; (3) the County failed

to demonstrate that there is not a feasible, less environmentally damaging alternative site for the project; and (4) that the development would result in significant degradation of ESHA. Pursuant to Section 30603(b) and Section 30621 of the California Coastal Act, the CC held a Substantial Issue and *de novo* hearing July 7, 2010. The Commission found that the project as approved by the County failed to conform to the policies of the certified LCP protections of visual resources and ESHA and determined that the County approved project raised a Substantial Issue. The Commission then proceeded to the *de novo* hearing at which time the applicant, Verizon Wireless, submitted an amended project description and modified site plans that relocated the proposed project site to an area outside of ESHA and more than 50 feet beyond ESHA buffers. As explained in the CC staff report for appeal A-1-MEN-10-001, the following revised project description was provided to the CC to consider alternatively:

> *"For the purposes of de novo review, the proposed project involves construction and remote operation of a telecommunication facility on the approximately 12.41-acre private residential parcel to support a wireless provided (Verizon Wireless). The proposed facility will consist of a 160-foot tall lattice tower with 12 panel antennas; 2 microwave dishes; 2 wireless GPS antennas; and ground-based equipment. The project includes improvements to an existing 10-foot-wide earthen access road; clearing trees and herbaceous vegetation for the construction of the tower; limbing trees for vertical clearance along the access road; installation of underground power and telephone lines; and above ground utility metering and termination equipment. The facility will be located within a 1500 square foot (30' X 50') fenced lease area located north of the County approved site."*

On August 4, 2015, the Mendocino County Board of Supervisors adopted *Guidelines for the Development of Wireless Communication Facilities* to provide a uniform and comprehensive set of standards for the development, operation, and maintenance of wireless communications facilities consistent with applicable federal regulations. The Mendocino County Department of Planning and Building Services has submitted a Local Coastal Program Amendment for adopting revised regulations within the Coastal Zone for wireless communication facilities and to formally adopt the *Guidelines for the Development of Wireless Communication Facilities* into the Mendocino County Local Coastal Program. Although this Amendment has not been approved as of the writing of this staff report, the standards as outlined in the guidelines provide critical considerations for development. Section C of the guidelines requires General, Visual, Radio Frequency, Landscaping and Public Safety standards for facilities including enhanced setbacks-to-property lines and residences within proximity of telecommunication facilities. Specifically, Section C(m) requires that:

> "*Antenna towers shall be subject to setbacks required by the County zoning Code, and shall be set back a minimum of 110% of the overall height rom any property line, and a minimum of 500% of the overall height from any residence or school*."

The guidelines provide a pathway to reduce the required enhanced setback and further describes circumstances under which a reduced setback could be granted. In this case, given that the tower is 160 feet tall, the minimum setback to a property line should be 176 feet and that of a residence or school, 800 feet. As the subject tower is in the Coastal Zone and was approved by the CC, the subject tower was installed in a location that does not conform to all current county standards. The tower lies approximately 86 feet east of the property boundary to the west and 793 feet northwest of an occupied residence on an adjacent parcel under separate, private ownership.

PROJECT DESCRIPTION: This application is a renewal of previously Modified Use Permit CDU 13-2007 to continue operation of an existing telecommunications facility. There are no proposed changes to the existing 160 foot tall lattice tower, no associated ground equipment or request for any physical modifications to the facility. Staff notes that when the CC approved A-1-MEN-10-001, the Mendocino County Coastal Development Use Permit and governing entitlement (CDU 13-2007) was not updated to reflect the approved modifications to the subject tower. County staff reviewed the building permit

(BF_2011-0300) which accurately detailed the project as approved by the CC and found that at time of construction, the applicant downgraded the back-up diesel generator from 60 KW to 48KW. No other inconsistencies were identified. This Use Permit Renewal therefore aligns the project as approved by the CC with that of the County and subject tower modified as such.

APPLICANT'S STATEMENT:

> *"Renewal of expired Permit CDU 13-2007 for an existing communications facility consisting of a 160' Tower, 12' X 20' shelter and generator in a 30' X 50' fenced compound."*

RELATED APPLICATIONS:

Facility Development

- Coastal Development Use Permit (#CDU 13-2007) – Coastal Development Use Permit to allow the construction and operation of a telecommunications facility to support a wireless provider, Verizon Wireless, including a 135-foot tall lattice tower with 12 panel antennas, 2 microwave dishes. Associated ground equipment included a 60 kilowatt generator, a 210 gallon fuel storage tank and a 240 square foot equipment shelter.
  **This permit was appealed to the CC and ultimately approved as A-1-MEN-10-001*.

- Building Permit (BF_2011-0300) – Building Permit to construction a new wireless telecommunications facility consisting of a new 160 foot tall lattice tower, new 12' X 16' equipment shelter, twelve (12) 8-foot tall panel antennas and two (2) 6-foot wide microwave dishes, new 48 KW diesel generator and 210 gallon tank.
  **This permit was issued to construct the facility pursuant to A-1-MEN-10-001 which supersedes the County approval*.

- Encroachment Permit (TU_2010-0142) – Mendocino County Department of Transportation Encroachment permit authorized excavation of a 50 foot utility trench and construction of a standard private driveway.

Modifications to Facility

- Building Permit (BF_2018-0622) – Building Permit to remove and replace six (6) panel antennas and install six (6) new panel antennas, six (6) Remote Radio Units (RRUs), one surge protector on the subject tower; install six (6) diplexers in the equipment shelter and two (2) hybrid cables.
  **This permit was issued after CC approved Immaterial Amendment A-1-MEN-10-001-A1*.

- Building Permit (BF_2019-0878) – Building Permit to collocate new antennas and cables to existing tower, place radio equipment cabinets on new concrete slab within fenced area and extend fiber optics and electricity from existing vault and pedestal.
  **This permit was issued of CC approved Immaterial Amendment A-1-MEN-10-001-A2.*

SITE CHARACTERISTICS: The subject property is designated in the Coastal Land Use Plan and zoned in the Coastal Zoning Ordinance as Rural Residential (RR) which requires a five acre minimum parcel size. Major Impact Services and Utilities are a conditional use, subject to approval of a coastal development use permit within the RR zoning classification. The property lies on the fourth marine terrace on the south edge of Big River where several rare plant species occur. *Mendocino Cypress/Bolander Pine woodland* is the dominant vegetation type on the subject property. There is *Labrador tea swamp* habitat along the southwestern portion of the property and *pygmy manzanita* exist along the periphery of a natural meadow. All of the attributes together are indicative of the "Mendocino pygmy cypress Woodland,"

recognized as a sensitive plant community and carries a state/global ranking of S2/G2 by the California Natural Diversity Database (CNDDB) and is consistently considered ESHA by the CC. Other special-status species found onsite include the local endemic corn lily and California sedge. The northwestern portion of the property transitions into an upland forest dominated by coast redwood, upslope from the pygmy forest habitat. Additional species present include western hemlock, Bishop pine, tan-oak, Douglas fire and wax myrtle. The northeastern property line is the centerline of tributary that drains to Big River and is located downslope of the upland redwood forest community. Access to the facility is provided by a private driveway from Comptche-Ukiah Road and transitions into a 10-foot-wide earthen access road which ends 650 feet towards the facility.

SURROUNDING LAND USE AND ZONING: The larger adjacent parcel along the north and west boundaries of the subject parcel is undeveloped and zoned forestland. Parcels to the east are residential in nature and Zoned Rural Residential (RR:5) and Planned Development (PD). A summary of the adjacent properties including their General Plan, Zoning and lot-size are listed below.

	GENERAL PLAN	ZONING	LOT SIZES	USES
NORTH	Forestland (FL160)	Forestland (FL:160)	51.37± Acres	Forestland/ Vacant
EAST	Rural Residential & Planned Unit Combining District (RR5) & (RR5 + PD)	Rural Residential & Planned Unit Combining District (RR:5) & (RR:5 + PD)	1.0 & 8.8± Acres	Residential
SOUTH	Rural Residential (RR10)	Rural Residential (RR:10)	11.7± Acres	Residential
WEST	Forestland (FL160)	Forestland (FL:160)	51.37± Acres	Forestland/ Vacant

PUBLIC SERVICES:

Access: COMPTCHE-UKIAH ROAD (CR #223)
Fire District: MENDOCINO FIRE PROTECTION DISTRICT

AGENCY COMMENTS:

On October 30, 2020 project referrals were sent to the following responsible or trustee agencies with jurisdiction over the Project. A summary of the submitted agency comments will be listed below once received.

REFERRAL AGENCIES	COMMENT
Assessor	TBD
Planning Department- Fort Bragg	TBD
Building Services- Fort Bragg	TBD
Environmental Health-Fort Bragg	TBD
Coastal Commission	TBD

Coastal Development Use Permit Renewal Review Criteria

The Coastal Permit Administrator approves Use Permit Renewal (UR_2020-0009) subject to the Conditions of Approval identified by staff and further finding:

1. Use Permit Findings MCC Section 20.532.095

The proposed development is in conformity with the certified Local Coastal Program. As previously discussed, the presence of Mendocino pygmy cypress Woodland on the subject property requires analysis of ESHA to determine compliance with the LCP for development within or in proximity to ESHA. A buffer area between the development and resource shall be a minimum of one hundred (100) feet unless a reduction to fifty (50) feet can be substantiated by the applicant. Land Use Policy (LUP) 3.1-7 and the CZC Section 20.496.020 (A)(1) allow for permitted development within a buffer area if the development is for a use that is the same as those uses permitted in the adjacent environmentally sensitive habitat area, and if the development complies with the standards set forth in subsections (1)-(3) of LUP Policy 3.1-7 and 4(a)-(k) of Section 20.496.020. Additionally, CZC Section 20.532.100(A)(1)(a) requires that ESHA resources affected by development will not be significantly degraded by the development. The LCP policies do not identify allowed uses within rare plant ESHA or rare plant buffers, however, the Coastal Act Section 30240(a) states that environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values and that only uses dependent on those resources shall be allowed within those areas. The existing facility is located within the 100-foot ESHA buffer, but has been sited outside of the minimum 50-foot ESHA buffer.

At the *de novo* hearing in 2010, the CC found that the Mendocino County LCP policies governing rare plant habitat areas restrict development to resource dependent uses that do not significantly disrupt habitat values furthermore reinforcing that the existing tower conforms to the LCP. Special Condition 6A(1) of A-1-MEN-10-001 as applied by the CC reduced the required 100-foot defensible space in relation to the building site and ESHA buffer to ensure vegetation clearing did not occur within the buffer and restricted any vegetation clearing from occurring within the buffer unless an amendment to Coastal Development Permit A-1-MEN-10-001 is obtained first.

The proposed development will be provided with adequate utilities, access roads, drainage and other necessary facilities. The existing facility is currently operating with adequate utilities including emergency back-up power as provided by a 48 KW diesel generator. Access is provided by an established 10-foot wide gravel road that extends from the onsite residential driveway. Drainage and other necessary facilities are provided as well.

The proposed development is consistent with the purpose and intent of the zoning district applicable to the property, as well as the provisions of this Division and preserves the integrity of the zoning district. The subject property is located in the Rural Residential Zoning district where Major Impact Utilities are conditionally allowed as a coastal civic use type. The existing telecommunications facility does not impact agricultural viability and is consistent with the intent to preserve local small scale farming as identified in Chapter 20 of the CZC.

The proposed development will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act. As the lead agency for the purposes of CEQA review, Mendocino County is the lead agency and determined that installation of the facility could be adequately mitigated through the conditions of approval and therefore adopted a Negative Declaration when #CDU 13-2007 was approved in 2010. The Use Permit Renewal request seeks to continue operation of an existing telecommunications facility. There are no proposed changes to the existing 150 foot tall lattice tower, no associated ground equipment or physical modifications to the facility. Since approval of #CDU 13-2007, later superseded by Coastal Development Permit A-1-MEN-10-001, two Immaterial Amendments have been approved by the CC to allow repair and replacement of existing equipment as well as installation of small equipment at the facility base. Use Permit Renewal UR_2020-0009 is Categorically Exempt under the California Code of Regulations, Title 14, Chapter 3, Section 15301 Class 1(b)-Existing Facility.

The proposed development will not have any adverse impacts on any known archaeological or paleontological resource. The Northwest Information Center (NWIC) at Sonoma State University determined that there was no record of previous cultural resources studies performed in the area and that there was a “low” possibility that the site contained any unrecorded archaeological resources. Approval of #CDU 13-2007 included Condition No. 18 which requires that in the event that archaeological resources are encountered on the site, further disturbance in the immediate vicinity of the find shall be halted until all

requirements of Chapter 22.12 of the Mendocino County Code relating to archaeological discoveries have been satisfied.

Other public services, including but not limited to, solid waste and public roadway capacity have been considered and are adequate to serve the proposed development. The existing facility will remain unmanned, operate 24 hours a day, 7 days a week and requires no new or expanded access to public services, solid waste and or public roadways.

2. General Plan Consistency Finding

The Rural Residential (RR) General Plan classification is intend to encourage local, small scale farming in areas which are not well suited for large scale commercial agriculture and is not intended to be a growth area. General uses as described in the General Plan include a variety of appropriate use types including utility installations. Therefore, renewal of the Use Permit to allow continued operation of the existing facility is consistent with the goals and policies as applied to the RR classification.

3. Environmental Finding

On December 17, 2009, the Mendocino County Planning Commission determined the project could be adequately mitigated through the conditions of approval so that no significant adverse environmental impacts would result from the project and therefore, adopted a Negative Declaration and approved Coastal Development Use Permit No. CDU 13-2007. At the *de novo* hearing, the CC found that the project was consistent with the certified Mendocino County LCP and Section 30010 of the Coastal Act. The Commission determined that the Project was consistent with the requirements of the Coastal Act to conform to CEQA.

This Use Permit Renewal requests to allow continued operation of an existing facility and is therefore Categorically Exempt pursuant to the California Code of Regulations, Title 14, Chapter 3, Section 15301 Class 1(b)-Existing Facility.

4. Vehicle Miles Traveled

On September 27, 2013, Governor Jerry Brown signed Senate Bill (SB) 743 into law, requiring jurisdictions to use Vehicle Miles Traveled (VMT) to analyze a project's transportation impact on the environment. This requirement eliminates using level of services (LOS) as a basis for determining significant impacts and identifies VMT as the preferred California Environmental Quality Act (CEQA) transportation metric. The Mendocino Council of Governments' (MCOG) developed a screening tool to determine if a project's VMT will create an environmental impact. The screening tools uses data from the MCOG traveling forecast model to compare the VMT to similar projects for the sub-region in which a project is located. In 2017, the California Resources Board (CARB) identified VMT reductions relationship to State Climate Goals including the VMT reductions needed to meet the State's Greenhouse Gas emission reduction targets by 2050. This document identifies two specific thresholds to meet these targets, a 14.3-percent reduction in total VMT per capita, and a 16.8-percent reduction in light-duty vehicle VMT per capita.

This project renewal (UR_2020-0009) is located in an area where existing activities and uses generate a low VMT and activities have been ongoing. The facility will remain unmanned and continue to operate 24 hours a day, 7 days a week. Trips are limited for maintenance. The site was evaluated using the MCOG screening tool under the analysis of the 14.3-percent threshold and passed (14.3 percent analysis represents the threshold required by the state in order to meet 2050 GHG reduction goals) meaning the project generated VMT is likely at or below the threshold set by the MCOG for the area in which the project is located. This evidence supports a conclusion that the project would have a less than significant VMT impact under baseline plus project conditions. This conclusion would also apply under cumulative conditions presuming no substantial changes to the subarea land use and transportation context. Continued operation of the existing facility, is expected to generate no additional traffic, and be limited to existing maintenance trips.

RECOMMENDATION

By resolution, grant Use Permit Renewal UR_2020-0009 for the Project, as proposed by the applicant, based on the facts and findings and subject to the conditions of approval.

DATE

CHEVON HOLMES
Planner II

Appeal Period: 10 Days
Appeal Fee: $1616.00

ATTACHMENTS:

A. Topographic Map
B. Aerial Map
C. Site Plan Map
D. Tower Elevations Map
E. Zoning Map
F. General Plan Map
G. LCP Land Use Map
H. LCP Land Capabilities Map
I. LCP Habitat Resources Map
J. Appealable Areas Map
K. Adjacent Parcels Map
L. Fire Hazards & Responsibility Map
M. Coastal Ground Water Resource Map
N. Highly Scenic Map
O. Slope Map
P. Soils Map
Q. Wetlands Map
R. Farmland Map
S. Mendocino Cypress Map

RESOLUTION AND CONDITIONS OF APPROVAL (Exhibit A):

http://www.co.mendocino.ca.us/planning/meetings.htm

Planning and Building Services

Case No:	UR_2020-0009
CalFire No:	
Date Filed:	8.18.2020
Fee:	7,633.00
Receipt No:	PRJ-053700
Received By:	CH

Office use only

APPLICATION FORM

APPLICANT
Name: JOHN MERRITT/AMERICAN TOWER Phone: 805-771-0123

Mailing Address: 630 QUINTANA ROAD, SUITE 321

City: MORRO BAY State/Zip: CA 93442 email: JTM@EMPIREMEDIACORP.COM

PROPERTY OWNER
Name: PHILIP & GRACE SHARPLES Phone: 707-485-2047

Mailing Address: 100 NORTH FRANKLIN STREET

City: FORT BRAGG State/Zip: CA email:

AGENT
Name: JOHN MERRITT Phone: 805-771-0123

Mailing Address: 630 QUINTANA ROAD, SUITE 321

City: MORRO BAY State/Zip: CA email: JTM@EMPIREMEDIACORP.COM

Parcel Size: 530125/12.17 (Sq. feet/Acres) Address of Property: 43600 COMPTCHE UKIAH ROAD, MENDOCINO, CA

Assessor Parcel Number(s): 119-410-17-00

TYPE OF APPLICATION:

- ☐ Administrative Permit
- ☐ Agricultural Preserve
- ☐ Airport Land Use
- ☐ CDP- Admin
- ☐ CDP- Standard
- ☐ Certificate of Compliance
- ☐ Development Review
- ☐ Exception
- ☐ Flood Hazard
- ☐ General Plan Amendment
- ☐ Land Division-Minor
- ☐ Land Division- Major
- ☐ Land Division-Parcel
- ☐ Land Division-Resubdivision
- ☐ Modification of Conditions
- ☐ Reversion to Acreage
- ☐ Rezoning
- ☐ Use Permit-Cottage
- ☐ Use Permit-Minor
- ☒ Use Permit-Major
- ☐ Variance
- ☐ Other

THIS APPLICATION IS FOR RENEWAL OF EXPIRED PERMIT CDU13-2007

I certify that the information submitted with this application is true and accurate.

John Merritt Digitally signed by John Merritt DN: cn=John Merritt, o=EMC, ou=American Tower, email=JTM@empiremediacorp.com, c=US Date: 2020.07.30 18:18:34 -07'00' 7/30/20

Signature of Applicant/Agent *Date* *Signature of Owner* *Date*

SEE ATTACHED AUTHORIZATION

SITE AND PROJECT DESCRIPTION QUESTIONNAIRE

The purpose of this questionnaire is to relate information concerning your application to the Department of Planning and Building Services and other agencies who will be reviewing your project proposal. Please remember that the clearer picture that you give us of your project and the site, the easier it will be to promptly process your application. Please answer all questions. Those questions which do not pertain to your project please indicate "Not applicable" or "N/A".

THE PROJECT

1. Describe your project. Include secondary improvements such as wells, septic systems, grading, vegetation removal, roads, etc.

RENEWAL OF EXPIRED PERMIT CDU13-2007 FOR AN EXISTING COMMUNICATIONS FACIITY

CONSISTING OF A 160' TOWER, 12' X 20' SHELTER AND GENERATOR IN A 30' X 50' FENCED COMPOUND.

2. **Structures/Lot Coverage**	**Number of Units**		**Square Footage**		
	Existing	Proposed	Existing	Proposed	Total
☐ Single Family ☐ Mobile Home ☐ Duplex ☐ Multifamily ■ Other: FENCED TOWER COMPOUND ☐ Other:					
Total Structures Paved **Area Landscaped Area** **Unimproved Area**	12' X 20' PAVED	12' X 20' PAVED	1500	1500	1500
GRAND TOTAL (Equal to gross area of Parcel) 530,125					

3. If the project is commercial, industrial or institutional, complete the following:

FACILITY IS UNMANNED

Estimated employees per shift: 0
Estimated shifts per day: 0
Type of loading facilities proposed: 0

4. Will the proposed project be phased? ☐ Yes ■ No If yes, explain your plans for phasing:

5. Will vegetation be removed on areas other than the building sites and roads? ☐Yes ■No Explain:

6. Will the project involve the use or disposal of potentially hazardous materials such as toxic substances, flammables, or explosives? ☐Yes ■No If yes, explain:

7. How much off-street parking will be provided?

	Number	Size
Number of covered spaces	0	
Number of uncovered spaces	1	12' X 20'
Number of standard spaces	0	
Number of handicapped spaces	0	
Existing Number of Spaces	1	
Proposed Additional Spaces	0	
Total	1	

8. Is any road construction or grading planned? ☐Yes ■No If yes, grading and drainage plans may be required. Also, describe the terrain to be traversed (e.g., steep, moderate slope, flat, etc.).

9. For grading or road construction, complete the following:

A. Amount of cut _____ cubic yards
B. Amount of fill _____ cubic yards
C. Maximum height of fill slope _____ feet
D. Maximum height of cut slope _____ feet
E. Amount of import or export _____ cubic yards
F. Location of borrow or disposal site _____

10. Does the project involve sand removal, mining or gravel extraction? ☐Yes ■No
If yes, detailed extraction, reclamation and monitoring plans may be required?

11. Will the proposed development convert land currently or previously used for agriculture to another use?
☐Yes ■No
If yes, how many acres will be converted?_____acres. An agricultural economic feasibility study may be required.

12. Will the development provide public or private recreational opportunities? ☐Yes ■No
If yes, explain below:

_____

_____

_____

_____

13. Is the proposed development visible from State Highway 1 or other scenic route?
☐Yes ■No

14. Is the proposed development visible from a park, beach or other recreational area?
☐Yes ■No

15. Does the development involve diking, filling, dredging or placing structures in open coastal water, wetlands, estuaries or lakes?

Diking :	☐Yes	☐No	Placement of structures in:
Filling:	☐Yes	■No	☐open coastal waters
Dredging:	☐Yes	☐No	☐wetlands
			☐estuaries
			☐lakes

If so, amount of material to be dredged or filled?_____cubic yards.

Location of dredged material disposal site?_____

Has a U.S. Army Corps of Engineers permit been applied for? ☐Yes ■No

16. Will there be any exterior lighting? ☐Yes ■No If yes, describe below and identify the location of all exterior lighting on the plot plan and building plans.

_____

_____

17. Utilities will be supplied to the site as follows:

A. Electricity:
- ■Utility Company (service exists to the parcel)
- ☐Utility Company (requires extension of service to site:_____feet _____miles)
- ☐On Site Generation - Specify:_____

B. Gas:
- ☐Utility Company/Tank
- ☐On Site Generation - Specify:_____
- ■None

C. Telephone: ■Yes ☐No EXISTING FIBER OPTIC CABLES ON SITE

18. What will be the method of sewage disposal?
- ☐Community sewage system - Specify supplier NA
- ☐Septic Tank
- ☐Other - Specify:_____

19. What will be the domestic water source:
- ☐Community water system - Specify supplier NONE
- ☐Well
- ☐Spring
- ☐Other - Specify:_____

20. Are there any associated projects and/or adjacent properties under your ownership?
☐Yes ■No If yes, explain (e.g., Assessor's Parcel Number, address, etc.):

21. List and describe any other related permits and other public approval required for this project, including those required by other County departments, city, regional, state and federal agencies:
NONE. THIS APPLICATION IS FOR RENEWAL ONLY.THIS PERMIT.

22. Describe the location of the site in terms of readily identifiable landmarks (e.g., mailboxes, mile posts, street intersections, etc.):
SITE IS APPROXIMAGTELY 100' NNW OF THE DRIVEWAY ENTRANCE AT 43600 COMPTCHE UKIAH ROAD

23. Are there existing structures on the property? ■Yes ☐No
If yes, describe below, and identify the use of each structure on the plot plan or tentative map if the proposal is for a subdivision.
OWNERS' RESIDENCE AND A 12'X 20' SHELTER FOR ELECTRONIC EQUIPMENT IN THE FENCED COMPOUND

24. Will any existing structures be demolished or removed? ☐Yes ■No
If yes, describe the type of development to be demolished or removed, including the relocation site, if applicable.

25. Project Height. Maximum height of existing structures 160 feet. Maximum height of proposed structures 160 feet.

26. Gross floor area of existing structures 240 square feet (including covered parking and accessory buildings). Gross floor area of proposed structures 240 square feet (including covered parking and accessory buildings).

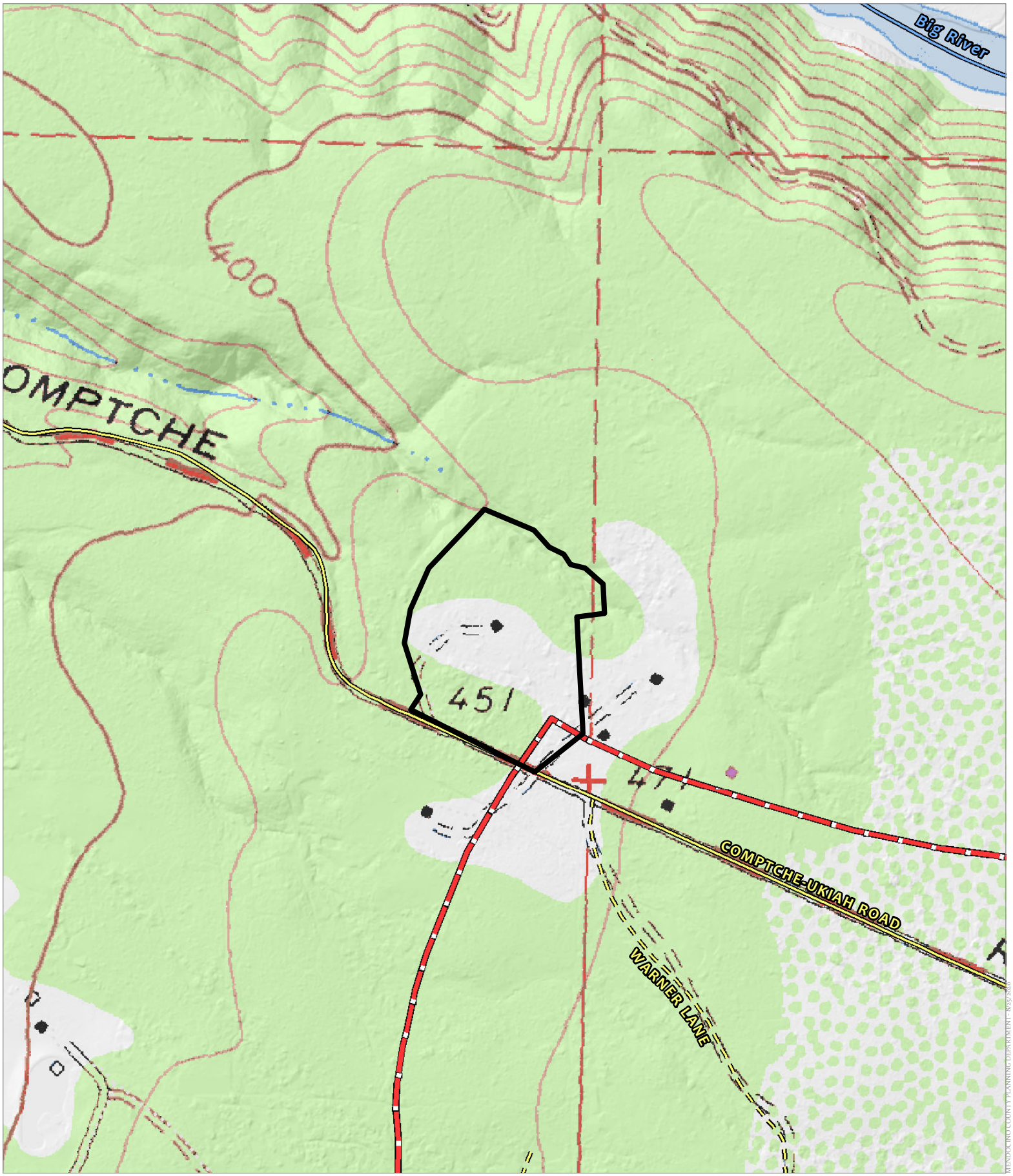
27. Lot area (within property lines): 12.17 ☐square feet ■acres.

28. Briefly describe the project site as it exists before the project, including information on existing structures and their uses, slopes, soil stability, plants and animals, and any cultural, historical or scenic aspects. Attach any photographs of the site that you feel would be helpful.
APPLICATION IS FOR RFENEWAL OF AN EXISTING PERMIT FOR A 160' TOWER, 12' X 20' SHELTER IN A 30' X 50' FENCED COMPOUND.

29. Briefly describe the surrounding properties, including information on plants, animals and any cultural, historic or scenic aspects. Indicate the type of land use (use chart below) and its general intensity. Attach any photographs of the vicinity that you feel would be helpful.
RURAL RESIDENTIAL WITH DENSE CONIFEROUS TREE COVER

30. Indicate the surrounding land uses:

	North	East	South	West
Vacant				
Residential Agricultural		x	x	x
Commercial Industrial				
Institutional Timberland	x			
Other				



CASE: UR 2020-0009
OWNER: SHARPLES, Philip & Grace
APN: 119-410-17
APLCT: John Merritt
AGENT: John Merritt
ADDRESS: 43610 Comptche Ukiah Road, Mendocino

Coastal Zone Boundary
Named Rivers
Public Roads
Private Roads
Driveways/Unnamed Roads

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

N W E S

TOPOGRAPHIC MAP
CONTOUR INTERVAL IS 40 FEET

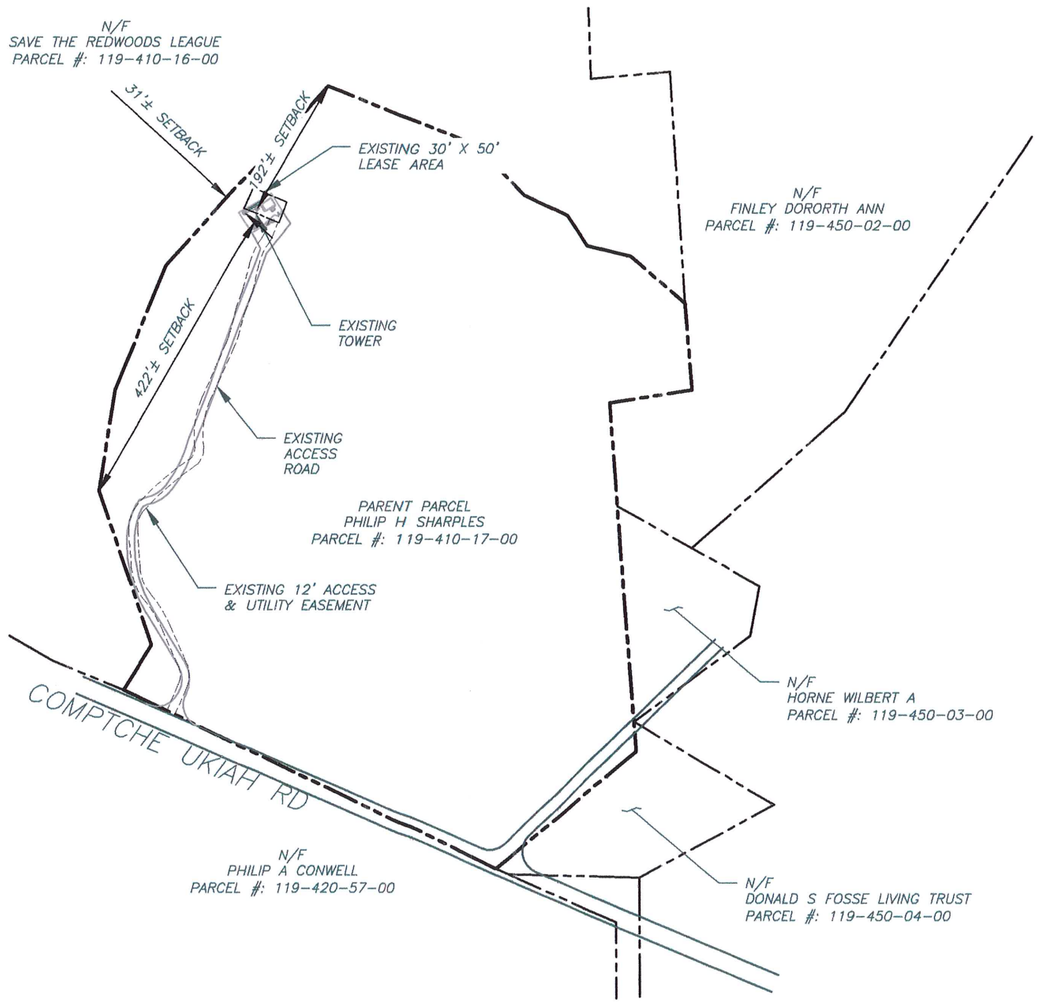
CASE: UR 2020-0009
OWNER: SHARPLES, Philip & Grace
APN: 119-410-17
APLCT: John Merritt
AGENT: John Merritt
ADDRESS: 43610 Comptche Ukiah Road, Mendocino

Public Roads
Private Roads
Driveways/Unnamed Roads

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

AERIAL IMAGERY

NOTES:
1. THIS SET OF DRAWINGS IS INTENDED TO DEPICT EXISTING SITE CONDITIONS ONLY. THE PROJECT WILL NOT RESULT IN ANY PROPOSED WORK.
2. BOUNDARY INFORMATION OBTAINED FROM: DATATREE ONLINE GIS.



SURVEY LEGEND

- EXISTING PROPERTY
- EXISTING ADJ. PROPERTY
- EXISTING EASEMENT
- EXISTING CONTOUR (MAJOR)
- EXISTING CONTOUR (MINOR)
- EXISTING TREELINE
- EXISTING CHAINLINK FENCE
- EXISTING BUILDING
- EXISTING STORM DRAIN
- EXISTING ROAD (DIRT)
- EXISTING ROAD (STONE)
- EXISTING ROAD (PAVED)
- EXISTING CONCRETE
- EXISTING LEASE AREA

1 OVERALL SITE PLAN

0 200' 400'

SCALE: 1"=200' (11X17)
1"=100' (22X34)

N

AMERICAN TOWER®
ATC TOWER SERVICES, LLC
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112

REV.	DESCRIPTION	BY	DATE
A	PRELIM	NRP	06/23/20

ATC SITE NUMBER:
411046

ATC SITE NAME:
MENDOCINO CA

SITE ADDRESS:
43600 COMPTCHE UKIAH ROAD
MENDOCINO, CA 95460

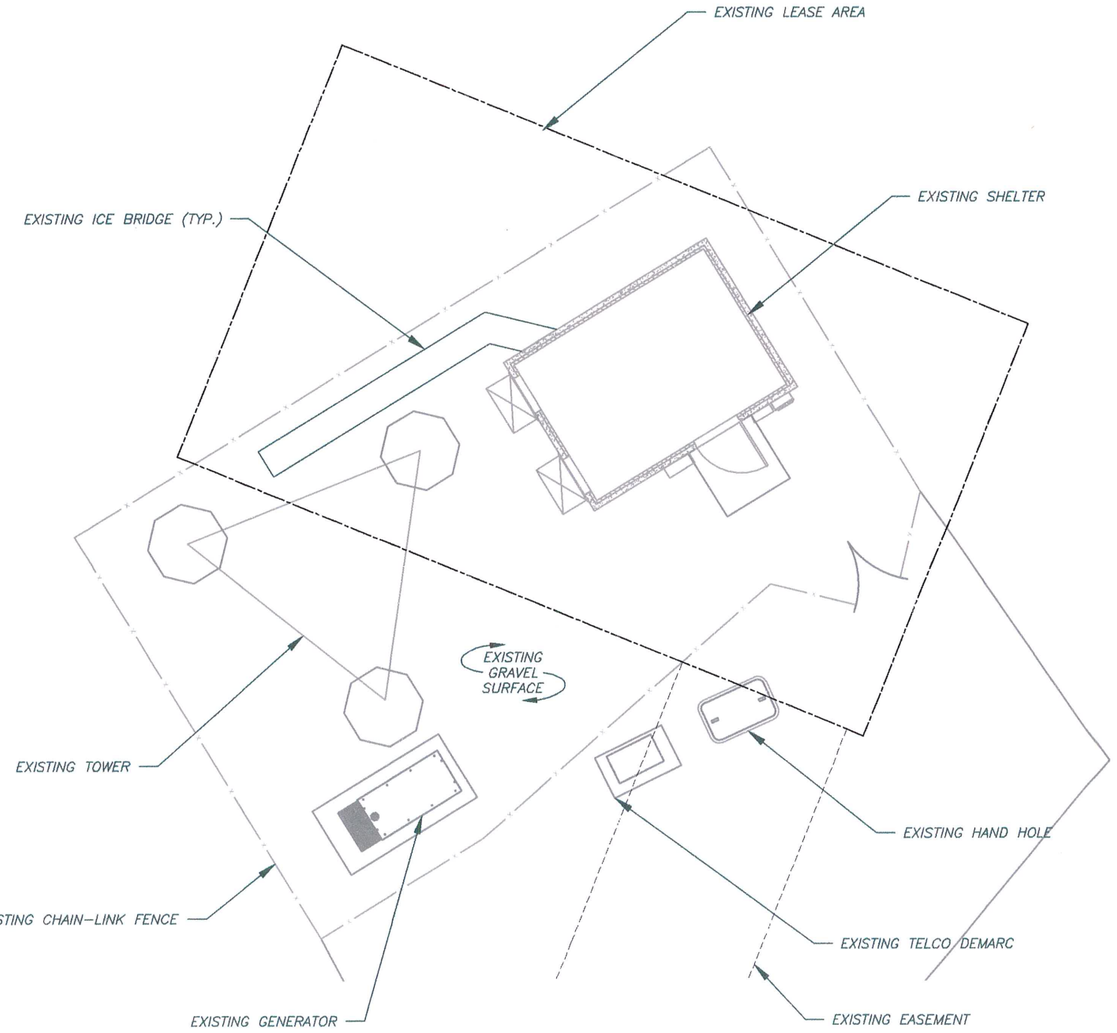
SEAL:

PRELIMINARY: NOT FOR CONSTRUCTION

DATE DRAWN:	06/23/20
ATC JOB NO:	13252473_E1

OVERALL SITE PLAN

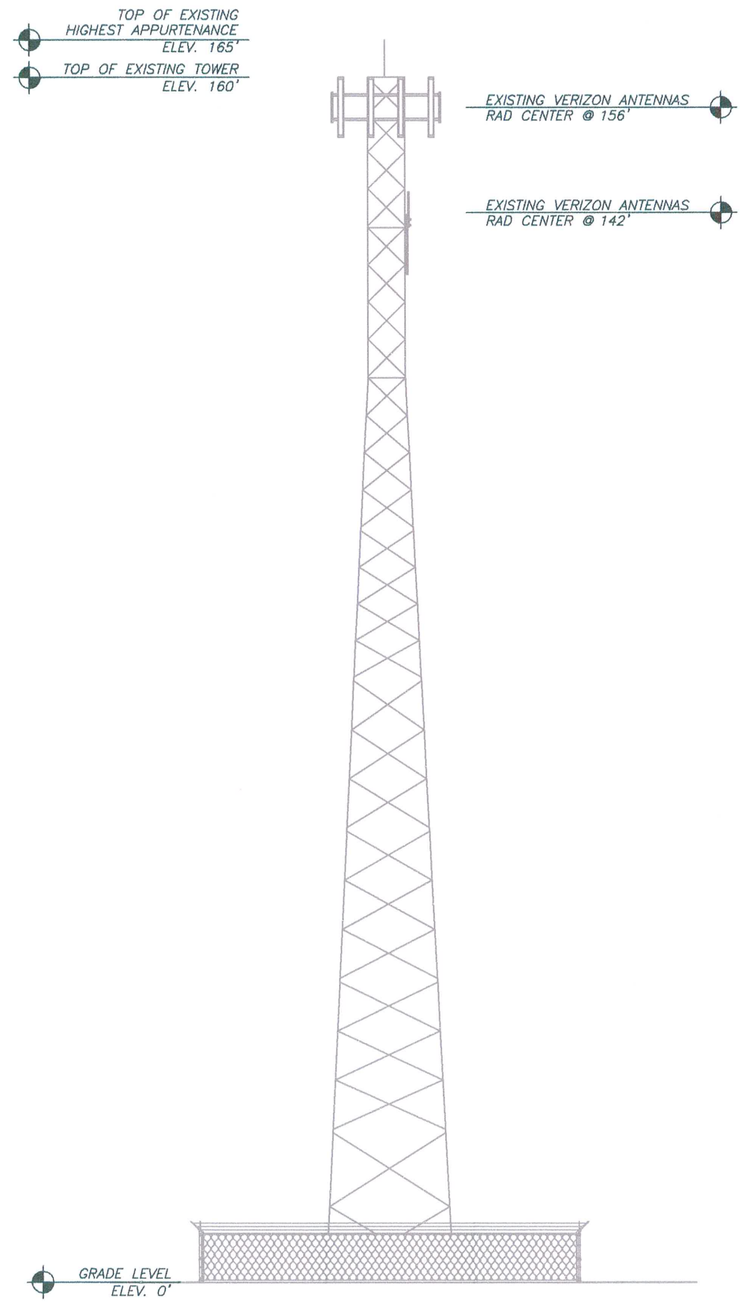
SHEET NUMBER:	REVISION:
C-101	A



1 DETAILED SITE PLAN

0 10' 20'

SCALE: 1"=10' (11X17)
1"=5' (22X34)



2 TOWER ELEVATION

SCALE: NOT TO SCALE

AMERICAN TOWER®
ATC TOWER SERVICES, LLC
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112

REV.	DESCRIPTION	BY	DATE
A	PRELIM	NRP	06/23/20

ATC SITE NUMBER:
411046

ATC SITE NAME:
MENDOCINO CA

SITE ADDRESS:
43600 COMPTCHE UKIAH ROAD
MENDOCINO, CA 95460

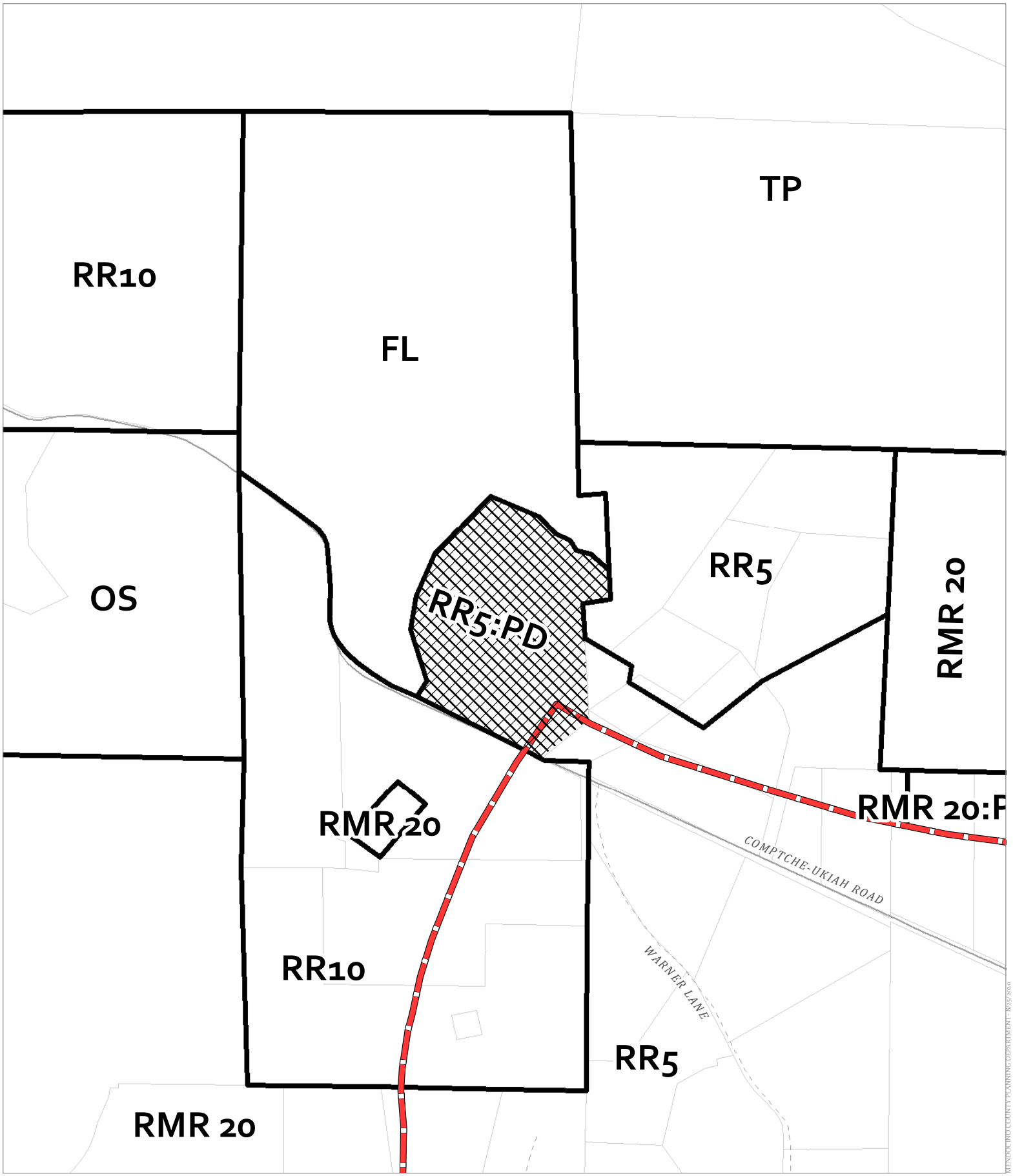
SEAL:

PRELIMINARY: NOT FOR CONSTRUCTION

DATE DRAWN:	06/23/20
ATC JOB NO:	13252473_E1

DETAILED SITE PLAN & TOWER ELEVATION

SHEET NUMBER:	REVISION:
C-102	A



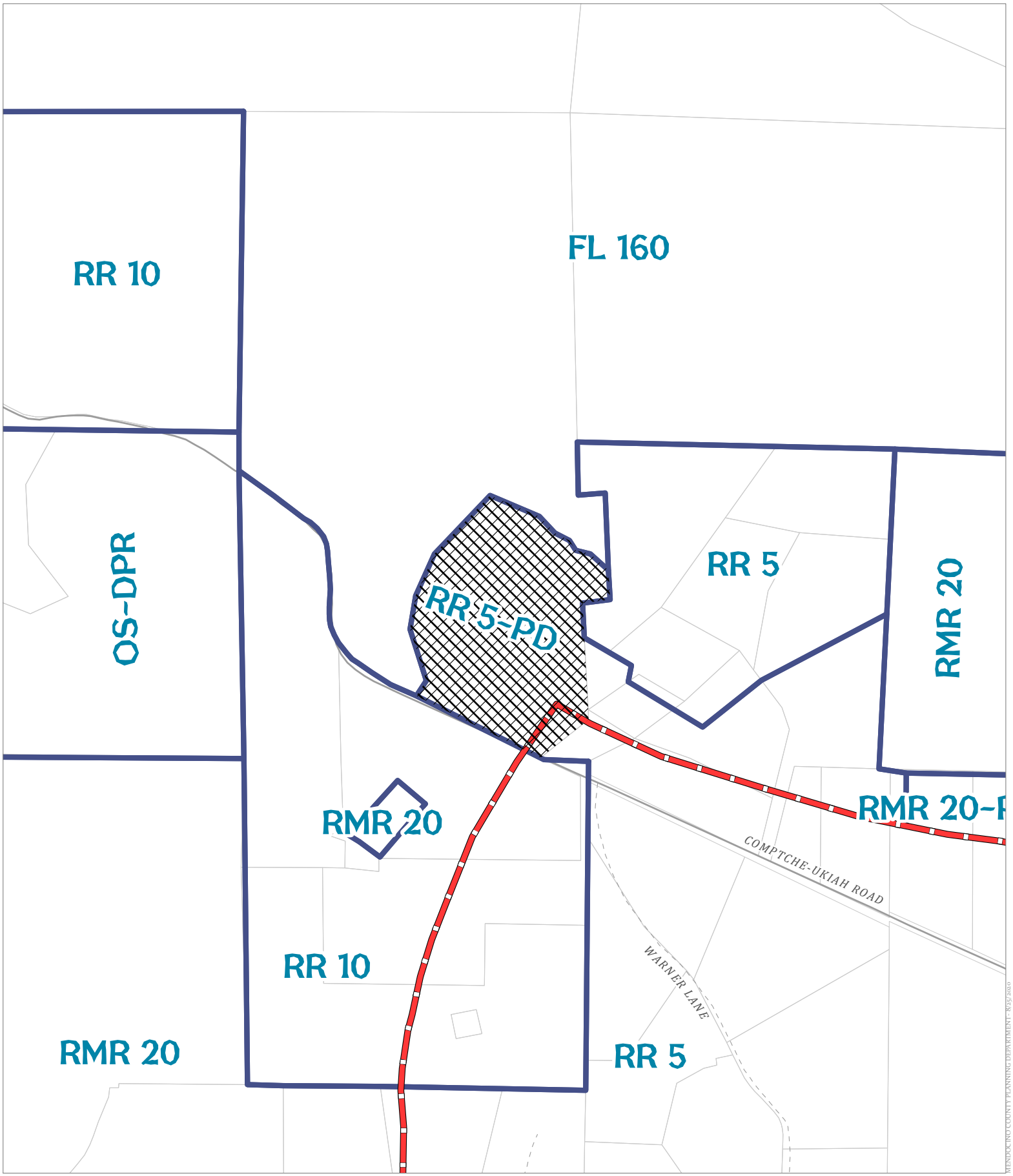
CASE: UR 2020-0009
OWNER: SHARPLES, Philip & Grace
APN: 119-410-17
APLCT: John Merritt
AGENT: John Merritt
ADDRESS: 43610 Comptche Ukiah Road, Mendocino

Coastal Zone Boundary
Zoning Districts
Public Roads
Assessors Parcels

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

ZONING DISPLAY MAP

MENDOCINO COUNTY PLANNING DEPARTMENT - 8/25/2020



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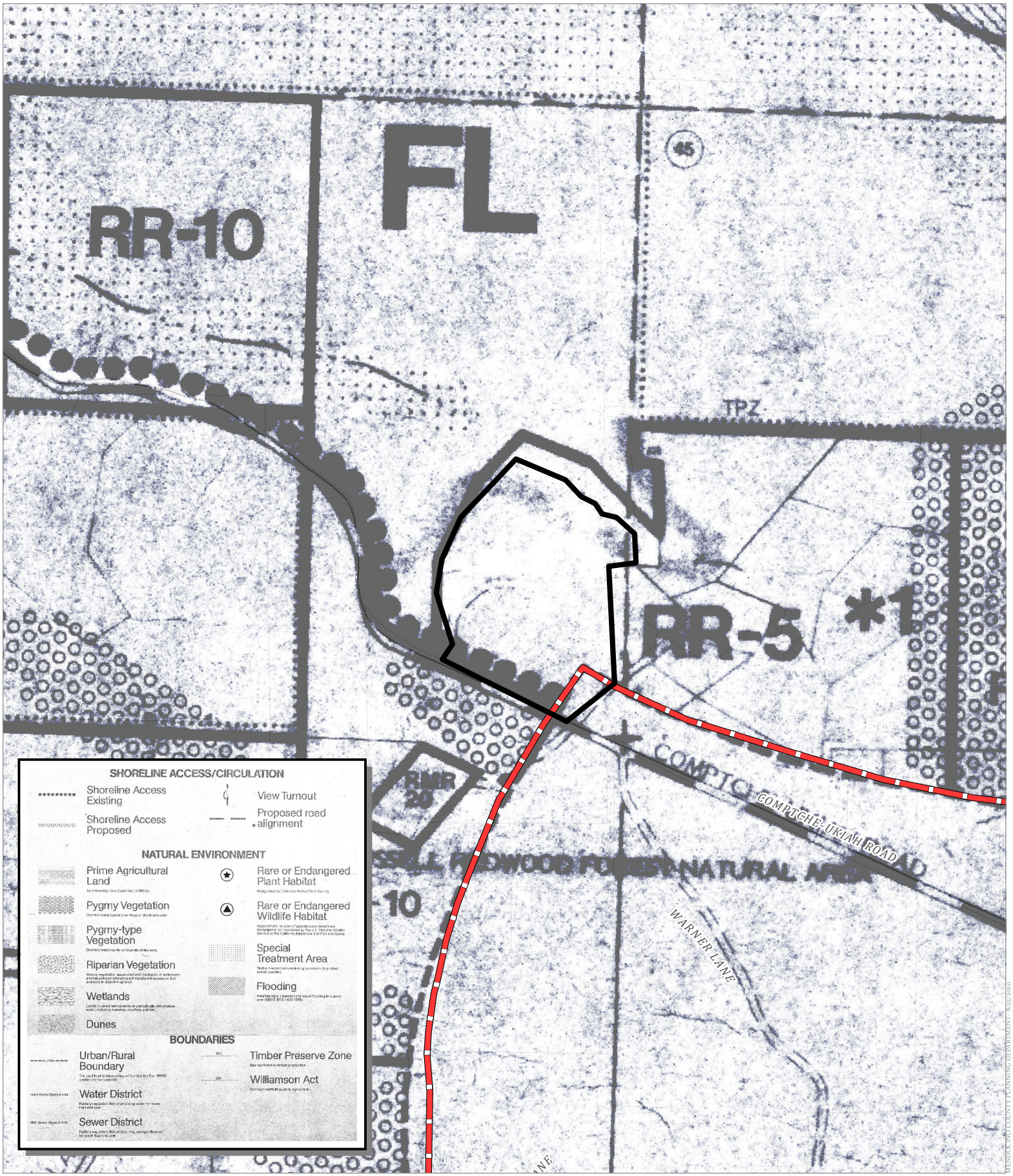
Coastal Zone Boundary
General Plan Classes
Public Roads
Assessors Parcels

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

GENERAL PLAN CLASSIFICATIONS

MENDOCINO COUNTY PLANNING DEPARTMENT - 8/25/2020



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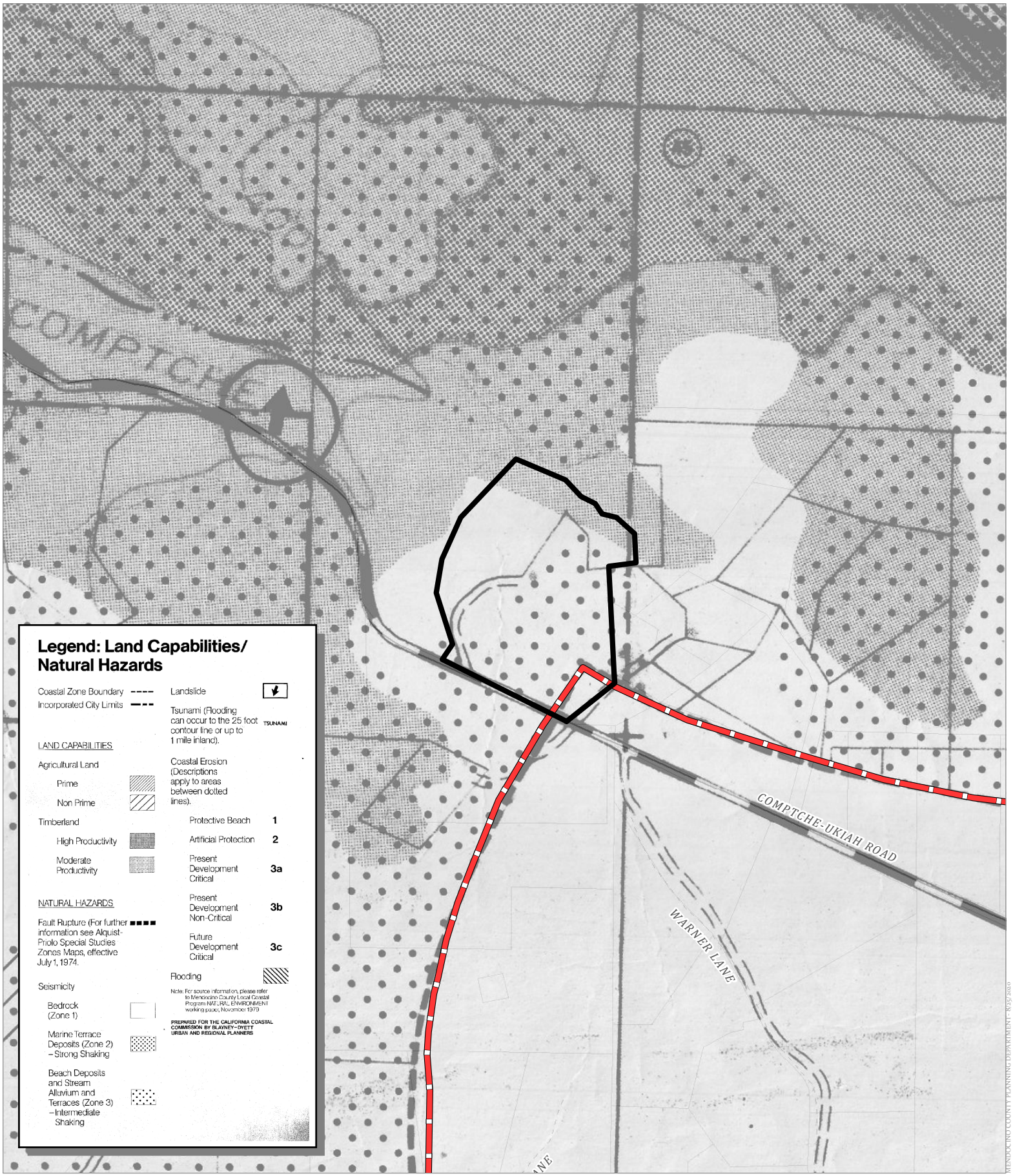
Coastal Zone Boundary
Public Roads
Assessors Parcels

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

LCP LAND USE MAP 17: MENDOCINO



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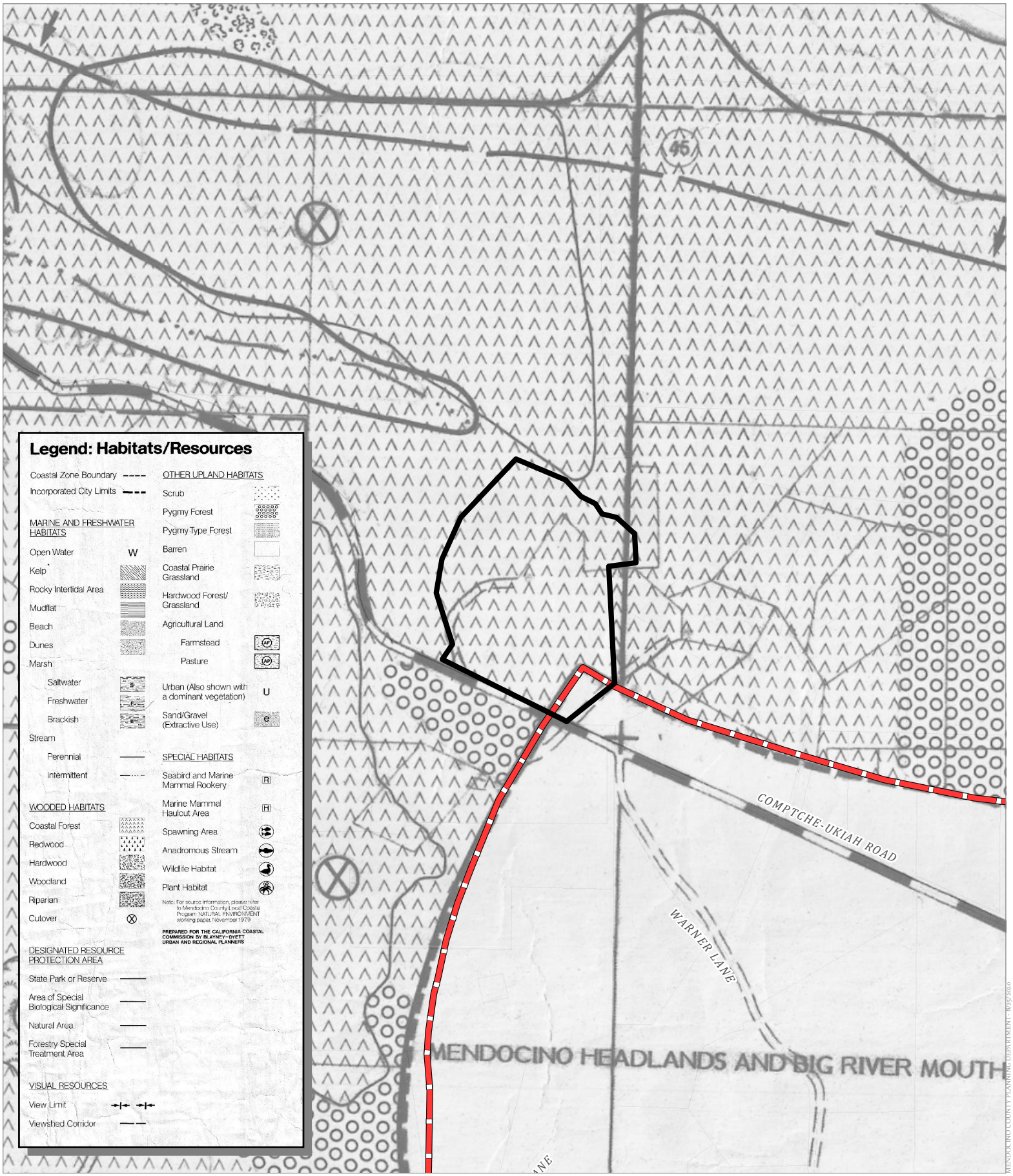
Coastal Zone Boundary
Public Roads
Assessors Parcels

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

LCP LAND CAPABILITIES & NATURAL HAZARDS



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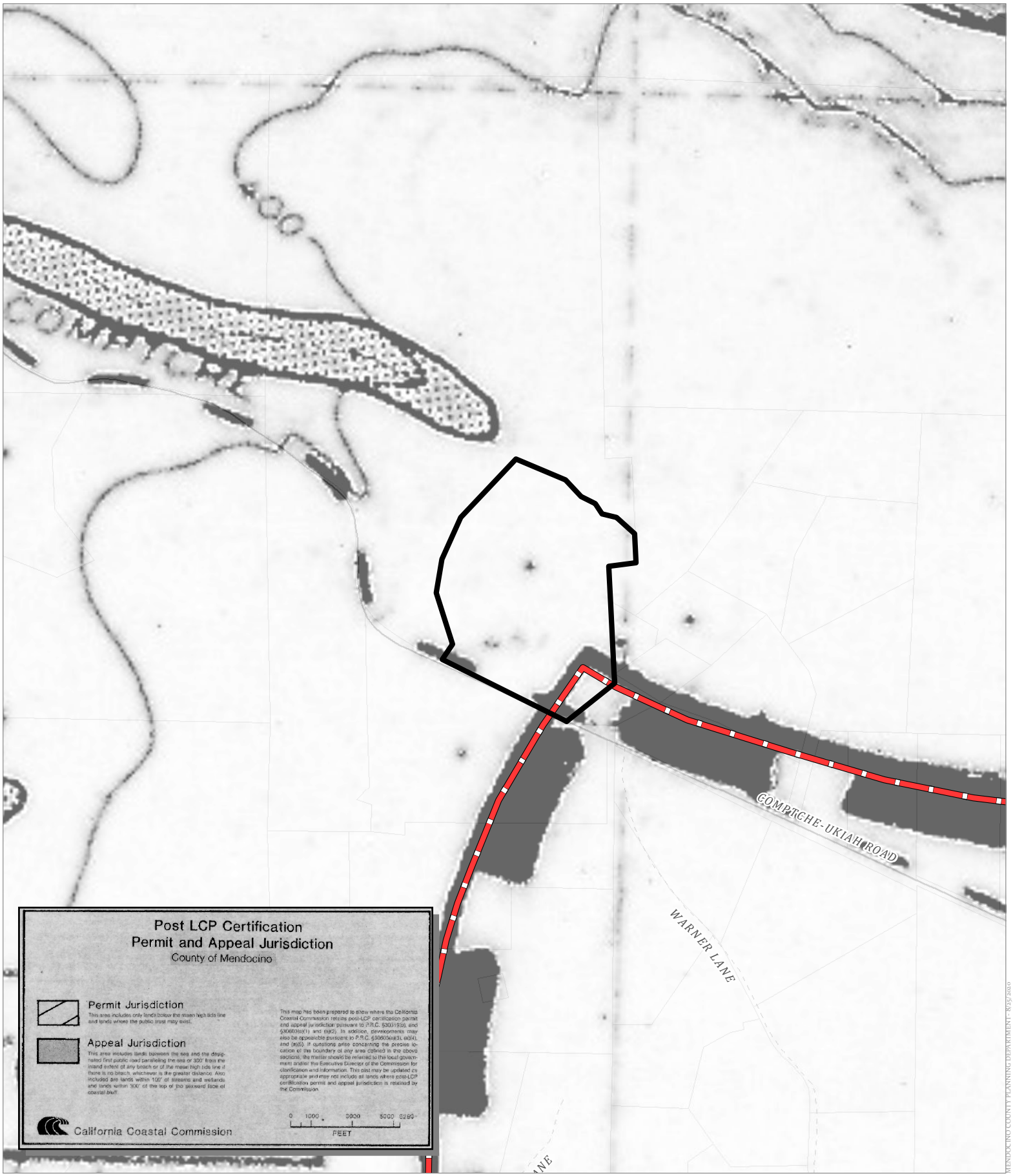
Coastal Zone Boundary
Public Roads
Assessors Parcels

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

LCP HABITATS & RESOURCES



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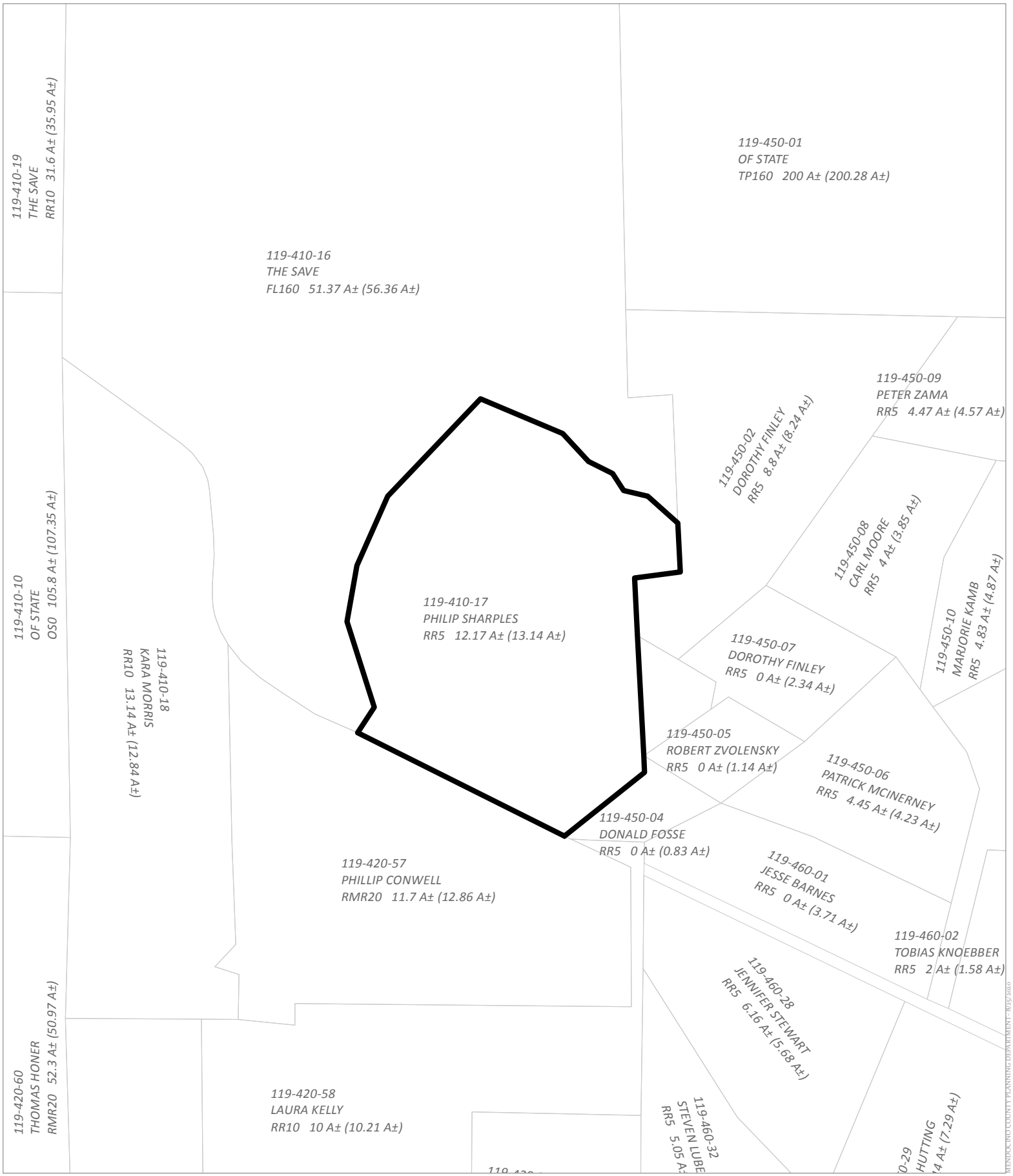
Coastal Zone Boundary
Public Roads
Assessors Parcels

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

POST LCP CERTIFICATION AND APPEAL JURISDICTION



CASE: UR 2020-0009
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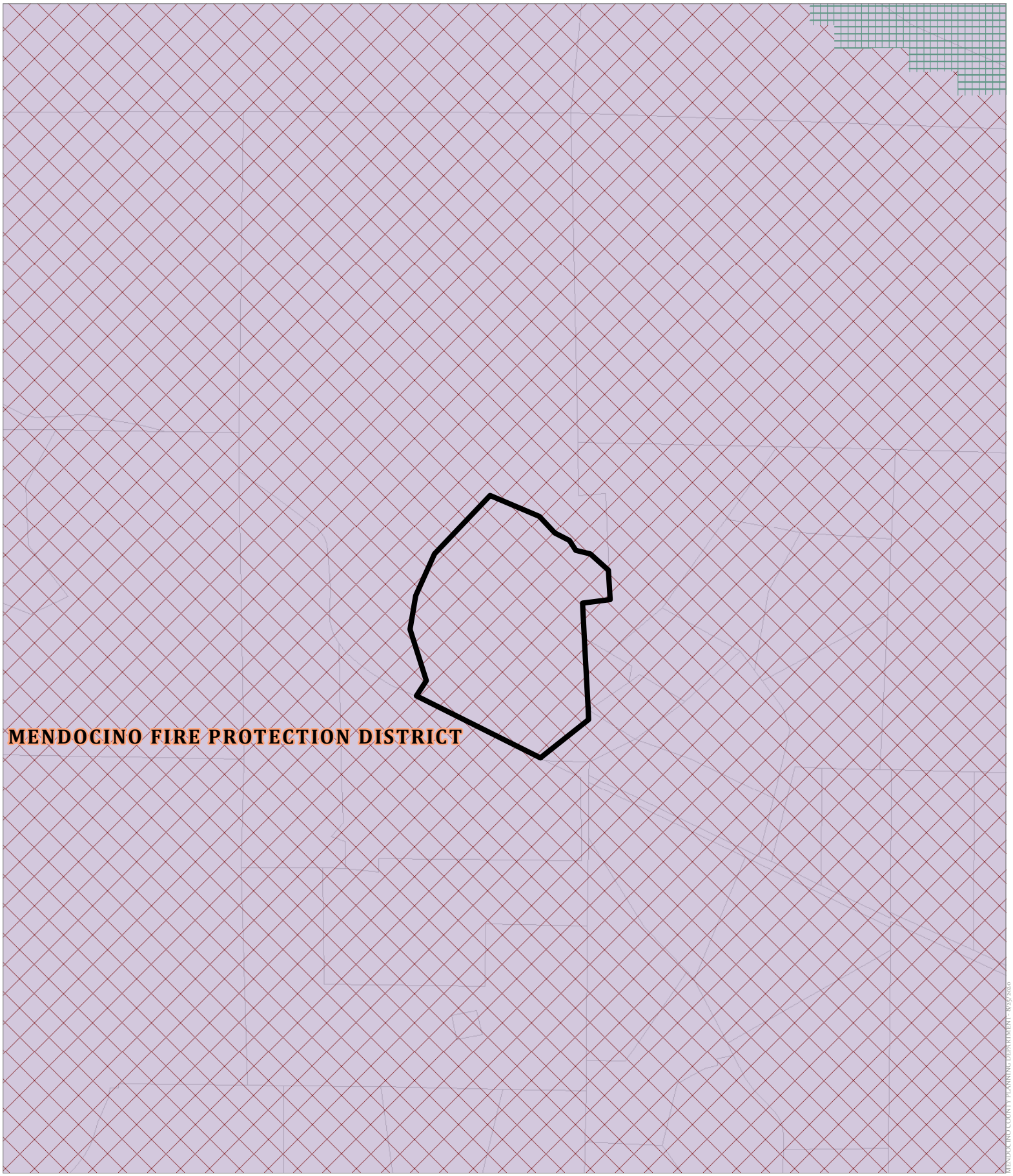
APN: 119-410-17
APLCT: John Merritt
AGENT: John Merritt
ADDRESS: 43610 Comptche Ukiah Road, Mendocino

Assessors Parcels

0 150 300 Feet
0 0.025 0.05 Miles
1:3,600

ADJACENT PARCELS



CASE: UR 2020-0009
OWNER: SHARPLES, Philip & Grace
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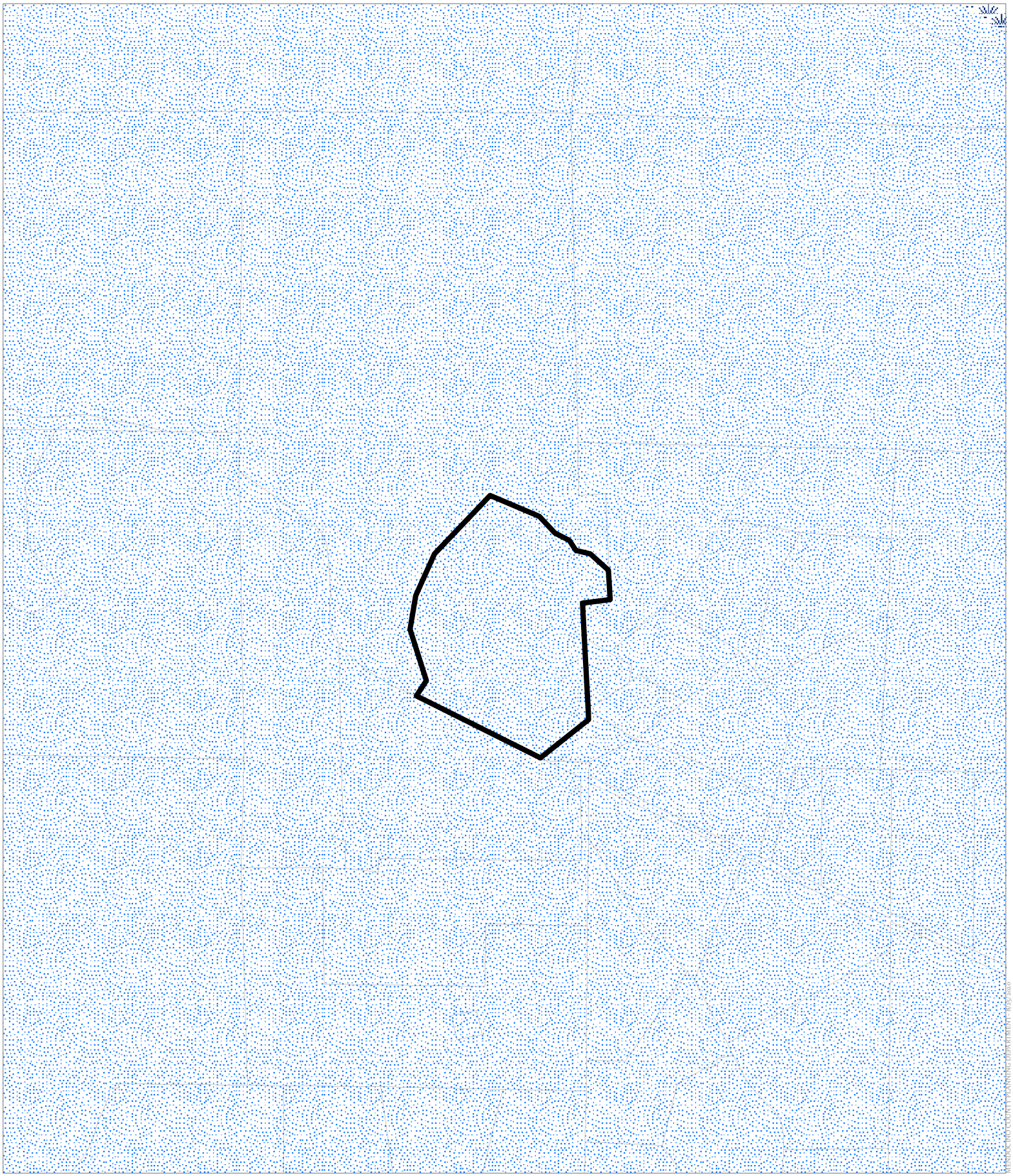
High Fire Hazard
Moderate Fire Hazard
County Fire Districts
Assessors Parcels

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

FIRE HAZARD ZONES & RESPONSIBILITY AREAS
STATE RESPONSIBILITY AREA

MENDOCINO COUNTY PLANNING DEPARTMENT 4/29/2020



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OWNER: SHARPLES, Philip & Grace
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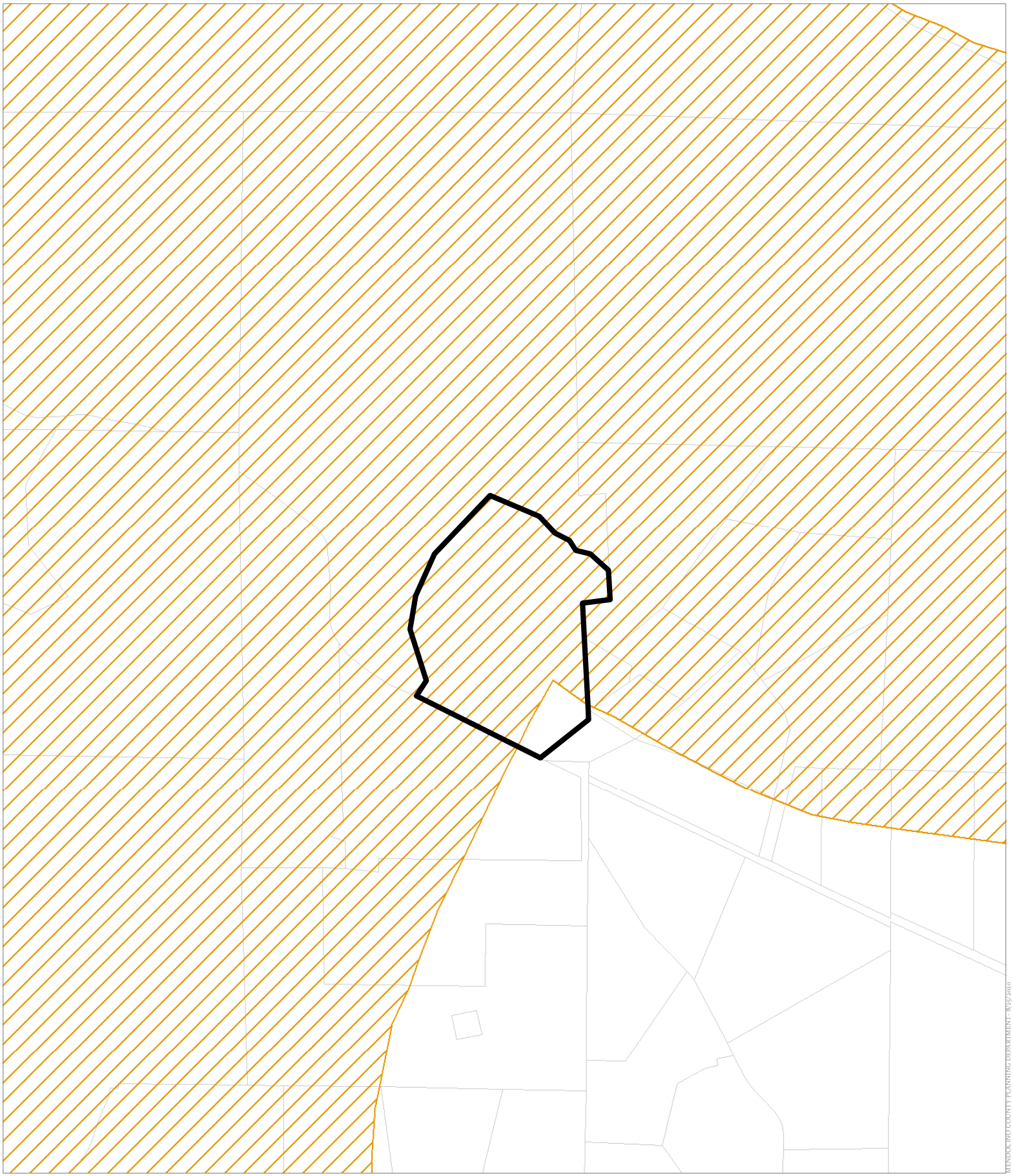
Sufficient Water Resources
Marginal Water Resources
Assessors Parcels

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

GROUND WATER RESOURCES



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Highly Scenic Area (Conditional)

Assessors Parcels

0 250 500 Feet

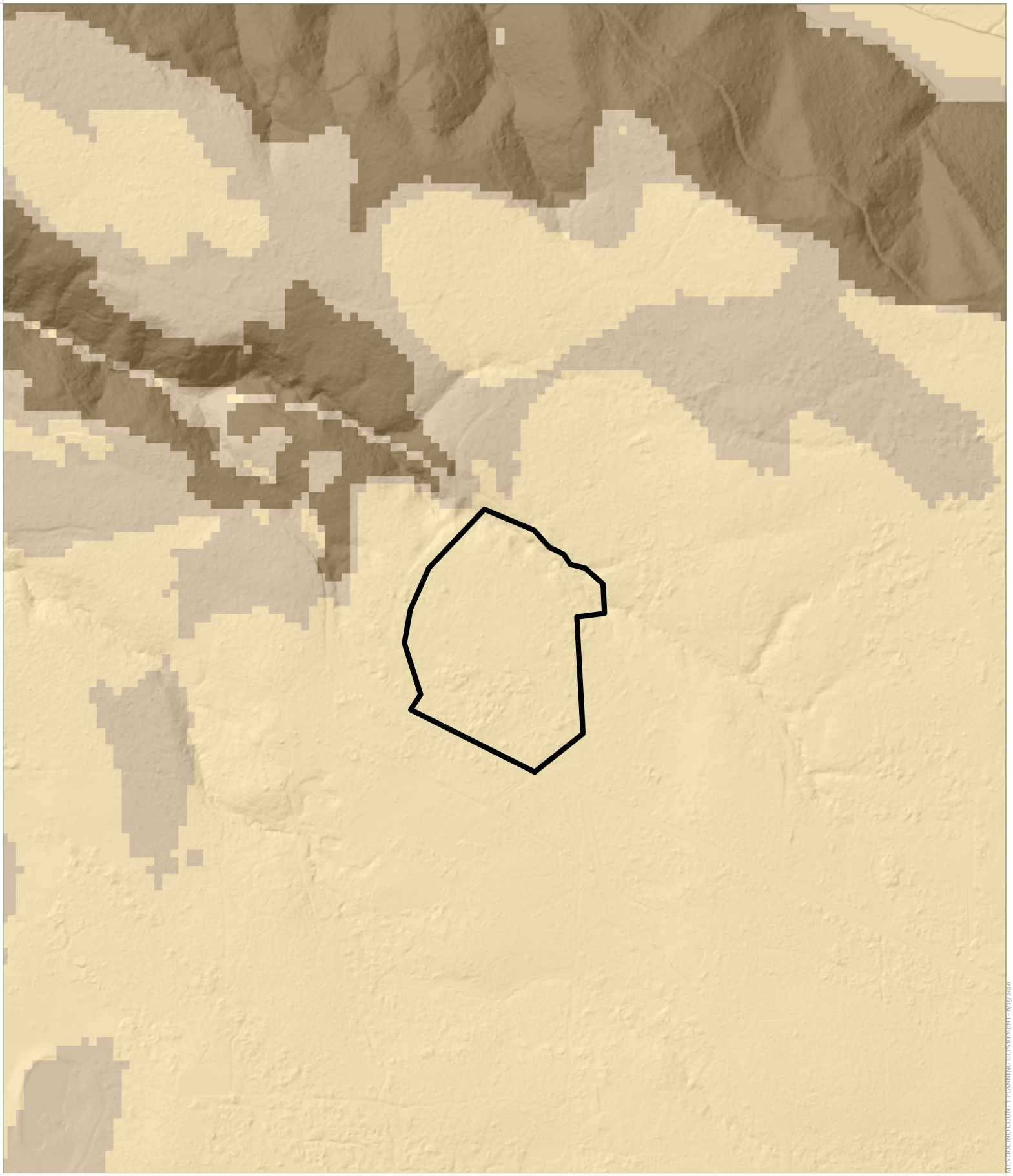
0 0.0425 0.085 Miles

N W E S

1:6,000

HIGHLY SCENIC & TREE REMOVAL AREAS

MENDOCINO COUNTY PLANNING DEPARTMENT - 8/25/2020



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ADDRESS: 43610 Comptche Ukiah Road, Mendocino

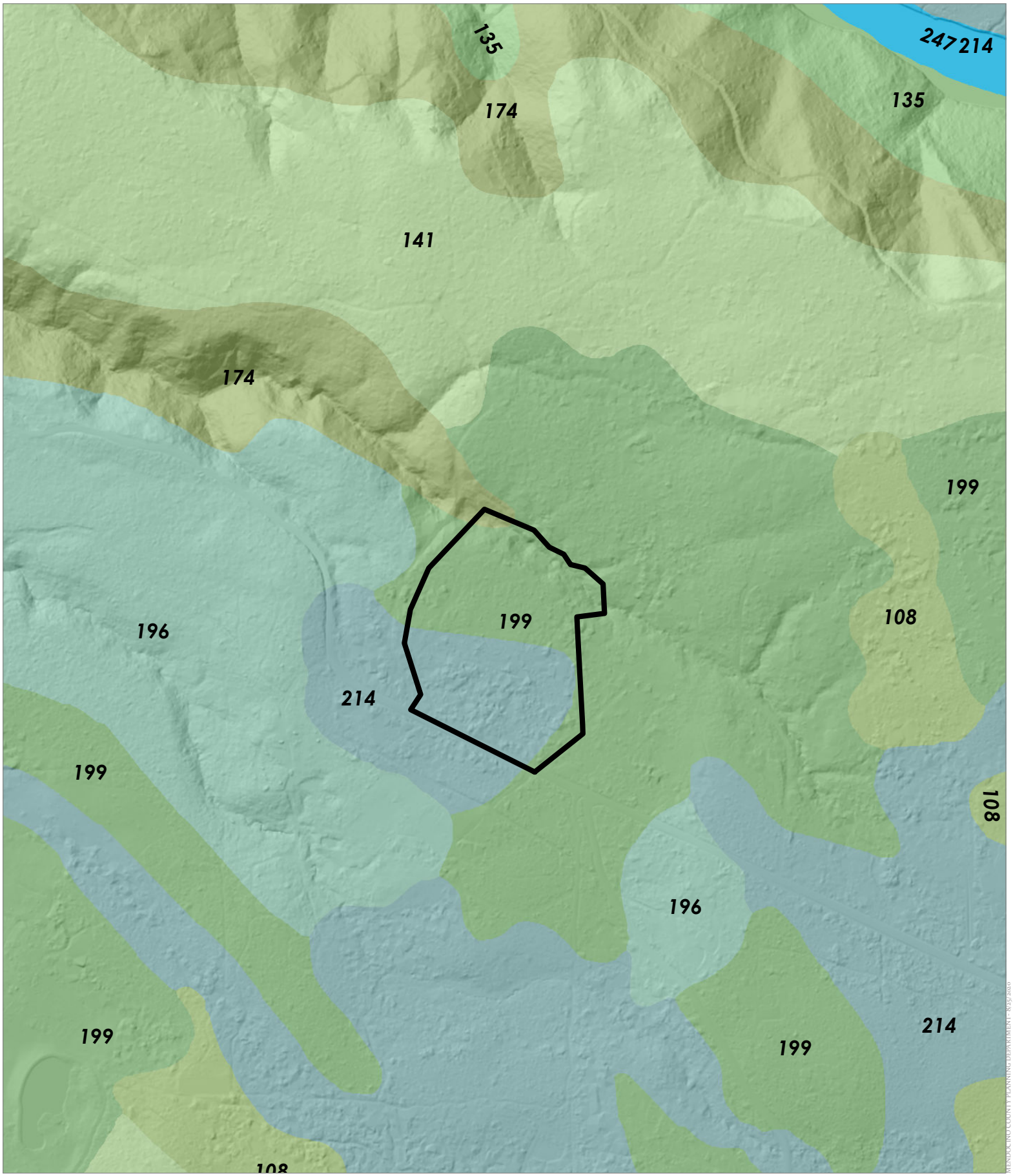
0° - 14°
15° - 32°
33° - 72°

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

N W E S

ESTIMATED SLOPE

MENDOCINO COUNTY PLANNING DEPARTMENT - 8/25/2020



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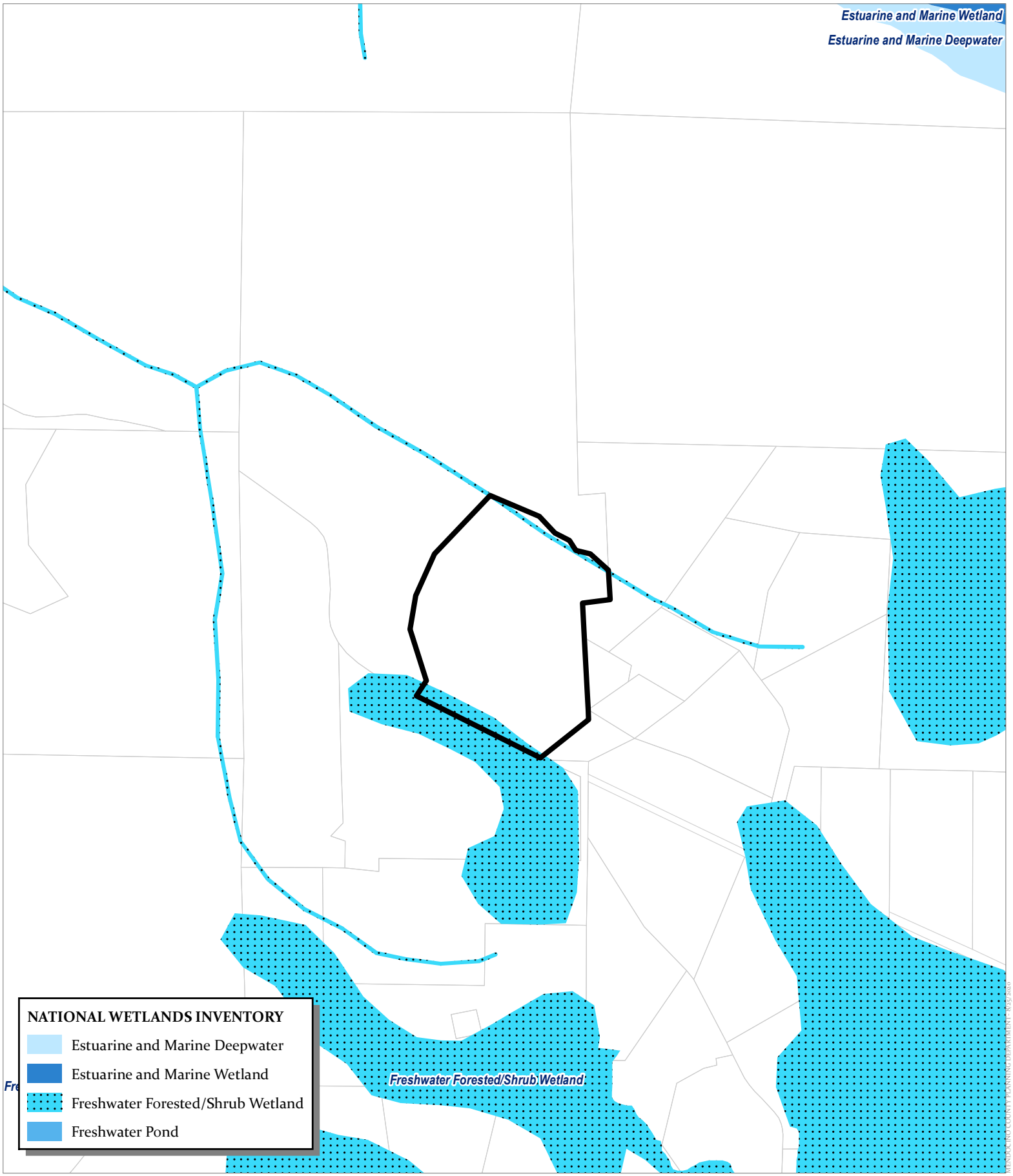
Blacklock & Aborigine
Shinglemill-Gibney Complex
Bishop Pine

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

WESTERN SOIL CLASSIFICATIONS

MENDOCINO COUNTY PLANNING DEPARTMENT - 8/25/2020

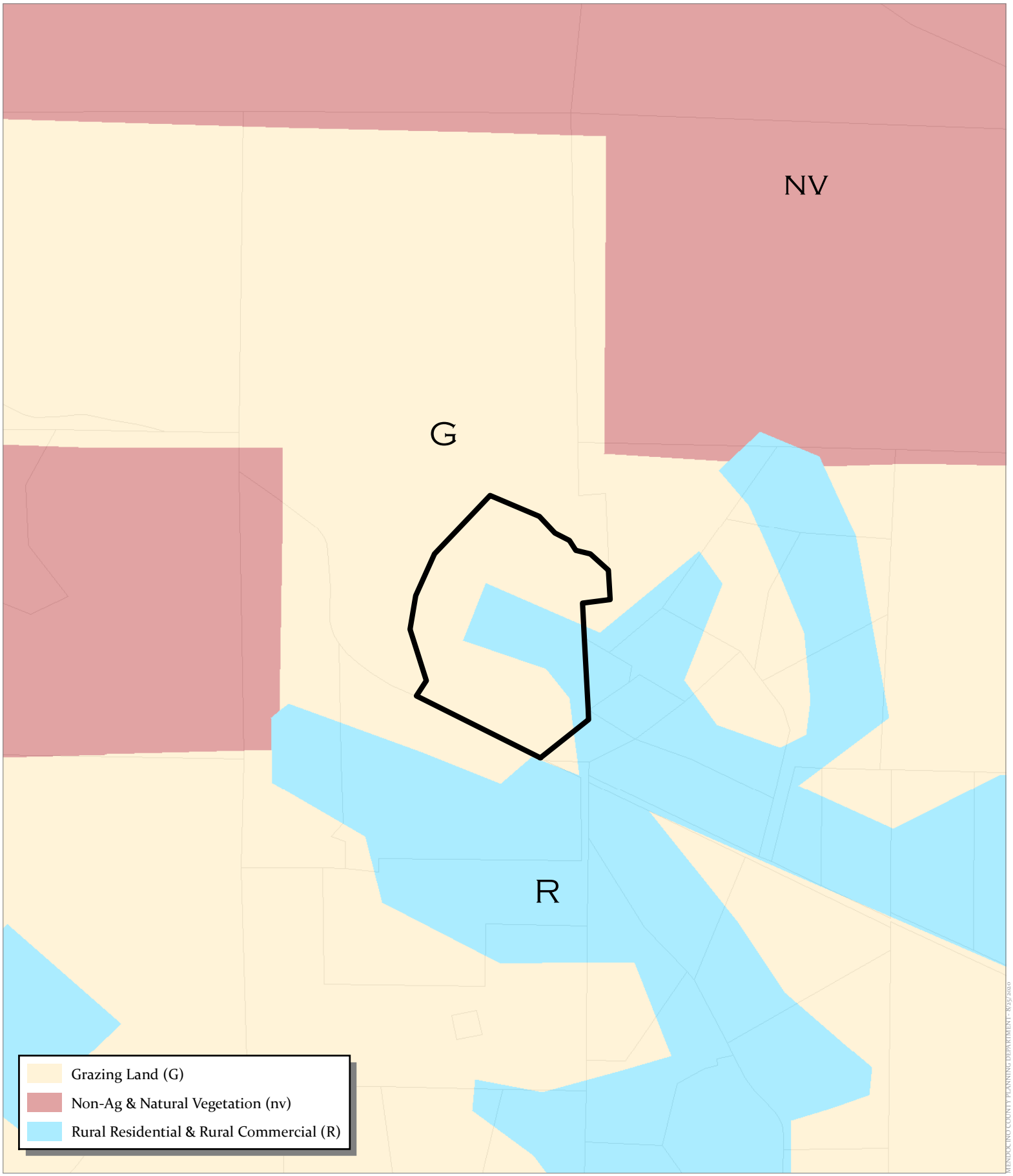


CASE: UR 2020-0009
OWNER: SHARPLES, Philip & Grace
APN: 119-410-17
APLCT: John Merritt
AGENT: John Merritt
ADDRESS: 43610 Comptche Ukiah Road, Mendocino

Assessors Parcels

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

WETLANDS



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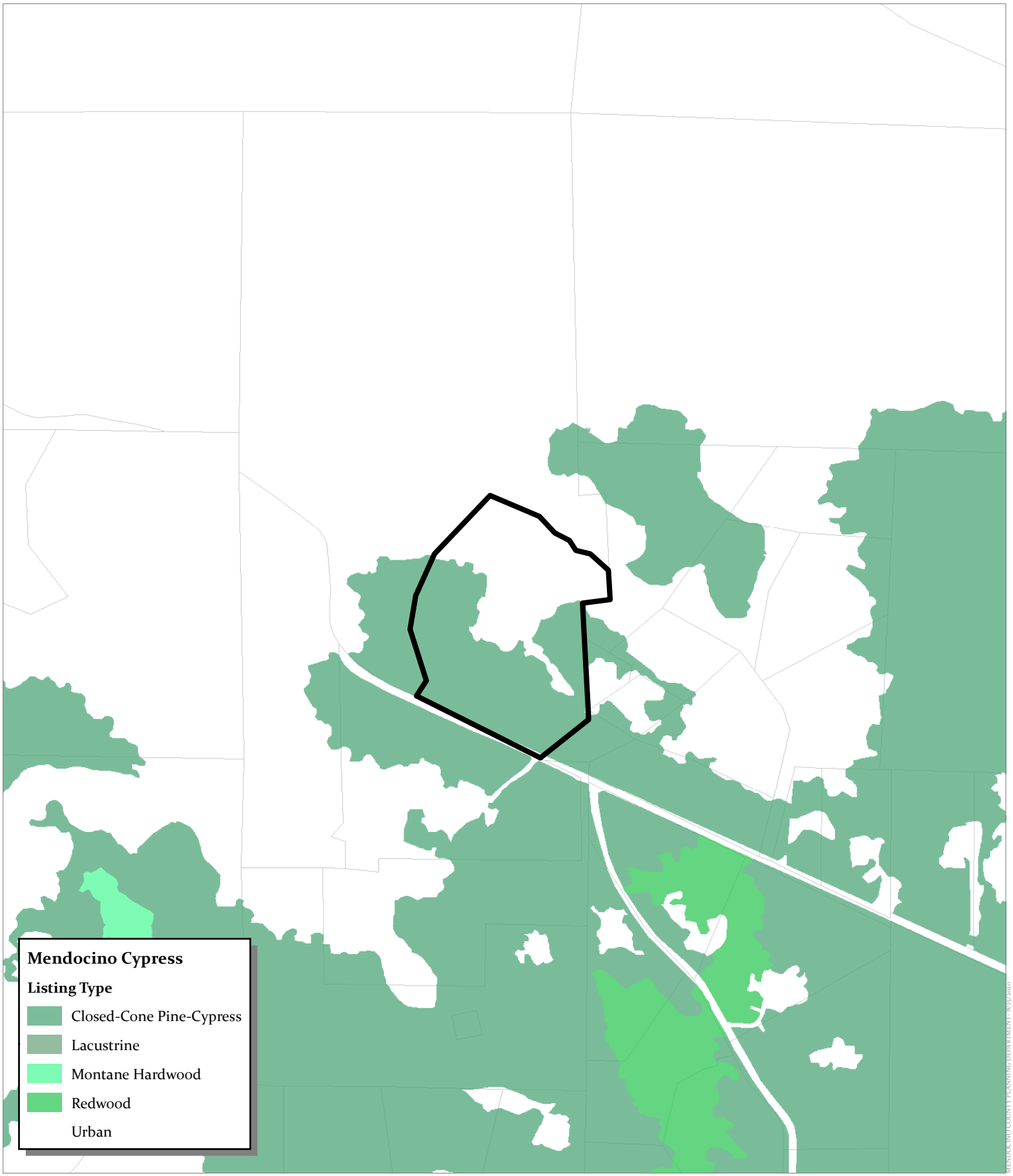
0 250 500 Feet
0 0.0425 0.085 Miles
1:6,000

FARMLAND CLASSIFICATIONS



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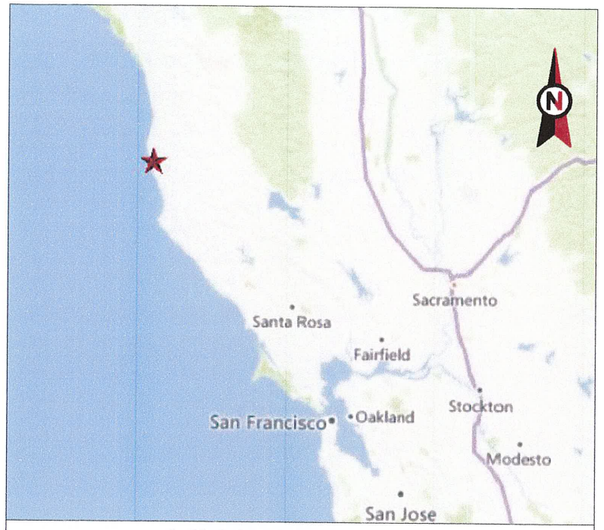
AGENT: John Merritt
ADDRESS: 43610 Comptche Ukiah Road, Mendocino

Assessors Parcels

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

MENDOCINO CYPRESS



VICINITY MAP

AMERICAN TOWER®

SITE NAME: MENDOCINO CA
SITE NUMBER: 411046
SITE ADDRESS: 43600 COMPTCHE UKIAH ROAD
MENDOCINO, CA 95460

LOCATION MAP

CONDITIONAL USE PERMIT RENEWAL

COMPLIANCE CODE

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

1. 2016 CALIFORNIA ADMINISTRATIVE CODE
2. 2016 CALIFORNIA BUILDING CODE
3. 2016 CALIFORNIA RESIDENTIAL CODE
4. 2016 CALIFORNIA ELECTRICAL CODE
5. 2016 CALIFORNIA MECHANICAL CODE
6. 2016 CALIFORNIA PLUMBING CODE
7. 2016 CALIFORNIA ENERGY CODE
8. 2016 CALIFORNIA FIRE CODE
9. 2016 CALIFORNIA EXISTING BUILDING CODE
10. INTERNATIONAL BUILDING CODE (IBC)
11. NATIONAL ELECTRICAL CODE (NEC)
12. LOCAL BUILDING CODES

UTILITY COMPANIES

POWER COMPANY: UNKNOWN
PHONE: N/A

TELEPHONE COMPANY: UNKNOWN
PHONE: N/A

811 Know what's below. Call before you dig.

PROJECT SUMMARY

SITE ADDRESS:

43600 COMPTCHE UKIAH ROAD
MENDOCINO, CA 95460
COUNTY: MENDOCINO

GEOGRAPHIC COORDINATES:

LATITUDE: 39.295

LONGITUDE: -123.772544

GROUND ELEVATION: 452' AMSL

ZONING INFORMATION:

JURISDICTION: UNINCORPORATED AREA

PARCEL NUMBER: 119-410-17-00

ZONING: RR5 5

PROJECT TEAM

TOWER OWNER:

ATC SEQUOIA LLC
10 PRESIDENTIAL WAY
WOBURN, MA 01801

PROPERTY OWNER:

PHILIP SHARPLES
100 N FRANKLIN ST
FORT BRAGG, CA 95437

ENGINEER:

ATC TOWER SERVICES
3500 REGENCY PARKWAY SUITE 100
CARY, NC 27518

AGENT:

BONNIE BELAIR
ATTORNEY, AMERICAN TOWER
10 PRESIDENTIAL WAY
WOBURN, MA 01801

PROJECT DESCRIPTION

THIS SET OF DRAWINGS IS INTENDED TO DEPICT EXISTING SITE CONDITIONS. NO CHANGES TO EXISTING ARE PROPOSED.

PROJECT NOTES

1. THE FACILITY IS UNMANNED.
2. A TECHNICIAN WILL VISIT THE SITE APPROXIMATELY ONCE A MONTH FOR ROUTINE INSPECTION AND MAINTENANCE.
3. EXISTING FACILITY MEETS OR EXCEEDS ALL FAA AND FCC REGULATORY REQUIREMENTS.
4. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT LAND DISTURBANCE OR EFFECT OF STORM WATER DRAINAGE.
5. NO SANITARY SEWER, POTABLE WATER OR TRASH DISPOSAL IS REQUIRED.
6. HANDICAP ACCESS IS NOT REQUIRED.

PROJECT LOCATION DIRECTIONS

FROM MENDOCINO HEAD SOUTH ON CA-1, TURN LEFT ONTO COMPTCHE UKIAH RD (EAST),ABOUT 1.4 MILES THE PRIVATE DRIVE IS ON THE LEFT, FOLLOW SIGN TO THE TOWER, FIRST LEFT AFTER YOU ENTER THE DRIVE YOU WILL SEE THE TOWER.

SHEET INDEX

SHEET NO:	DESCRIPTION:	REV:	DATE:	BY:
G-001	TITLE SHEET	A	06/23/20	NRP
C-101	OVERALL SITE PLAN	A	06/23/20	NRP
C-102	DETAILED SITE PLAN & TOWER ELEVATION	A	06/23/20	NRP
C-501	SIGNAGE	A	06/23/20	NRP

AMERICAN TOWER®
ATC TOWER SERVICES, LLC
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112

REV.	DESCRIPTION	BY	DATE
A	PRELIM	NRP	06/23/20

ATC SITE NUMBER:
411046

ATC SITE NAME:
MENDOCINO CA

SITE ADDRESS:
43600 COMPTCHE UKIAH ROAD
MENDOCINO, CA 95460

SEAL:

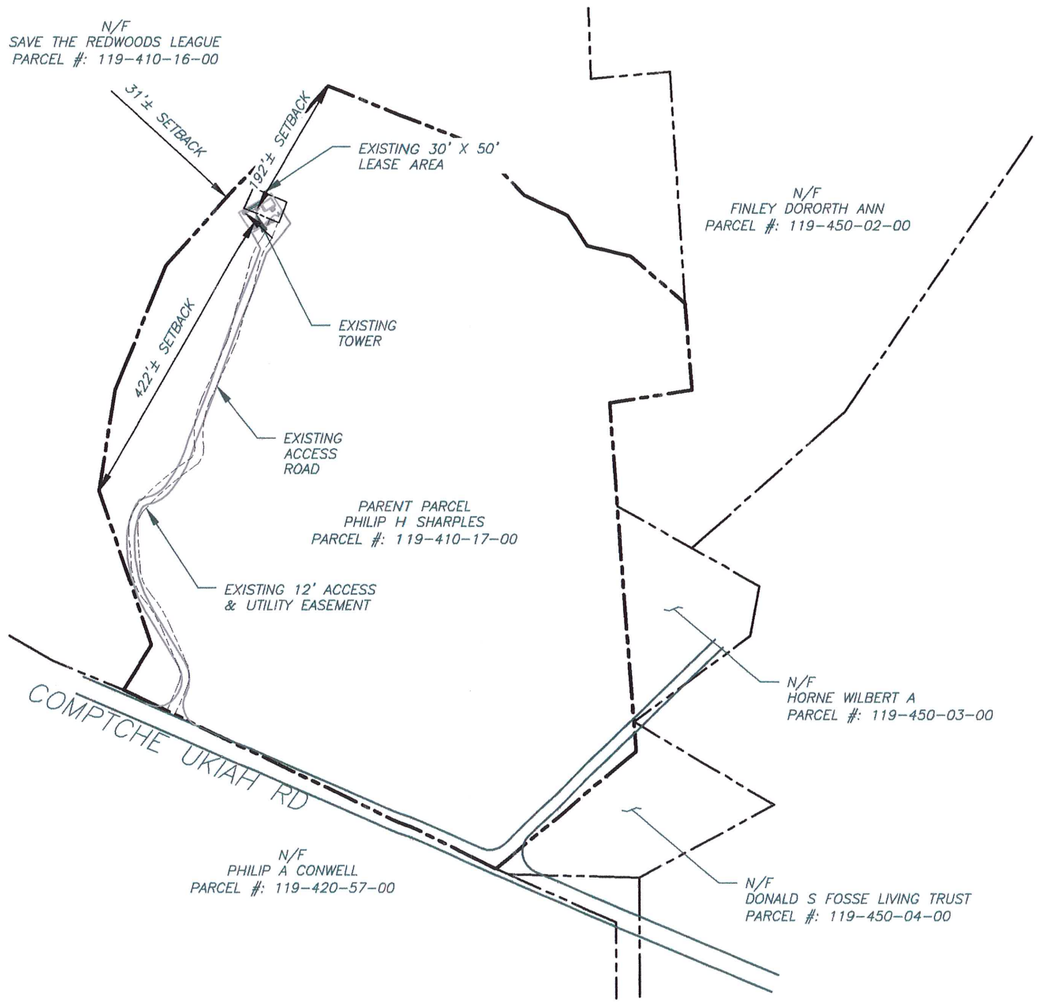
PRELIMINARY: NOT FOR CONSTRUCTION

DATE DRAWN:	06/23/20
ATC JOB NO:	13252473_E1

TITLE SHEET

SHEET NUMBER:	REVISION:
G-001	A

NOTES:
1. THIS SET OF DRAWINGS IS INTENDED TO DEPICT EXISTING SITE CONDITIONS ONLY. THE PROJECT WILL NOT RESULT IN ANY PROPOSED WORK.
2. BOUNDARY INFORMATION OBTAINED FROM: DATATREE ONLINE GIS.



SURVEY LEGEND

- EXISTING PROPERTY
- EXISTING ADJ. PROPERTY
- EXISTING EASEMENT
- EXISTING CONTOUR (MAJOR)
- EXISTING CONTOUR (MINOR)
- EXISTING TREELINE
- EXISTING CHAINLINK FENCE
- EXISTING BUILDING
- EXISTING STORM DRAIN
- EXISTING ROAD (DIRT)
- EXISTING ROAD (STONE)
- EXISTING ROAD (PAVED)
- EXISTING CONCRETE
- EXISTING LEASE AREA

1 OVERALL SITE PLAN

0 200' 400'

SCALE: 1"=200' (11X17)
1"=100' (22X34)

N

AMERICAN TOWER®
ATC TOWER SERVICES, LLC
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112

REV.	DESCRIPTION	BY	DATE
A	PRELIM	NRP	06/23/20

ATC SITE NUMBER:
411046

ATC SITE NAME:
MENDOCINO CA

SITE ADDRESS:
43600 COMPTCHE UKIAH ROAD
MENDOCINO, CA 95460

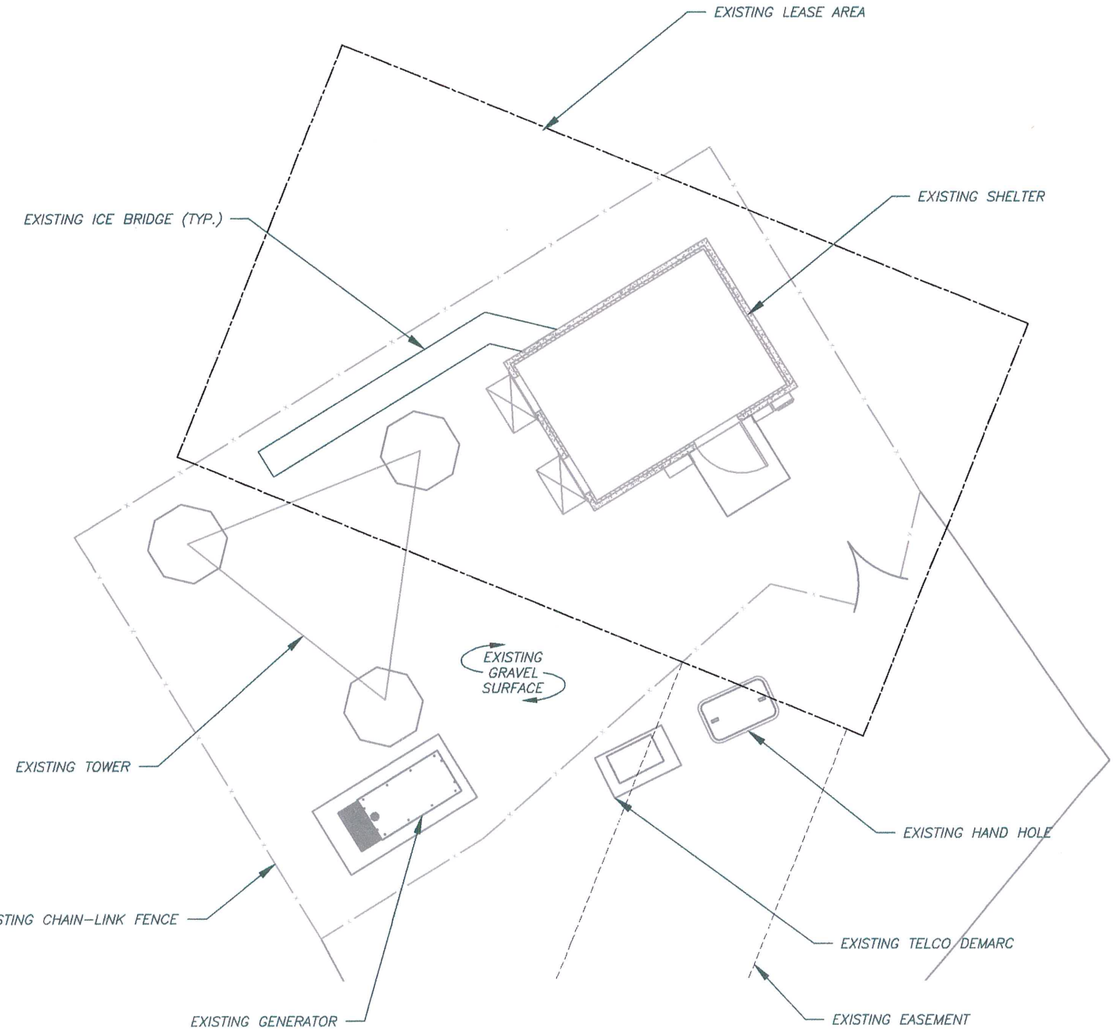
SEAL:

PRELIMINARY: NOT FOR CONSTRUCTION

DATE DRAWN:	06/23/20
ATC JOB NO:	13252473_E1

OVERALL SITE PLAN

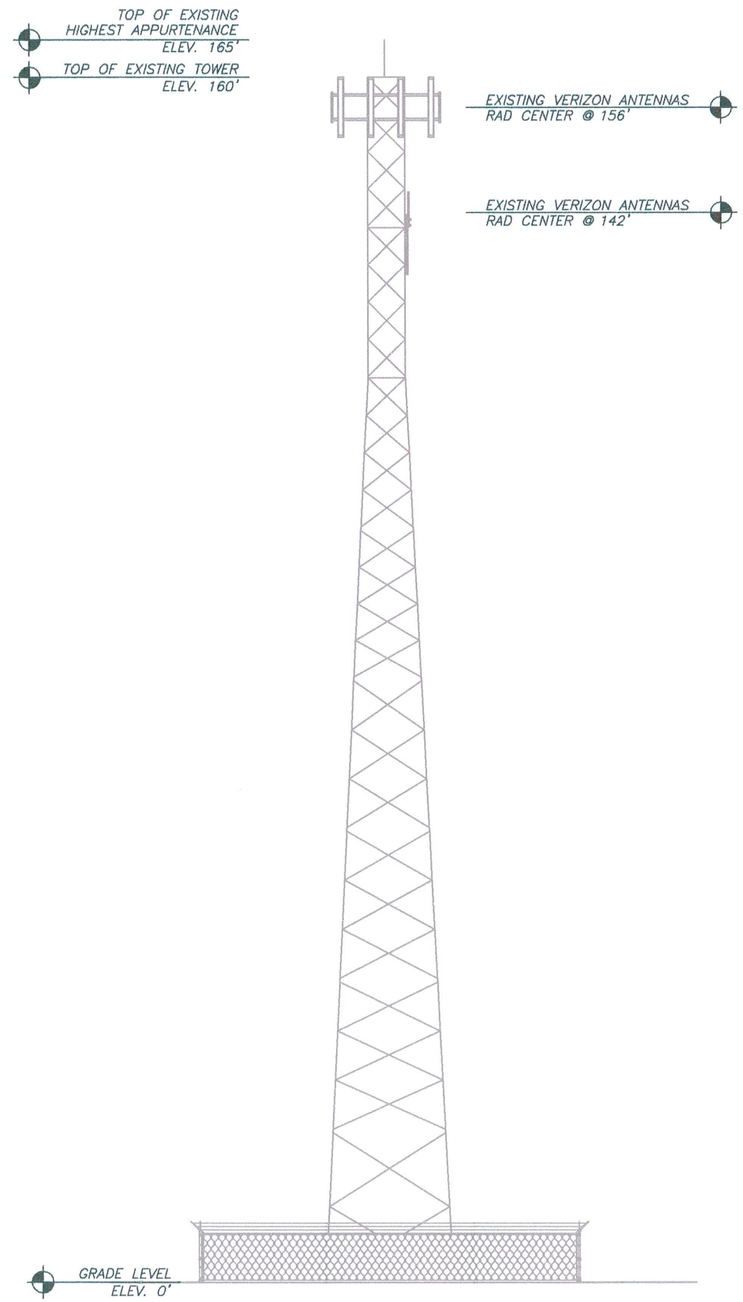
SHEET NUMBER:	REVISION:
C-101	A



1 DETAILED SITE PLAN

0 10' 20'

SCALE: 1"=10' (11X17)
1"=5' (22X34)



2 TOWER ELEVATION

SCALE: NOT TO SCALE

AMERICAN TOWER®
ATC TOWER SERVICES, LLC
3500 REGENCY PARKWAY
SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112

REV.	DESCRIPTION	BY	DATE
A	PRELIM	NRP	06/23/20

ATC SITE NUMBER:
411046

ATC SITE NAME:
MENDOCINO CA

SITE ADDRESS:
43600 COMPTCHE UKIAH ROAD
MENDOCINO, CA 95460

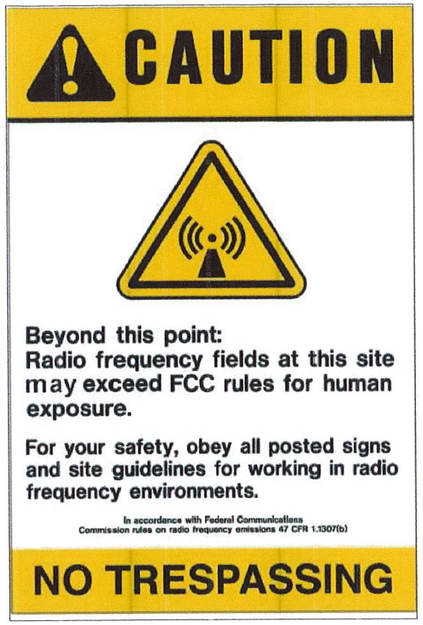
SEAL:

PRELIMINARY: NOT FOR CONSTRUCTION

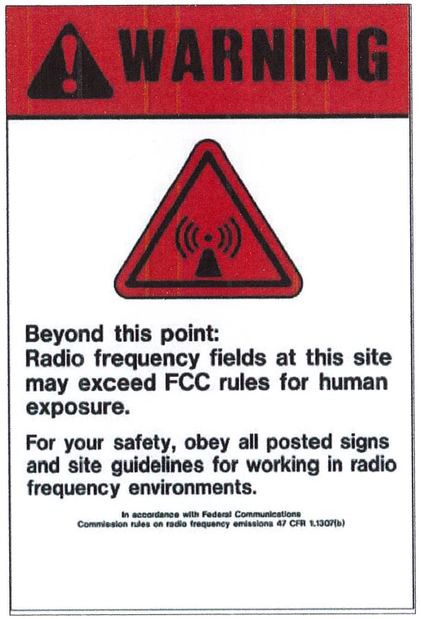
DATE DRAWN:	06/23/20
ATC JOB NO:	13252473_E1

DETAILED SITE PLAN & TOWER ELEVATION

SHEET NUMBER:	REVISION:
C-102	A

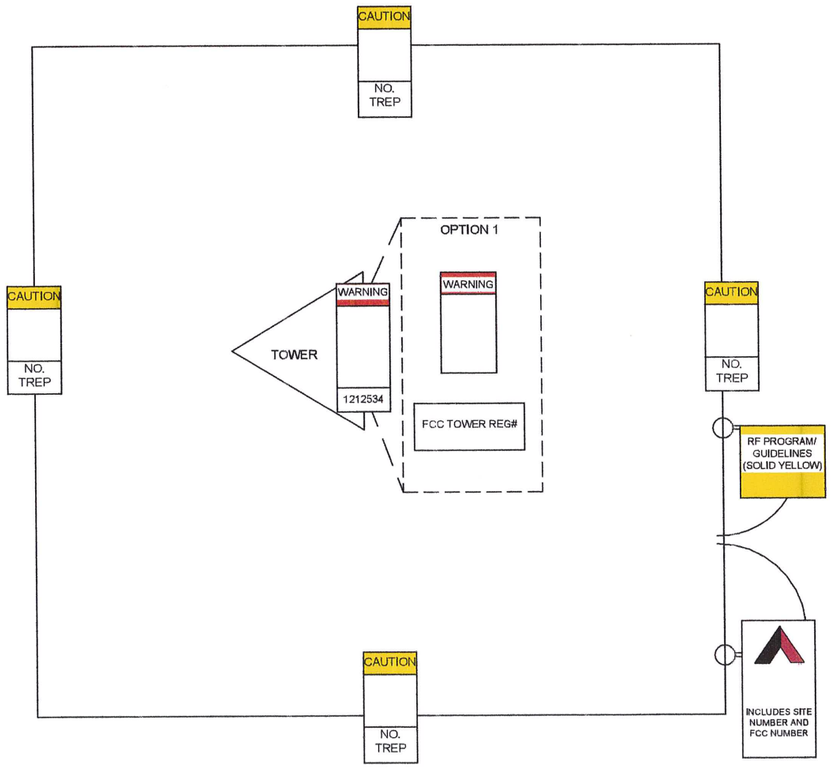


ATC CAUTION AND NO TRESPASSING SIGN



ATC RF WARNING AND FCC NUMBER SIGN

A "NO TRESPASSING" SIGN MUST BE POSTED A MINIMUM OF EVERY 50'.



FCC TOWER REGISTRATION #

Posting of sign required by law

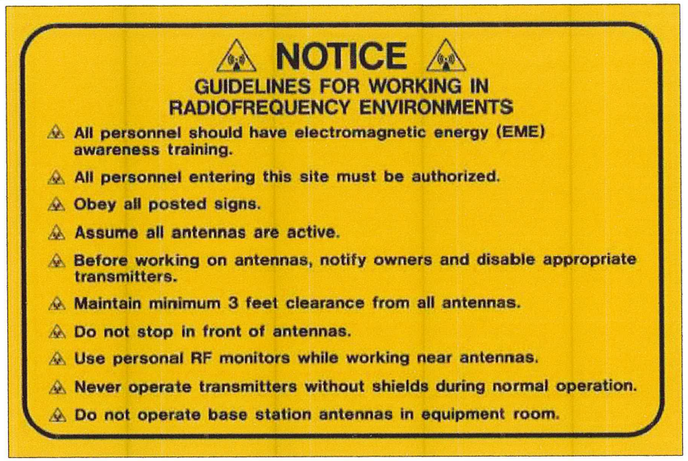
ATC STAND-ALONE FCC TOWER REGISTRATION SIGN

THERE MUST BE AN ATC SIGN WITH SITE INFORMATION AND FCC REGISTRATION NUMBER AT BOTH THE ACCESS ROAD GATE (GATE OFF OF MAIN ROAD, IF APPLICABLE) AND COMPOUND FENCE (IF NO COMPOUND FENCE, THEN IN A CONSPICUOUS PLACE UPON DRIVE UP). IN ADDITION, PLEASE LOOK AT DIAGRAM FOR ALL ADDITIONAL SIGNS REQUIRED.

OPTION 1 MAY BE USED TO POST TOWER REGISTRATION NUMBERS AT THE BASE OF THE TOWER IF A WARNING SIGN DOES NOT HAVE SPACE FOR THE TOWER REGISTRATION NUMBER.

IMPORTANT: FOR ANY ATC SIGN THAT DOES NOT MEET THE ATC SPECIFICATION FOR SIGNAGE (I.E., SHARPIE/PAINT PEN, WORN LABELS, ETC.), BRING IT INTO COMPLIANCE (RE-WRITE IF WORN) AND FLAG FOR REPLACEMENT ASAP WITH THE APPROPRIATE PERMANENT SIGN (YOU CAN ORDER THESE THROUGH THE WAREHOUSE).

ONLY LABELS PRINTED BY A ZEBRA LABEL PRINTER WILL BE ACCEPTED.



ATC RF PROGRAM NOTICE SIGN

ATC SITE SIGN

REPLACEMENT OF SIGNAGE:

AS SIGNAGE BECOMES STOLEN, DAMAGED, BRITTLE OR FADED, IT SHOULD BE REPLACED WITH SIGNAGE PER THIS SPECIFICATION. ANY ACQUIRED SITE SHOULD HAVE NEW SIGNS POSTED WITHIN 60 DAYS UNLESS OTHERWISE SPECIFIED. ANY SITE SOLD SHOULD HAVE THE ATC SIGNS REMOVED WITHIN 30 DAYS UNLESS OTHERWISE SPECIFIED. ALL FCC OR REGULATORY SIGNAGE MUST BE INSTALLED OR REPLACED AS REQUIRED TO MEET OUR STANDARD. SIGNS SHOULD BE REPLACED ON NORMAL, QUARTERLY MAINTENANCE VISITS BY CONTRACTORS OR SITE MANAGERS, UNLESS OTHERWISE REQUIRED ON A CASE-BY-CASE BASIS.

NOTE:

EXTERIOR SIGNS ARE NOT PROPOSED EXCEPT AS REQUIRED BY THE FCC. ALL EXISTING SIGNAGE AND ANY FUTURE SIGNAGE WILL BE COMPLIANT WITH STATUTE 164-43.4 NO HIGH-VOLTAGE SIGNAGE IS NECESSARY. NO HIGH-VOLTAGE EQUIPMENT PRESENT.

AMERICAN TOWER®
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SUITE 100
CARY, NC 27518
PHONE: (919) 468-0112

REV.	DESCRIPTION	BY	DATE
A	PRELIM	NRP	06/23/20

ATC SITE NUMBER:
411046

ATC SITE NAME:
MENDOCINO CA

SITE ADDRESS:
43600 COMPTCHE UKIAH ROAD
MENDOCINO, CA 95460

SEAL:

PRELIMINARY: NOT FOR CONSTRUCTION

DATE DRAWN:	06/23/20
ATC JOB NO:	13252473_E1

SIGNAGE

SHEET NUMBER:	REVISION:
C-501	A

AMERICAN TOWER®
CORPORATION

Structural Analysis Report

Structure	:	**160 ft Self Supported Tower**
ATC Site Name	:	**Mendocino CA, CA**
ATC Site Number	:	**411046**
Engineering Number	:	**OAA718167_C3_04**
Proposed Carrier	:	**US CELLULAR**
Carrier Site Name	:	**Mendocino II Relo**
Carrier Site Number	:	**568503**
Site Location	:	**43600 Comptche Ukiah Road** **Mendocino, CA 95460-9015** **39.295000,-123.772500**
County	:	**Mendocino**
Date	:	**April 23, 2019**
Max Usage	:	**93%**
Result	:	**Pass**

Prepared By:
Jennifer Yu
Structural Engineer I

Jennifer Yu

Reviewed By:

REGISTERED PROFESSIONAL ENGINEER
WILLIAM GARRETT
C69570
STATE OF CALIFORNIA

Expires: 06/30/2020

Karen Wager
Apr 26 2019 8:39 AM cosign

AMERICAN TOWER®
CORPORATION

Table of Contents

AMERICAN TOWER®
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Introduction

The purpose of this report is to summarize results of a structural analysis performed on the 160 ft self supported tower to reflect the change in loading by US CELLULAR.

Supporting Documents

Tower Drawings	Sabre Job #48775, dated September 14, 2011
Foundation Drawing	Sabre Job #48775, dated August 31, 2011
Geotechnical Report	BMI Project #10S-147, dated August 9, 2010

Analysis

The tower was analyzed using American Tower Corporation's tower analysis software. This program considers an elastic three-dimensional model and second-order effects per ANSI/TIA-222.

Basic Wind Speed:	85 mph (3-Second Gust, Vasd) / 110 mph (3-Second Gust, Vult)
Basic Wind Speed w/ Ice:	No Ice Considered
Code:	ANSI/TIA-222-G / 2015 IBC / 2016 California Building Code
Structure Class:	II
Exposure Category:	B
Topographic Category:	1
Crest Height:	0 ft
Spectral Response:	Ss = 1.51, S_1 = 0.68
Site Class:	D - Stiff Soil

Conclusion

Based on the analysis results, the structure meets the requirements per the applicable codes listed above. The tower and foundation can support the equipment as described in this report.

If you have any questions or require additional information, please contact American Tower via email at Engineering@americantower.com. Please include the American Tower site name, site number, and engineering number in the subject line for any questions.

Existing and Reserved Equipment

Elev.[1] (ft)	Qty	Antenna	Mount Type	Lines	Carrier
156.0	3	Ericsson Radio 4449-B13&B5 w/ protruding items	Sector Frame	(2) 1 5/8" (1.63"-41.3mm) Fiber (10) 1 5/8" Coax	VERIZON WIRELESS
	3	Ericsson Radio 8843 - B2 + B66A (w/ protruding items)			
	1	Raycap RVZDC-6627-PF-48			
	1	VZW Unused Reserve: 14609 sq in			
	3	Andrew LNX-6515DS-T4M (48.5 lbs)			
	6	Andrew SBNHH-1D65C			
142.0	2	Generic GPS	Leg	(2) 1/2" Coax	

Equipment to be Removed

Elev.[1] (ft)	Qty	Antenna	Mount Type	Lines	Carrier
No loading was considered as removed as part of this analysis.					

Proposed Equipment

Elev.[1] (ft)	Qty	Antenna	Mount Type	Lines	Carrier
136.0	3	Nokia AHCA AirScale RRH 4T4R B5 160W	Sector Frame	(1) 1" (25.4mm) Hybrid	US CELLULAR
	3	Nokia AirScale Dual RRH 4T4R B12/71 240W AHLOA			
	1	Raycap RUSDC-6267-PF-48			
	6	Amphenol Antel TWIN658LU000G			

[1] Contracted elevations are shown for appurtenances within contracted installation tolerances. Appurtenances outside of contract limits are shown at installed elevations.

Install proposed lines anywhere on tower.

Structure Usages

Structural Component	Controlling Usage	Pass/Fail
Legs	90%	Pass
Diagonals	93%	Pass
Horizontals	11%	Pass
Anchor Bolts	39%	Pass
Leg Bolts	38%	Pass

Foundations

Reaction Component	Original Design Reactions	Analysis Reactions	% of Design
Uplift (Kips)	161.6	125.2	77%
Axial (Kips)	179.9	145.2	81%
Shear (Kips)	17.2	12.5	73%

The structure base reactions resulting from this analysis are acceptable when compared to those shown on the original structure drawings, therefore no modification or reinforcement of the foundation will be required.

Deflection, Twist and Sway*

Antenna Elevation (ft)	Antenna	Carrier	Deflection (ft)	Twist (°)	Sway (Rotation) (°)
136.0	Amphenol Antel TWIN658LU000G	US CELLULAR	0.322	0.003	0.376
	Nokia AHCA AirScale RRH 4T4R B5 160W				
	Nokia AirScale Dual RRH 4T4R B12/71 240W AHLOA				
	Raycap RUSDC-6267-PF-48				

***Deflection, Twist and Sway was evaluated considering a design wind speed of 60 mph (3-Second Gust) per ANSI/TIA-222-G**

AMERICAN TOWER®
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Standard Conditions

All engineering services performed by ATC Tower Services LLC are prepared on the basis that the information used is current and correct. This information may consist of, but is not limited to the following:

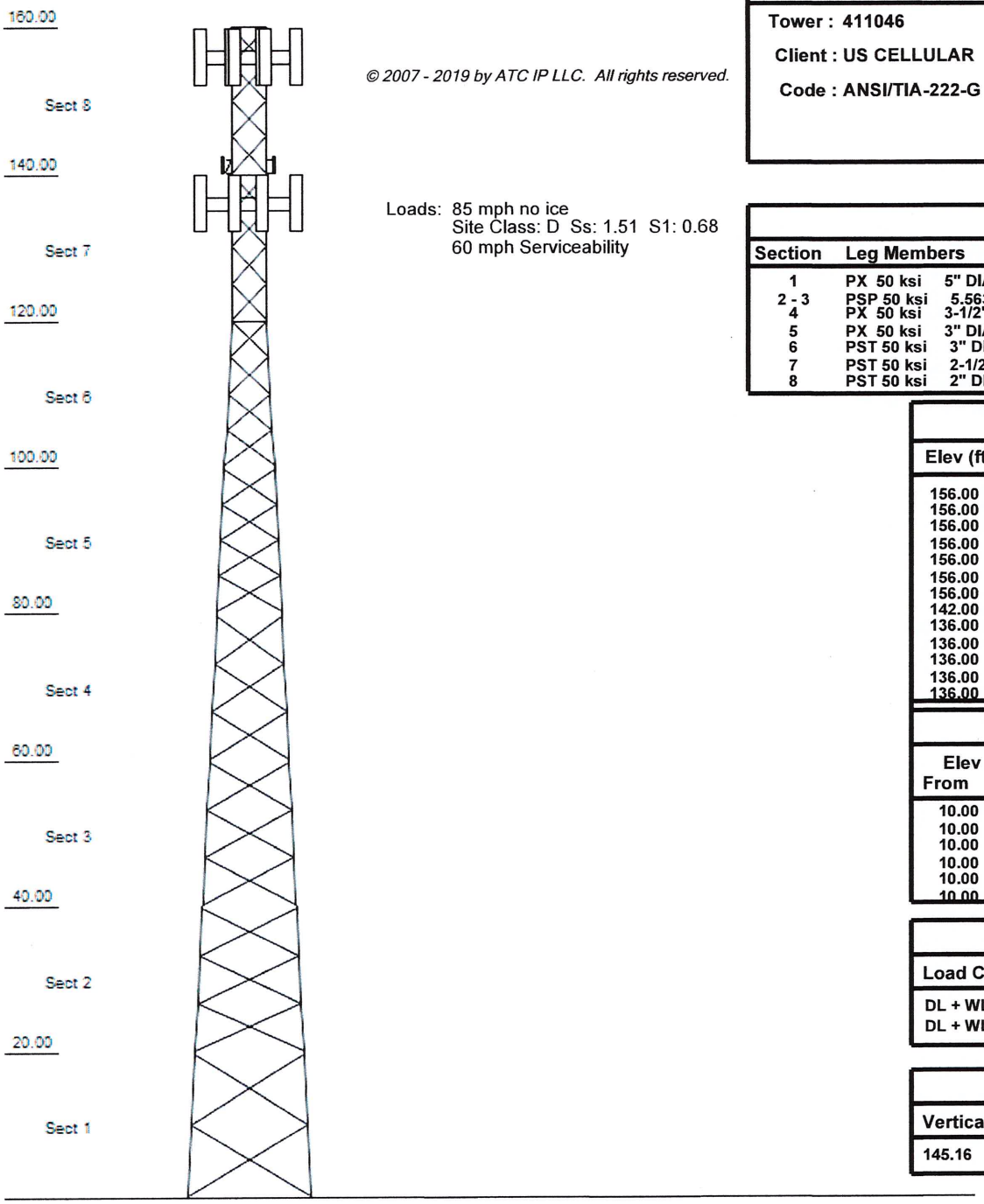
- Information supplied by the client regarding antenna, mounts and feed line loading
- Information from drawings, design and analysis documents, and field notes in the possession of ATC Tower Services LLC

It is the responsibility of the client to ensure that the information provided to ATC Tower Services LLC and used in the performance of our engineering services is correct and complete.

All assets of American Tower Corporation, its affiliates and subsidiaries (collectively "American Tower") are inspected at regular intervals. Based upon these inspections and in the absence of information to the contrary, American Tower assumes that all structures were constructed in accordance with the drawings and specifications.

Unless explicitly agreed by both the client and ATC Tower Services LLC, all services will be performed in accordance with the current revision of ANSI/TIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. ATC Tower Services LLC is not responsible for the conclusions, opinions and recommendations made by others based on the information supplied herein.



Loads: 85 mph no ice
Site Class: D Ss: 1.51 S1: 0.68
60 mph Serviceability

Job Information

Tower : 411046	Location : Mendocino CA,	Base Width : 17.00 ft
Client : US CELLULAR		Top Width : 5.00 ft
Code : ANSI/TIA-222-G		Tower Ht : 160.00 ft
		Shape : Triangle

Sections Properties

Section	Leg Members	Diagonal Members	Horizontal Members
1	PX 50 ksi 5" DIA PIPE	SAE 36 ksi 3X3X0.1875	
2 - 3	PSP 50 ksi 5.563" OD x 0.5"	SAE 36 ksi 2.5X2.5X0.1875	
4	PX 50 ksi 3-1/2" DIA PIPE	SAE 36 ksi 2X2X0.1875	
5	PX 50 ksi 3" DIA PIPE	SAE 36 ksi 2X2X0.125	
6	PST 50 ksi 3" DIA PIPE	SAE 36 ksi 2X2X0.125	SAE 36 ksi 2X2X0.125
7	PST 50 ksi 2-1/2" DIA PIPE	SAE 36 ksi 2X2X0.125	SAE 36 ksi 2X2X0.125
8	PST 50 ksi 2" DIA PIPE	SAE 36 ksi 2X2X0.125	SAE 36 ksi 2X2X0.125

Discrete Appurtenance

Elev (ft)	Type	Qty	Description
156.00	Other	1	VZW Unused Reserve: 14609 sq i
156.00	Mounting Frame	3	Round Sector Frame
156.00	Panel	3	Andrew LNX-6515DS-T4M (48.5 lb
156.00	Panel	6	Andrew SBNHH-1D65C
156.00		1	Raycap RVZDC-6627-PF-48
156.00		3	Ericsson Radio 8843 - B2 + B66
156.00		3	Ericsson Radio 4449-B13&B5 w/
142.00	Whip	2	Generic GPS
136.00	Mounting Frame	3	Flat Light Sector Frame
136.00	Panel	6	Amphenol Antel TWIN658LU000G
136.00		1	Raycap RUSDC-6267-PF-48
136.00		3	Nokia AirScale Dual RRH 4T4R B
136.00		3	Nokia AHCA AirScale RRH 4T4R B

Linear Appurtenance

Elev (ft) From	To	Qty	Description
10.00	156.00	1	Waveguide
10.00	156.00	10	1 5/8" Coax
10.00	156.00	2	1 5/8" (1.63"-41.3mm
10.00	142.00	2	1/2" Coax
10.00	136.00	1	Waveguide
10.00	136.00	1	1" (25.4mm) Hybrid

Global Base Foundation Design Loads

Load Case	Moment (k-ft)	Vertical (kip)	Horizontal (kip)
DL + WL	2,019.89	23.88	19.78
DL + WL + IL	0.00	0.00	0.00

Individual Base Foundation Design Loads

Vertical (kip)	Uplift (kip)	Horizontal (kip)
145.16	125.21	12.53

Site Number:	411046	**Code:**	ANSI/TIA-222-G	
Site Name:	Mendocino CA, CA	**Engineering Number:**	OAA718167_C3_04	4/23/2019 4:10:37 PM
Customer:	US CELLULAR			

Analysis Parameters

Location:	Mendocino County, CA	**Height (ft):**	160
Code:	ANSI/TIA-222-G	**Base Elevation (ft):**	0.00
Shape:	Triangle	**Bottom Face Width (ft):**	17.00
Tower Manufacturer:	Sabre	**Top Face Width (ft):**	5.00
Tower Type:	Self Support	**Anchor Bolt Detail Type**	d
Kd:			
Ke:			

Ice & Wind Parameters

Structure Class:	II	**Design Windspeed Without Ice:**	85 mph
Exposure Category:	B	**Design Windspeed With Ice:**	0 mph
Topographic Category:	1	**Operational Windspeed:**	60 mph
Crest Height:	0 ft	**Design Ice Thickness:**	0.00 in

Seismic Parameters

Analysis Method: Equivalent Modal Analysis & Equivalent Lateral Force Methods

Site Class: D - Stiff Soil

Period Based on Rayleigh Method (sec): 1.03

T_L(sec):	12	**p:**	1.3	**C_s:**	0.219
S_S:	1.510	**S_1:**	0.680	**C_s, Max:**	0.219
F_a:	1.000	**F_V:**	1.500	**C_s, Min:**	0.181
S_{ds}:	1.007	**S_{d1}:**	0.680		

Load Cases

1.2D + 1.6W Normal	85 mph Normal to Face with No Ice
1.2D + 1.6W 60 deg	85 mph 60 degree with No Ice
1.2D + 1.6W 90 deg	85 mph 90 degree with No Ice
1.2D + 1.6W 120 deg	85 mph 120 degree with No Ice
1.2D + 1.6W 180 deg	85 mph 180 degree with No Ice
1.2D + 1.6W 210 deg	85 mph 210 degree with No Ice
1.2D + 1.6W 240 deg	85 mph 240 degree with No Ice
1.2D + 1.6W 300 deg	85 mph 300 degree with No Ice
1.2D + 1.6W 330 deg	85 mph 330 degree with No Ice
0.9D + 1.6W Normal	85 mph Normal to Face with No Ice (Reduced DL)
0.9D + 1.6W 60 deg	85 mph 60 deg with No Ice (Reduced DL)
0.9D + 1.6W 90 deg	85 mph 90 deg with No Ice (Reduced DL)
0.9D + 1.6W 120 deg	85 mph 120 deg with No Ice (Reduced DL)
0.9D + 1.6W 180 deg	85 mph 180 deg with No Ice (Reduced DL)
0.9D + 1.6W 210 deg	85 mph 210 deg with No Ice (Reduced DL)
0.9D + 1.6W 240 deg	85 mph 240 deg with No Ice (Reduced DL)
0.9D + 1.6W 300 deg	85 mph 300 deg with No Ice (Reduced DL)
0.9D + 1.6W 330 deg	85 mph 330 deg with No Ice (Reduced DL)
(1.2 + 0.2Sds) * DL + E Normal	Seismic Normal

Site Number:	**411046**	**Code:**	**ANSI/TIA-222-G**	
Site Name:	**Mendocino CA, CA**	**Engineering Number:**	**OAA718167_C3_04**	4/23/2019 4:10:37 PM
Customer:	**US CELLULAR**			

Analysis Parameters

(1.2 + 0.2Sds) * DL + E 60 deg	Seismic 60 deg
(1.2 + 0.2Sds) * DL + E 90 deg	Seismic 90 deg
(1.2 + 0.2Sds) * DL + E 120 deg	Seismic 120 deg
(1.2 + 0.2Sds) * DL + E 180 deg	Seismic 180 deg
(1.2 + 0.2Sds) * DL + E 210 deg	Seismic 210 deg
(1.2 + 0.2Sds) * DL + E 240 deg	Seismic 240 deg
(1.2 + 0.2Sds) * DL + E 300 deg	Seismic 300 deg
(1.2 + 0.2Sds) * DL + E 330 deg	Seismic 330 deg
(0.9 - 0.2Sds) * DL + E Normal	Seismic (Reduced DL) Normal
(0.9 - 0.2Sds) * DL + E 60 deg	Seismic (Reduced DL) 60 deg
(0.9 - 0.2Sds) * DL + E 90 deg	Seismic (Reduced DL) 90 deg
(0.9 - 0.2Sds) * DL + E 120 deg	Seismic (Reduced DL) 120 deg
(0.9 - 0.2Sds) * DL + E 180 deg	Seismic (Reduced DL) 180 deg
(0.9 - 0.2Sds) * DL + E 210 deg	Seismic (Reduced DL) 210 deg
(0.9 - 0.2Sds) * DL + E 240 deg	Seismic (Reduced DL) 240 deg
(0.9 - 0.2Sds) * DL + E 300 deg	Seismic (Reduced DL) 300 deg
(0.9 - 0.2Sds) * DL + E 330 deg	Seismic (Reduced DL) 330 deg
1.0D + 1.0W Service Normal	Serviceability - 60 mph Wind Normal
1.0D + 1.0W Service 60 deg	Serviceability - 60 mph Wind 60 deg
1.0D + 1.0W Service 90 deg	Serviceability - 60 mph Wind 90 deg
1.0D + 1.0W Service 120 deg	Serviceability - 60 mph Wind 120 deg
1.0D + 1.0W Service 180 deg	Serviceability - 60 mph Wind 180 deg
1.0D + 1.0W Service 210 deg	Serviceability - 60 mph Wind 210 deg
1.0D + 1.0W Service 240 deg	Serviceability - 60 mph Wind 240 deg
1.0D + 1.0W Service 300 deg	Serviceability - 60 mph Wind 300 deg
1.0D + 1.0W Service 330 deg	Serviceability - 60 mph Wind 330 deg

Site Number: 411046 Code: ANSI/TIA-222-G

Site Name: Mendocino CA, CA Engineering Number: OAA718167_C3_04 4/23/2019 4:10:38 PM

Customer: US CELLULAR

Tower Loading

Discrete Appurtenance Properties 1.2D + 1.6W

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc.(ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
156.0	Andrew LNX-	3	49	11.4	8.0	11.9	7.1	0.80	0.70	0.0	0.0	17.64	461	175
156.0	Andrew SBNHH-	6	66	11.4	8.0	11.9	7.1	0.80	0.70	0.0	0.0	17.64	915	476
156.0	Ericsson Radio 4449-	3	70	2.0	1.5	13.2	9.4	0.80	0.50	0.0	0.0	17.64	57	252
156.0	Ericsson Radio 8843	3	75	2.0	1.5	13.2	11.3	0.80	0.50	0.0	0.0	17.64	57	270
156.0	Raycap RVZDC-6627-	1	32	3.8	2.4	15.7	10.3	0.80	1.00	0.0	0.0	17.64	73	38
156.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	17.64	583	1080
156.0	VZW Unused	1	1221	101.4	0.0	0.0	0.0	0.80	0.90	0.0	0.0	17.64	1752	1465
142.0	Generic GPS	2	10	0.9	1.0	9.0	6.0	1.00	0.50	0.0	0.0	17.17	21	24
136.0	Amphenol Antel	6	98	21.7	8.0	26.0	8.4	0.80	0.62	0.0	0.0	16.96	1488	706
136.0	Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.0	16.96	697	1440
136.0	Nokia AHCA AirScale	3	35	1.3	1.1	11.6	6.5	0.80	0.50	0.0	0.0	16.96	36	127
136.0	Nokia AirScale Dual	3	84	2.2	1.8	12.1	7.4	0.80	0.67	0.0	0.0	16.96	82	302
136.0	Raycap RUSDC-6267-	1	16	2.5	1.6	16.1	5.6	0.80	1.00	0.0	0.0	16.96	47	19
	Totals	38	5311	461.3									6269	6373

Discrete Appurtenance Properties 0.9D + 1.6W

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc.(ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
156.0	Andrew LNX-	3	49	11.4	8.0	11.9	7.1	0.80	0.70	0.0	0.0	17.64	461	131
156.0	Andrew SBNHH-	6	66	11.4	8.0	11.9	7.1	0.80	0.70	0.0	0.0	17.64	915	357
156.0	Ericsson Radio 4449-	3	70	2.0	1.5	13.2	9.4	0.80	0.50	0.0	0.0	17.64	57	189
156.0	Ericsson Radio 8843	3	75	2.0	1.5	13.2	11.3	0.80	0.50	0.0	0.0	17.64	57	203
156.0	Raycap RVZDC-6627-	1	32	3.8	2.4	15.7	10.3	0.80	1.00	0.0	0.0	17.64	73	29
156.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	17.64	583	810
156.0	VZW Unused	1	1221	101.4	0.0	0.0	0.0	0.80	0.90	0.0	0.0	17.64	1752	1099
142.0	Generic GPS	2	10	0.9	1.0	9.0	6.0	1.00	0.50	0.0	0.0	17.17	21	18
136.0	Amphenol Antel	6	98	21.7	8.0	26.0	8.4	0.80	0.62	0.0	0.0	16.96	1488	529
136.0	Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.0	16.96	697	1080
136.0	Nokia AHCA AirScale	3	35	1.3	1.1	11.6	6.5	0.80	0.50	0.0	0.0	16.96	36	95
136.0	Nokia AirScale Dual	3	84	2.2	1.8	12.1	7.4	0.80	0.67	0.0	0.0	16.96	82	226
136.0	Raycap RUSDC-6267-	1	16	2.5	1.6	16.1	5.6	0.80	1.00	0.0	0.0	16.96	47	14
	Totals	38	5311	461.3									6269	4780

Discrete Appurtenance Properties 1.0D + 1.0W Service

Elevation (ft)	Description	Qty	Wt. (lb)	EPA (sf)	Length (ft)	Width (in)	Depth (in)	K_a	Orient. Factor	Vert. Ecc.(ft)	M_u (lb-ft)	Q_z (psf)	F_a (WL) (lb)	P_a (DL) (lb)
156.0	Andrew LNX-	3	49	11.4	8.0	11.9	7.1	0.80	0.70	0.0	0.0	8.79	144	146
156.0	Andrew SBNHH-	6	66	11.4	8.0	11.9	7.1	0.80	0.70	0.0	0.0	8.79	285	397
156.0	Ericsson Radio 4449-	3	70	2.0	1.5	13.2	9.4	0.80	0.50	0.0	0.0	8.79	18	210
156.0	Ericsson Radio 8843	3	75	2.0	1.5	13.2	11.3	0.80	0.50	0.0	0.0	8.79	18	225
156.0	Raycap RVZDC-6627-	1	32	3.8	2.4	15.7	10.3	0.80	1.00	0.0	0.0	8.79	23	32
156.0	Round Sector Frame	3	300	14.4	0.0	0.0	0.0	0.75	0.75	0.0	0.0	8.79	182	900
156.0	VZW Unused	1	1221	101.4	0.0	0.0	0.0	0.80	0.90	0.0	0.0	8.79	546	1221
142.0	Generic GPS	2	10	0.9	1.0	9.0	6.0	1.00	0.50	0.0	0.0	8.56	7	20
136.0	Amphenol Antel	6	98	21.7	8.0	26.0	8.4	0.80	0.62	0.0	0.0	8.45	463	588
136.0	Flat Light Sector	3	400	17.9	0.0	0.0	0.0	0.75	0.75	0.0	0.0	8.45	217	1200
136.0	Nokia AHCA AirScale	3	35	1.3	1.1	11.6	6.5	0.80	0.50	0.0	0.0	8.45	11	106
136.0	Nokia AirScale Dual	3	84	2.2	1.8	12.1	7.4	0.80	0.67	0.0	0.0	8.45	26	251

Site Number:	**411046**	**Code:**	**ANSI/TIA-222-G**		
Site Name:	**Mendocino CA, CA**	**Engineering Number:**	**OAA718167_C3_04**		4/23/2019 4:10:38 PM
Customer:	**US CELLULAR**				

Tower Loading

136.0	**Raycap RUSDC-6267-**	**1**	**16**	**2.5**	**1.6**	**16.1**	**5.6**	**0.80**	**1.00**	**0.0**	**0.0**	**8.45**	**15**	**16**
	Totals	**38**	**5311**	**461.3**									**1952**	**5311**

Tower Loading

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	Qty	Width (in)	Weight (lb/ft)	Pct In Block	Spread On Faces	Bundling Arrangement	Cluster Dia (in)	Out Of Zone	Spacing (in)	Orientation Factor	Ka Override
10.00	156.0	1 5/8" (1.63"-	2	1.63	1.61	100	Lin App	Individual	0.00	N	1.00	1.00	0.00
10.00	156.0	1 5/8" Coax	10	1.98	0.82	50	Lin App	Block	0.00	N	1.00	1.00	0.00
10.00	156.0	Waveguide	1	2.00	6.00	100	Lin App	Individual	0.00	N	1.00	1.00	0.00
10.00	142.0	1/2" Coax	2	0.63	0.15	100	Lin App	Individual	0.00	N	1.00	1.00	0.01
10.00	136.0	1" (25.4mm) Hybrid	1	1.00	0.65	100	Lin App	Individual	0.00	N	1.00	1.00	0.00
10.00	136.0	Waveguide	1	2.00	6.00	100	Lin App	Individual	0.00	N	1.00	1.00	0.00

Site Number: 411046 | Code: ANSI/TIA-222-G

Site Name: Mendocino CA, CA | Engineering Number: OAA718167_C3_04

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Customer: US CELLULAR

Equivalent Lateral Force Method

(Based on ASCE7-10 Chapters 11, 12 & 15)

Spectral Response Acceleration for Short Period (S_s):	1.51
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.68
Long-Period Transition Period (T_L - Seconds):	12
Importance Factor (I_e):	1.00
Site Coefficient F_a:	1.00
Site Coefficient F_v:	1.50
Response Modification Coefficient (R):	3.00
Design Spectral Response Acceleration at Short Period (S_{ds}):	1.01
Design Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.68
Seismic Response Coefficient (C_s):	0.22
Upper Limit C_s:	0.22
Lower Limit C_s:	0.18
Period based on Rayleigh Method (sec):	1.03
Redundancy Factor (p):	1.30
Seismic Force Distribution Exponent (k):	1.27
Total Unfactored Dead Load:	19.90 k
Seismic Base Shear (E):	5.68 k

LoadCase (1.2 + 0.2Sds) * DL + E **Seismic**

Section	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
8	150.00	802	456,886	0.077	437	1,124
7	130.00	1,111	528,160	0.089	505	1,557
6	110.00	1,275	490,612	0.083	469	1,787
5	90.00	1,475	439,958	0.074	421	2,066
4	70.00	1,763	382,555	0.064	366	2,470
3	50.00	2,867	406,325	0.068	388	4,017
2	30.00	2,966	220,114	0.037	210	4,156
1	10.00	2,327	42,965	0.007	41	3,261
Andrew LNX-6515DS-T4M (48.5 lbs)	156.00	146	87,116	0.015	83	204
Andrew SBNHH-1D65C	156.00	397	237,459	0.040	227	556
Ericsson Radio 4449-B13&B5 w/	156.00	210	125,734	0.021	120	294
Ericsson Radio 8843 - B2 + B66A (w/ prot	156.00	225	134,716	0.023	129	315
Raycap RVZDC-6627-PF-48	156.00	32	19,160	0.003	18	45
Round Sector Frame	156.00	900	538,862	0.091	515	1,261
VZW Unused Reserve: 14609 sq in	156.00	1,221	730,996	0.123	699	1,711
Generic GPS	142.00	20	10,630	0.002	10	28
Amphenol Antel TWIN658LU000G	136.00	588	295,908	0.050	283	824
Flat Light Sector Frame	136.00	1,200	603,894	0.102	577	1,682
Nokia AHCA AirScale RRH 4T4R B5 160W	136.00	106	53,294	0.009	51	148
Nokia AirScale Dual RRH 4T4R B12/71	136.00	251	126,516	0.021	121	352
Raycap RUSDC-6267-PF-48	136.00	16	7,951	0.001	8	22
		19,896	5,939,810	1.000	5,677	27,881

Site Number: 411046 Code: ANSI/TIA-222-G

Site Name: Mendocino CA, CA Engineering Number: OAA718167_C3_04 4/23/2019 4:10:38 PM

Customer: US CELLULAR

Equivalent Lateral Force Method

LoadCase (0.9 - 0.2Sds) * DL + E **Seismic (Reduced DL)**

Section	Height Above Base (ft)	Weight (lb)	W_z (lb-ft)	C_{vx}	Horizontal Force (lb)	Vertical Force (lb)
8	150.00	802	456,886	0.077	437	560
7	130.00	1,111	528,160	0.089	505	776
6	110.00	1,275	490,612	0.083	469	891
5	90.00	1,475	439,958	0.074	421	1,030
4	70.00	1,763	382,555	0.064	366	1,232
3	50.00	2,867	406,325	0.068	388	2,003
2	30.00	2,966	220,114	0.037	210	2,072
1	10.00	2,327	42,965	0.007	41	1,626
Andrew LNX-6515DS-T4M (48.5 lbs)	156.00	146	87,116	0.015	83	102
Andrew SBNHH-1D65C	156.00	397	237,459	0.040	227	277
Ericsson Radio 4449-B13&B5 w/	156.00	210	125,734	0.021	120	147
Ericsson Radio 8843 - B2 + B66A (w/ prot	156.00	225	134,716	0.023	129	157
Raycap RVZDC-6627-PF-48	156.00	32	19,160	0.003	18	22
Round Sector Frame	156.00	900	538,862	0.091	515	629
VZW Unused Reserve: 14609 sq in	156.00	1,221	730,996	0.123	699	853
Generic GPS	142.00	20	10,630	0.002	10	14
Amphenol Antel TWIN658LU000G	136.00	588	295,908	0.050	283	411
Flat Light Sector Frame	136.00	1,200	603,894	0.102	577	838
Nokia AHCA AirScale RRH 4T4R B5 160W	136.00	106	53,294	0.009	51	74
Nokia AirScale Dual RRH 4T4R B12/71	136.00	251	126,516	0.021	121	176
Raycap RUSDC-6267-PF-48	136.00	16	7,951	0.001	8	11
		19,896	5,939,811	1.000	5,677	13,901

Site Number: 411046 | Code: ANSI/TIA-222-G |

Site Name: Mendocino CA, CA | Engineering Number: OAA718167_C3_04 | 4/23/2019 4:10:38 PM

Customer: US CELLULAR

Equivalent Modal Analysis Method

(Based on ASCE7-10 Chapters 11, 12 & 15 and ANSI/TIA-G, section 2.7)

Spectral Response Acceleration for Short Period (S_s):	1.51
Spectral Response Acceleration at 1.0 Second Period (S_1):	0.68
Importance Factor (I_e):	1.00
Site Coefficient F_a:	1.00
Site Coefficient F_v:	1.50
Response Modification Coefficient (R):	3.00
Design Spectral Response Acceleration at Short Period (S_{ds}):	1.01
Desing Spectral Response Acceleration at 1.0 Second Period (S_{d1}):	0.68
Period Based on Rayleigh Method (sec):	1.03
Redundancy Factor (p):	1.30

LoadCase (1.2 + 0.2Sds) * DL + E — Seismic

Section	Height Above Base (ft)	Weight (lb)	a	b	c	S_{az}	Horizontal Force (lb)	Vertical Force (lb)
8	150.00	802	1.661	0.980	0.756	1.564	544	1,124
7	130.00	1,111	1.248	0.054	0.292	0.698	336	1,557
6	110.00	1,275	0.893	-0.122	0.085	0.366	202	1,787
5	90.00	1,475	0.598	-0.052	0.014	0.308	197	2,066
4	70.00	1,763	0.362	0.030	0.008	0.281	215	2,470
3	50.00	2,867	0.185	0.065	0.025	0.215	267	4,017
2	30.00	2,966	0.066	0.072	0.041	0.147	189	4,156
1	10.00	2,327	0.007	0.050	0.029	0.080	80	3,261
Andrew LNX-6515DS-T4M (48.5	156.00	146	1.797	1.523	0.972	1.951	123	204
Andrew SBNHH-1D65C	156.00	397	1.797	1.523	0.972	1.951	335	556
Ericsson Radio 4449-B13&B5 w/	156.00	210	1.797	1.523	0.972	1.951	178	294
Ericsson Radio 8843 - B2 + B66A	156.00	225	1.797	1.523	0.972	1.951	190	315
Raycap RVZDC-6627-PF-48	156.00	32	1.797	1.523	0.972	1.951	27	45
Round Sector Frame	156.00	900	1.797	1.523	0.972	1.951	761	1,261
VZW Unused Reserve: 14609 sq	156.00	1,221	1.797	1.523	0.972	1.951	1,032	1,711
Generic GPS	142.00	20	1.489	0.474	0.529	1.143	10	28
Amphenol Antel TWIN658LU000G	136.00	588	1.366	0.222	0.397	0.893	228	824
Flat Light Sector Frame	136.00	1,200	1.366	0.222	0.397	0.893	465	1,682
Nokia AHCA AirScale RRH 4T4R	136.00	106	1.366	0.222	0.397	0.893	41	148
Nokia AirScale Dual RRH 4T4R	136.00	251	1.366	0.222	0.397	0.893	97	352
Raycap RUSDC-6267-PF-48	136.00	16	1.366	0.222	0.397	0.893	6	22
		19,896	25.913	13.323	10.566	22.923	5,522	27,881

LoadCase (0.9 - 0.2Sds) * DL + E — Seismic (Reduced DL)

Section	Height Above Base (ft)	Weight (lb)	a	b	c	S_{az}	Horizontal Force (lb)	Vertical Force (lb)
8	150.00	802	1.661	0.980	0.756	1.564	544	560
7	130.00	1,111	1.248	0.054	0.292	0.698	336	776
6	110.00	1,275	0.893	-0.122	0.085	0.366	202	891
5	90.00	1,475	0.598	-0.052	0.014	0.308	197	1,030
4	70.00	1,763	0.362	0.030	0.008	0.281	215	1,232
3	50.00	2,867	0.185	0.065	0.025	0.215	267	2,003
2	30.00	2,966	0.066	0.072	0.041	0.147	189	2,072
1	10.00	2,327	0.007	0.050	0.029	0.080	80	1,626
Andrew LNX-6515DS-T4M (48.5	156.00	146	1.797	1.523	0.972	1.951	123	102
Andrew SBNHH-1D65C	156.00	397	1.797	1.523	0.972	1.951	335	277

Equivalent Modal Analysis Method

Ericsson Radio 4449-B13&B5 w/	156.00	210	1.797	1.523	0.972	1.951	178	147
Ericsson Radio 8843 - B2 + B66A	156.00	225	1.797	1.523	0.972	1.951	190	157
Raycap RVZDC-6627-PF-48	156.00	32	1.797	1.523	0.972	1.951	27	22
Round Sector Frame	156.00	900	1.797	1.523	0.972	1.951	761	629
VZW Unused Reserve: 14609 sq	156.00	1,221	1.797	1.523	0.972	1.951	1,032	853
Generic GPS	142.00	20	1.489	0.474	0.529	1.143	10	14
Amphenol Antel TWIN658LU000G	136.00	588	1.366	0.222	0.397	0.893	228	411
Flat Light Sector Frame	136.00	1,200	1.366	0.222	0.397	0.893	465	838
Nokia AHCA AirScale RRH 4T4R	136.00	106	1.366	0.222	0.397	0.893	41	74
Nokia AirScale Dual RRH 4T4R	136.00	251	1.366	0.222	0.397	0.893	97	176
Raycap RUSDC-6267-PF-48	136.00	16	1.366	0.222	0.397	0.893	6	11
		19,896	25.913	13.323	10.566	22.923	5,522	13,901

Site Number: 411046 | Code: ANSI/TIA-222-G |

Site Name: Mendocino CA, CA | Engineering Number: OAA718167_C3_04 | 4/23/2019 4:10:38 PM

Customer: US CELLULAR

Force/Stress Summary

Section: 1 1 — Bot Elev (ft): 0.00 — Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PX - 5" DIA PIPE	-142.23	1.2D + 1.6W Normal	9.77	100	100	100	63.7	50.0	204.38	0	0	0.00	0.00	69	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SAE - 3X3X0.1875	-2.83	1.2D + 1.6W 90 deg	19.15	50	50	50	192.9	36.0	6.62	1	1	17.89	15.66	42	Member Z

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PX - 5" DIA PIPE	124.05	1.2D + 1.6W 60 deg	50	65	274.95	0	0	0.00	0.00		45	Member
HORIZ	0.00		0	0	0.00	0	0	0.00	0.00	0.00	0	
DIAG SAE - 3X3X0.1875	2.85	1.2D + 1.6W 90 deg	36	58	30.21	1	1	17.89	9.46	9.99	30	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	116.15	0.9D + 1.6W 60 deg	0.00	0	0	
Top Compression	134.01	1.2D + 1.6W 120 deg	0.00	0		
Bot Tension	125.78	0.9D + 1.6W 180 deg	436.14	34	6	1" F1554-105
Bot Compression	145.45	1.2D + 1.6W Normal	436.14	39	6	1" F1554-105

Section: 2 1 — Bot Elev (ft): 20.00 — Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PSP - 5.563" OD x 0.	-131.34	1.2D + 1.6W Normal	6.51	100	100	100	43.4	50.0	311.78	0	0	0.00	0.00	42	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SAE - 2.5X2.5X0.1875	-2.67	1.2D + 1.6W 90 deg	16.02	50	50	50	194.3	36.0	5.40	1	1	17.89	15.66	49	Member Z

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PSP - 5.563" OD x 0.	114.77	1.2D + 1.6W 60 deg	50	65	357.89	0	0	0.00	0.00		32	Member
HORIZ	0.00		0	0	0.00	0	0	0.00	0.00	0.00	0	
DIAG SAE - 2.5X2.5X0.1875	2.62	1.2D + 1.6W 90 deg	36	58	24.08	1	1	17.89	9.46	8.97	29	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	105.88	0.9D + 1.6W 60 deg	0.00	0	0	
Top Compression	120.93	1.2D + 1.6W 120 deg	0.00	0		
Bot Tension	116.15	0.9D + 1.6W 60 deg	327.10	36	6	1 A325
Bot Compression	0.00		0.00	0		

Force/Stress Summary

Section: 3 1 Bot Elev (ft): 40.00 Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PSP - 5.563" OD x 0.	-118.18	1.2D + 1.6W Normal	6.51	100	100	100	43.4	50.0	311.78	0	0	0.00	0.00	37	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SAE - 2.5X2.5X0.1875	-2.47	1.2D + 1.6W 330 deg	14.22	50	50	50	172.4	36.0	6.86	1	1	12.43	13.05	36	Member Z

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PSP - 5.563" OD x 0.	104.85	1.2D + 1.6W 60 deg	50	65	357.89	0	0	0.00	0.00		29	Member
HORIZ	0.00		0	0	0.00	0	0	0.00	0.00	0.00	0	
DIAG SAE - 2.5X2.5X0.1875	2.47	1.2D + 1.6W 90 deg	36	58	24.84	1	1	12.43	7.83	8.87	31	Bolt Bear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	95.02	0.9D + 1.6W 60 deg	0.00	0	0	
Top Compression	107.26	1.2D + 1.6W 120 deg	0.00	0		
Bot Tension	105.88	0.9D + 1.6W 60 deg	327.10	32	6	1 A325
Bot Compression	0.00		0.00	0		

Section: 4 1 Bot Elev (ft): 60.00 Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PX - 3-1/2" DIA PIPE	-104.43	1.2D + 1.6W Normal	6.51	100	100	100	59.6	50.0	127.68	0	0	0.00	0.00	81	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SAE - 2X2X0.1875	-2.25	1.2D + 1.6W 90 deg	12.47	50	50	50	190.0	36.0	4.47	1	1	12.43	13.05	50	Member Z

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PX - 3-1/2" DIA PIPE	95.19	0.9D + 1.6W 60 deg	50	65	165.60	0	0	0.00	0.00		57	Member
HORIZ	0.00		0	0	0.00	0	0	0.00	0.00	0.00	0	
DIAG SAE - 2X2X0.1875	2.29	1.2D + 1.6W 90 deg	36	58	18.74	1	1	12.43	7.83	6.83	33	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	83.09	0.9D + 1.6W 60 deg	0.00	0	0	
Top Compression	93.15	1.2D + 1.6W 120 deg	0.00	0		
Bot Tension	95.02	0.9D + 1.6W 60 deg	327.10	29	6	1 A325
Bot Compression	0.00		0.00	0		

Site Number: 411046
Site Name: Mendocino CA, CA
Customer: US CELLULAR

Code: ANSI/TIA-222-G
Engineering Number: OAA718167_C3_04

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Force/Stress Summary

Section: 5 1 — Bot Elev (ft): 80.00 — Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PX - 3" DIA PIPE	-91.01	1.2D + 1.6W Normal	4.88	100	100	100	51.4	50.0	112.03	0	0	0.00	0.00	81	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SAE - 2X2X0.125	-2.03	1.2D + 1.6W 90 deg	10.00	50	50	50	150.8	36.0	4.77	1	1	12.43	8.70	42	Member Z

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PX - 3" DIA PIPE	83.19	0.9D + 1.6W 60 deg	50	65	135.90	0	0	0.00	0.00		61	Member
HORIZ	0.00		0	0	0.00	0	0	0.00	0.00	0.00	0	
DIAG SAE - 2X2X0.125	2.13	1.2D + 1.6W 90 deg	36	58	12.60	1	1	12.43	5.22	4.55	46	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	69.12	0.9D + 1.6W 60 deg	0.00	0	0	
Top Compression	77.30	1.2D + 1.6W 120 deg	0.00	0		
Bot Tension	83.09	0.9D + 1.6W 60 deg	327.10	25	6	1 A325
Bot Compression	0.00		0.00	0		

Section: 6 1 — Bot Elev (ft): 100.0 — Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PST - 3" DIA PIPE	-74.76	1.2D + 1.6W Normal	4.95	100	100	100	51.2	50.0	82.87	0	0	0.00	0.00	90	Member X
HORIZ SAE - 2X2X0.125	-0.21	1.2D + 1.6W Normal	5.000	100	100	100	150.8	36.0	4.77	1	1	12.43	8.70	4	Member Z
DIAG SAE - 2X2X0.125	-2.53	1.2D + 1.6W Normal	7.206	50	50	50	111.5	36.0	8.08	1	1	12.43	8.70	31	Member Z

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PST - 3" DIA PIPE	68.63	1.2D + 1.6W 60 deg	50	65	100.35	0	0	0.00	0.00		68	Member
HORIZ SAE - 2X2X0.125	0.11	1.2D + 1.6W 60 deg	36	58	12.60	1	1	12.43	5.22	4.55	2	Blk Shear
DIAG SAE - 2X2X0.125	2.29	1.2D + 1.6W 60 deg	36	58	12.60	1	1	12.43	5.22	4.55	50	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	50.88	0.9D + 1.6W 180 deg	0.00	0	0	
Top Compression	57.46	1.2D + 1.6W Normal	0.00	0		
Bot Tension	69.12	0.9D + 1.6W 60 deg	180.61	38	6	0.75" A325
Bot Compression	0.00		0.00	0		

Site Number: 411046 | Code: ANSI/TIA-222-G |

Site Name: Mendocino CA, CA | Engineering Number: OAA718167_C3_04 | 4/23/2019 4:10:38 PM

Customer: US CELLULAR

Force/Stress Summary

Section: 7 1 — Bot Elev (ft): 120.0 — Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	-51.33	1.2D + 1.6W Normal	4.94	100	100	100	62.6	50.0	57.59	0	0	0.00	0.00	89	Member X
HORIZ SAE - 2X2X0.125	-0.47	1.2D + 1.6W Normal	5.000	100	100	100	150.8	36.0	4.77	1	1	12.43	8.70	9	Member Z
DIAG SAE - 2X2X0.125	-4.44	1.2D + 1.6W 90 deg	7.027	50	50	50	109.5	36.0	8.28	1	1	12.43	8.70	53	Member Z

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	51.03	0.9D + 1.6W 60 deg	50	65	76.68	0	0	0.00	0.00		66	Member
HORIZ SAE - 2X2X0.125	0.51	1.2D + 1.6W 60 deg	36	58	12.60	1	1	12.43	5.22	4.55	11	Blk Shear
DIAG SAE - 2X2X0.125	4.26	1.2D + 1.6W 90 deg	36	58	12.60	1	1	12.43	5.22	4.55	93	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	15.52	0.9D + 1.6W 60 deg	0.00	0	0	
Top Compression	18.74	1.2D + 1.6W 120 deg	0.00	0		
Bot Tension	50.88	0.9D + 1.6W 180 deg	180.61	28	6	0.75" A325
Bot Compression	0.00		0.00	0		

Section: 8 1 — Bot Elev (ft): 140.0 — Height (ft): 20.000

Max Compression Member	Pu (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	F'y (ksi)	Phic Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Use %	Controls
LEG PST - 2" DIA PIPE	-15.19	1.2D + 1.6W Normal	4.94	100	100	100	75.3	50.0	31.81	0	0	0.00	0.00	47	Member X
HORIZ SAE - 2X2X0.125	-0.45	1.2D + 1.6W Normal	5.000	100	100	100	150.8	36.0	4.77	1	1	12.43	8.70	9	Member Z
DIAG SAE - 2X2X0.125	-2.49	1.2D + 1.6W 90 deg	7.027	50	50	50	109.5	36.0	8.28	1	1	12.43	8.70	30	Member Z

Max Tension Member	Pu (kip)	Load Case	Fy (ksi)	Fu (ksi)	Phit Pn (kip)	Num Bolts	Num Holes	Shear phiRnv (kip)	Bear phiRn (kip)	Blk Shear phit Pn (kip)	Use %	Controls
LEG PST - 2" DIA PIPE	15.59	0.9D + 1.6W 60 deg	50	65	48.15	0	0	0.00	0.00		32	Member
HORIZ SAE - 2X2X0.125	0.38	1.2D + 1.6W 60 deg	36	58	12.60	1	1	12.43	5.22	4.55	8	Blk Shear
DIAG SAE - 2X2X0.125	2.38	1.2D + 1.6W 90 deg	36	58	12.60	1	1	12.43	5.22	4.55	52	Blk Shear

Max Splice Forces	Pu (kip)	Load Case	phiRnt (kip)	Use %	Num Bolts	Bolt Type
Top Tension	0.00		0.00	0	0	
Top Compression	0.37	(1.2 + 0.2Sds) * DL	0.00	0		
Bot Tension	15.52	0.9D + 1.6W 60 deg	180.61	9	6	0.75" A325
Bot Compression	0.00		0.00	0		

Detailed Reactions

Load Case	Radius (ft)	Elevation (ft)	Azimuth (deg)	Node	FX (kip)	FY (kip)	FZ (kip)	(-) = Uplift (+) = Down
1.2D + 1.6W Normal	9.81	00.00	0	1	0.00	145.16	-12.53	
	9.81	00.00	120	1a	4.38	-60.64	-3.62	
	9.81	00.00	240	1b	-4.38	-60.64	-3.62	
1.2D + 1.6W 60 deg	9.81	00.00	0	1	-0.88	73.66	-6.16	
	9.81	00.00	120	1a	-5.77	73.66	2.32	
	9.81	00.00	240	1b	-9.51	-123.45	-5.49	
1.2D + 1.6W 90 deg	9.81	00.00	0	1	-1.03	7.96	-0.44	
	9.81	00.00	120	1a	-9.35	123.01	4.80	
	9.81	00.00	240	1b	-8.56	-107.10	-4.36	
1.2D + 1.6W 120 deg	9.81	00.00	0	1	-0.95	-60.64	5.60	
	9.81	00.00	120	1a	-10.85	145.16	6.27	
	9.81	00.00	240	1b	-5.33	-60.64	-1.98	
1.2D + 1.6W 180 deg	9.81	00.00	0	1	0.00	-123.45	10.98	
	9.81	00.00	120	1a	-4.90	73.66	3.84	
	9.81	00.00	240	1b	4.90	73.66	3.84	
1.2D + 1.6W 210 deg	9.81	00.00	0	1	0.51	-107.10	9.59	
	9.81	00.00	120	1a	0.14	7.96	1.11	
	9.81	00.00	240	1b	8.83	123.01	5.70	
1.2D + 1.6W 240 deg	9.81	00.00	0	1	0.95	-60.64	5.60	
	9.81	00.00	120	1a	5.33	-60.64	-1.98	
	9.81	00.00	240	1b	10.85	145.16	6.27	
1.2D + 1.6W 300 deg	9.81	00.00	0	1	0.88	73.66	-6.16	
	9.81	00.00	120	1a	9.51	-123.45	-5.49	
	9.81	00.00	240	1b	5.77	73.66	2.32	
1.2D + 1.6W 330 deg	9.81	00.00	0	1	0.52	123.01	-10.50	
	9.81	00.00	120	1a	8.06	-107.10	-5.24	
	9.81	00.00	240	1b	0.89	7.96	-0.67	
0.9D + 1.6W Normal	9.81	00.00	0	1	0.00	142.94	-12.41	
	9.81	00.00	120	1a	4.48	-62.51	-3.68	
	9.81	00.00	240	1b	-4.48	-62.51	-3.68	
0.9D + 1.6W 60 deg	9.81	00.00	0	1	-0.88	71.56	-6.04	
	9.81	00.00	120	1a	-5.67	71.56	2.26	
	9.81	00.00	240	1b	-9.61	-125.21	-5.55	
0.9D + 1.6W 90 deg	9.81	00.00	0	1	-1.03	5.97	-0.32	
	9.81	00.00	120	1a	-9.24	120.83	4.73	
	9.81	00.00	240	1b	-8.66	-108.89	-4.42	
0.9D + 1.6W 120 deg	9.81	00.00	0	1	-0.95	-62.51	5.72	
	9.81	00.00	120	1a	-10.75	142.94	6.21	
	9.81	00.00	240	1b	-5.43	-62.51	-2.04	
0.9D + 1.6W 180 deg	9.81	00.00	0	1	0.00	-125.21	11.10	
	9.81	00.00	120	1a	-4.79	71.56	3.78	
	9.81	00.00	240	1b	4.79	71.56	3.78	
0.9D + 1.6W 210 deg	9.81	00.00	0	1	0.51	-108.89	9.71	
	9.81	00.00	120	1a	0.24	5.97	1.05	

	9.81	00.00	240	1b	8.72	120.83	5.64
0.9D + 1.6W 240 deg	9.81	00.00	0	1	0.95	-62.51	5.72
	9.81	00.00	120	1a	5.43	-62.51	-2.04
	9.81	00.00	240	1b	10.75	142.94	6.21
0.9D + 1.6W 300 deg	9.81	00.00	0	1	0.88	71.56	-6.04
	9.81	00.00	120	1a	9.61	-125.21	-5.55
	9.81	00.00	240	1b	5.67	71.56	2.26
0.9D + 1.6W 330 deg	9.81	00.00	0	1	0.52	120.83	-10.37
	9.81	00.00	120	1a	8.16	-108.89	-5.30
	9.81	00.00	240	1b	0.79	5.97	-0.73
(1.2 + 0.2Sds) * DL + E Normal M1	9.81	00.00	0	1	0.00	55.40	-4.16
	9.81	00.00	120	1a	1.01	-14.09	-0.74
	9.81	00.00	240	1b	-1.01	-14.09	-0.74
(1.2 + 0.2Sds) * DL + E Normal M2	9.81	00.00	0	1	0.00	57.37	-4.11
	9.81	00.00	120	1a	1.01	-15.07	-0.68
	9.81	00.00	240	1b	-1.01	-15.07	-0.68
(1.2 + 0.2Sds) * DL + E 60 deg M1	9.81	00.00	0	1	-0.14	32.24	-2.36
	9.81	00.00	120	1a	-2.11	32.24	1.05
	9.81	00.00	240	1b	-2.63	-37.25	-1.52
(1.2 + 0.2Sds) * DL + E 60 deg M2	9.81	00.00	0	1	-0.09	33.29	-2.34
	9.81	00.00	120	1a	-2.07	33.29	1.09
	9.81	00.00	240	1b	-2.60	-39.35	-1.50
(1.2 + 0.2Sds) * DL + E 90 deg M1	9.81	00.00	0	1	-0.16	9.08	-0.56
	9.81	00.00	120	1a	-3.22	49.19	1.77
	9.81	00.00	240	1b	-2.26	-31.04	-1.21
(1.2 + 0.2Sds) * DL + E 90 deg M2	9.81	00.00	0	1	-0.10	9.08	-0.55
	9.81	00.00	120	1a	-3.17	50.90	1.77
	9.81	00.00	240	1b	-2.20	-32.75	-1.22
(1.2 + 0.2Sds) * DL + E 120 deg M1	9.81	00.00	0	1	-0.14	-14.09	1.24
	9.81	00.00	120	1a	-3.60	55.40	2.08
	9.81	00.00	240	1b	-1.15	-14.09	-0.50
(1.2 + 0.2Sds) * DL + E 120 deg M2	9.81	00.00	0	1	-0.08	-15.07	1.22
	9.81	00.00	120	1a	-3.56	57.37	2.05
	9.81	00.00	240	1b	-1.10	-15.07	-0.54
(1.2 + 0.2Sds) * DL + E 180 deg M1	9.81	00.00	0	1	0.00	-37.25	3.04
	9.81	00.00	120	1a	-1.97	32.24	1.30
	9.81	00.00	240	1b	1.97	32.24	1.30
(1.2 + 0.2Sds) * DL + E 180 deg M2	9.81	00.00	0	1	0.00	-39.22	2.99
	9.81	00.00	120	1a	-1.97	33.22	1.24
	9.81	00.00	240	1b	1.97	33.22	1.24
(1.2 + 0.2Sds) * DL + E 210 deg M1	9.81	00.00	0	1	0.08	-31.04	2.56
	9.81	00.00	120	1a	-0.40	9.08	0.42
	9.81	00.00	240	1b	3.14	49.19	1.91
(1.2 + 0.2Sds) * DL + E 210 deg M2	9.81	00.00	0	1	0.05	-32.86	2.53
	9.81	00.00	120	1a	-0.43	9.08	0.36
	9.81	00.00	240	1b	3.13	51.01	1.87
(1.2 + 0.2Sds) * DL + E 240 deg M1	9.81	00.00	0	1	0.14	-14.09	1.24
	9.81	00.00	120	1a	1.15	-14.09	-0.50
	9.81	00.00	240	1b	3.60	55.40	2.08

(1.2 + 0.2Sds) * DL + E 240 deg M2	9.81	00.00	0	1	0.08	-15.07	1.22
	9.81	00.00	120	1a	1.10	-15.07	-0.54
	9.81	00.00	240	1b	3.56	57.37	2.05
(1.2 + 0.2Sds) * DL + E 300 deg M1	9.81	00.00	0	1	0.14	32.24	-2.36
	9.81	00.00	120	1a	2.63	-37.25	-1.52
	9.81	00.00	240	1b	2.11	32.24	1.05
(1.2 + 0.2Sds) * DL + E 300 deg M2	9.81	00.00	0	1	0.09	33.29	-2.34
	9.81	00.00	120	1a	2.60	-39.35	-1.50
	9.81	00.00	240	1b	2.07	33.29	1.09
(1.2 + 0.2Sds) * DL + E 330 deg M1	9.81	00.00	0	1	0.08	49.19	-3.67
	9.81	00.00	120	1a	2.18	-31.04	-1.35
	9.81	00.00	240	1b	0.56	9.08	0.14
(1.2 + 0.2Sds) * DL + E 330 deg M2	9.81	00.00	0	1	0.05	51.01	-3.64
	9.81	00.00	120	1a	2.16	-32.86	-1.30
	9.81	00.00	240	1b	0.53	9.08	0.19
(0.9 - 0.2Sds) * DL + E Normal M1	9.81	00.00	0	1	0.00	50.67	-3.87
	9.81	00.00	120	1a	1.25	-18.55	-0.88
	9.81	00.00	240	1b	-1.25	-18.55	-0.88
(0.9 - 0.2Sds) * DL + E Normal M2	9.81	00.00	0	1	0.00	52.62	-3.83
	9.81	00.00	120	1a	1.25	-19.52	-0.82
	9.81	00.00	240	1b	-1.25	-19.52	-0.82
(0.9 - 0.2Sds) * DL + E 60 deg M1	9.81	00.00	0	1	-0.14	27.60	-2.07
	9.81	00.00	120	1a	-1.87	27.60	0.91
	9.81	00.00	240	1b	-2.87	-41.62	-1.66
(0.9 - 0.2Sds) * DL + E 60 deg M2	9.81	00.00	0	1	-0.09	28.64	-2.05
	9.81	00.00	120	1a	-1.82	28.64	0.95
	9.81	00.00	240	1b	-2.84	-43.70	-1.64
(0.9 - 0.2Sds) * DL + E 90 deg M1	9.81	00.00	0	1	-0.16	4.53	-0.27
	9.81	00.00	120	1a	-2.98	44.49	1.62
	9.81	00.00	240	1b	-2.50	-35.44	-1.35
(0.9 - 0.2Sds) * DL + E 90 deg M2	9.81	00.00	0	1	-0.10	4.53	-0.27
	9.81	00.00	120	1a	-2.93	46.18	1.63
	9.81	00.00	240	1b	-2.45	-37.12	-1.36
(0.9 - 0.2Sds) * DL + E 120 deg M1	9.81	00.00	0	1	-0.14	-18.55	1.52
	9.81	00.00	120	1a	-3.36	50.67	1.94
	9.81	00.00	240	1b	-1.39	-18.55	-0.64
(0.9 - 0.2Sds) * DL + E 120 deg M2	9.81	00.00	0	1	-0.09	-19.52	1.50
	9.81	00.00	120	1a	-3.31	52.62	1.91
	9.81	00.00	240	1b	-1.34	-19.52	-0.67
(0.9 - 0.2Sds) * DL + E 180 deg M1	9.81	00.00	0	1	0.00	-41.62	3.32
	9.81	00.00	120	1a	-1.72	27.60	1.16
	9.81	00.00	240	1b	1.72	27.60	1.16
(0.9 - 0.2Sds) * DL + E 180 deg M2	9.81	00.00	0	1	0.00	-43.57	3.27
	9.81	00.00	120	1a	-1.73	28.57	1.10
	9.81	00.00	240	1b	1.73	28.57	1.10
(0.9 - 0.2Sds) * DL + E 210 deg M1	9.81	00.00	0	1	0.08	-35.44	2.84
	9.81	00.00	120	1a	-0.16	4.53	0.28
	9.81	00.00	240	1b	2.90	44.49	1.77

(0.9 - 0.2Sds) * DL + E 210 deg M2	9.81	00.00	0	1	0.05	-37.24	2.80
	9.81	00.00	120	1a	-0.19	4.53	0.23
	9.81	00.00	240	1b	2.88	46.29	1.73
(0.9 - 0.2Sds) * DL + E 240 deg M1	9.81	00.00	0	1	0.14	-18.55	1.52
	9.81	00.00	120	1a	1.39	-18.55	-0.64
	9.81	00.00	240	1b	3.36	50.67	1.94
(0.9 - 0.2Sds) * DL + E 240 deg M2	9.81	00.00	0	1	0.09	-19.52	1.50
	9.81	00.00	120	1a	1.34	-19.52	-0.67
	9.81	00.00	240	1b	3.31	52.62	1.91
(0.9 - 0.2Sds) * DL + E 300 deg M1	9.81	00.00	0	1	0.14	27.60	-2.07
	9.81	00.00	120	1a	2.87	-41.62	-1.66
	9.81	00.00	240	1b	1.87	27.60	0.91
(0.9 - 0.2Sds) * DL + E 300 deg M2	9.81	00.00	0	1	0.09	28.64	-2.05
	9.81	00.00	120	1a	2.84	-43.70	-1.64
	9.81	00.00	240	1b	1.82	28.64	0.95
(0.9 - 0.2Sds) * DL + E 330 deg M1	9.81	00.00	0	1	0.08	44.49	-3.39
	9.81	00.00	120	1a	2.42	-35.44	-1.49
	9.81	00.00	240	1b	0.32	4.53	-0.01
(0.9 - 0.2Sds) * DL + E 330 deg M2	9.81	00.00	0	1	0.05	46.29	-3.36
	9.81	00.00	120	1a	2.40	-37.24	-1.45
	9.81	00.00	240	1b	0.29	4.53	0.05
1.0D + 1.0W Service Normal	9.81	00.00	0	1	0.00	49.13	-4.15
	9.81	00.00	120	1a	1.13	-14.62	-1.00
	9.81	00.00	240	1b	-1.13	-14.62	-1.00
1.0D + 1.0W Service 60 deg	9.81	00.00	0	1	-0.27	26.98	-2.17
	9.81	00.00	120	1a	-2.02	26.98	0.85
	9.81	00.00	240	1b	-2.73	-34.07	-1.58
1.0D + 1.0W Service 90 deg	9.81	00.00	0	1	-0.32	6.63	-0.40
	9.81	00.00	120	1a	-3.13	42.27	1.62
	9.81	00.00	240	1b	-2.44	-29.01	-1.22
1.0D + 1.0W Service 120 deg	9.81	00.00	0	1	-0.30	-14.62	1.48
	9.81	00.00	120	1a	-3.59	49.13	2.07
	9.81	00.00	240	1b	-1.43	-14.62	-0.48
1.0D + 1.0W Service 180 deg	9.81	00.00	0	1	0.00	-34.07	3.15
	9.81	00.00	120	1a	-1.74	26.98	1.32
	9.81	00.00	240	1b	1.74	26.98	1.32
1.0D + 1.0W Service 210 deg	9.81	00.00	0	1	0.16	-29.01	2.72
	9.81	00.00	120	1a	-0.18	6.63	0.48
	9.81	00.00	240	1b	2.96	42.27	1.90
1.0D + 1.0W Service 240 deg	9.81	00.00	0	1	0.30	-14.62	1.48
	9.81	00.00	120	1a	1.43	-14.62	-0.48
	9.81	00.00	240	1b	3.59	49.13	2.07
1.0D + 1.0W Service 300 deg	9.81	00.00	0	1	0.27	26.98	-2.17
	9.81	00.00	120	1a	2.73	-34.07	-1.58
	9.81	00.00	240	1b	2.02	26.98	0.85
1.0D + 1.0W Service 330 deg	9.81	00.00	0	1	0.16	42.27	-3.52
	9.81	00.00	120	1a	2.28	-29.01	-1.50
	9.81	00.00	240	1b	0.50	6.63	-0.08

Site Number:	**411046**	**Code:**	**ANSI/TIA-222-G**		
Site Name:	**Mendocino CA, CA**	**Engineering Number:**	**OAA718167_C3_04**		4/23/2019 4:10:38 PM
Customer:	**US CELLULAR**				

Max Uplift:	**125.21 (kip)**	**Moment Ice:**	**0.00 (kip-ft)**	**Moment:**	**2,019.89 (kip-ft)**	**1.2D + 1.6W Normal**
Max Down:	**145.16 (kip)**	**Total Down Ice:**	**0.00 (kip)**	**Total Down:**	**23.88 (kip)**	
Max Shear:	**12.53 (kip)**	**Total Shear Ice:**	**0.00 (kip)**	**Total Shear:**	**19.78 (kip)**	

Site Number: 411046 | Code: ANSI/TIA-222-G |

Site Name: Mendocino CA, CA | Engineering Number: OAA718167_C3_04 | 4/23/2019 4:10:38 PM

Customer: US CELLULAR

Deflections and Rotations

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)	Resultant (deg)
85 mph Normal to Face with No Ice	135.06	1.041	0.0007	1.2161	1.2161
85 mph Normal to Face with No Ice	140.25	1.154	0.0005	1.4142	1.4142
85 mph Normal to Face with No Ice	155.06	1.496	0.0007	1.3398	1.3398
85 mph 60 degree with No Ice	135.06	1.009	-0.0030	1.1833	1.1833
85 mph 60 degree with No Ice	140.25	1.119	-0.0044	1.3704	1.3704
85 mph 60 degree with No Ice	155.06	1.451	-0.0035	1.3058	1.3058
85 mph 90 degree with No Ice	135.06	1.016	-0.0019	1.1979	1.1979
85 mph 90 degree with No Ice	140.25	1.128	0.0026	1.3623	1.3623
85 mph 90 degree with No Ice	155.06	1.462	-0.0021	1.3170	1.3170
85 mph 120 degree with No Ice	135.06	1.041	-0.0007	1.2161	1.2161
85 mph 120 degree with No Ice	140.25	1.154	0.0005	1.4142	1.4142
85 mph 120 degree with No Ice	155.06	1.496	-0.0007	1.3397	1.3397
85 mph 180 degree with No Ice	135.06	1.009	0.0028	1.1834	1.1834
85 mph 180 degree with No Ice	140.25	1.119	0.0041	1.3704	1.3704
85 mph 180 degree with No Ice	155.06	1.451	0.0032	1.3058	1.3058
85 mph 210 degree with No Ice	135.06	1.016	0.0023	1.1978	1.1978
85 mph 210 degree with No Ice	140.25	1.128	0.0036	1.3623	1.3623
85 mph 210 degree with No Ice	155.06	1.462	0.0025	1.3169	1.3169
85 mph 240 degree with No Ice	135.06	1.041	0.0007	1.2161	1.2161
85 mph 240 degree with No Ice	140.25	1.154	0.0011	1.4141	1.4141
85 mph 240 degree with No Ice	155.06	1.496	0.0007	1.3397	1.3397
85 mph 300 degree with No Ice	135.06	1.009	0.0030	1.1833	1.1833
85 mph 300 degree with No Ice	140.25	1.119	0.0044	1.3704	1.3704
85 mph 300 degree with No Ice	155.06	1.451	0.0035	1.3058	1.3058
85 mph 330 degree with No Ice	135.06	1.016	0.0020	1.1978	1.1978
85 mph 330 degree with No Ice	140.25	1.128	0.0033	1.3623	1.3623
85 mph 330 degree with No Ice	155.06	1.462	0.0023	1.3169	1.3169
85 mph Normal to Face with No Ice (Reduced DL)	135.06	1.037	0.0006	1.2114	1.2114
85 mph Normal to Face with No Ice (Reduced DL)	140.25	1.151	0.0005	1.4080	1.4080
85 mph Normal to Face with No Ice (Reduced DL)	155.06	1.491	0.0007	1.3345	1.3345
85 mph 60 deg with No Ice (Reduced DL)	135.06	1.006	-0.0030	1.1789	1.1789
85 mph 60 deg with No Ice (Reduced DL)	140.25	1.116	-0.0043	1.3655	1.3655
85 mph 60 deg with No Ice (Reduced DL)	155.06	1.446	-0.0034	1.3007	1.3007
85 mph 90 deg with No Ice (Reduced DL)	135.06	1.013	-0.0019	1.1933	1.1933
85 mph 90 deg with No Ice (Reduced DL)	140.25	1.124	0.0026	1.3564	1.3564
85 mph 90 deg with No Ice (Reduced DL)	155.06	1.457	-0.0021	1.3118	1.3118
85 mph 120 deg with No Ice (Reduced DL)	135.06	1.037	-0.0007	1.2114	1.2114
85 mph 120 deg with No Ice (Reduced DL)	140.25	1.151	0.0005	1.4080	1.4080
85 mph 120 deg with No Ice (Reduced DL)	155.06	1.491	-0.0007	1.3344	1.3344
85 mph 180 deg with No Ice (Reduced DL)	135.06	1.006	0.0027	1.1790	1.1790
85 mph 180 deg with No Ice (Reduced DL)	140.25	1.116	0.0040	1.3655	1.3655
85 mph 180 deg with No Ice (Reduced DL)	155.06	1.446	0.0031	1.3007	1.3007
85 mph 210 deg with No Ice (Reduced DL)	135.06	1.013	0.0023	1.1933	1.1933
85 mph 210 deg with No Ice (Reduced DL)	140.25	1.124	0.0035	1.3564	1.3564
85 mph 210 deg with No Ice (Reduced DL)	155.06	1.457	0.0025	1.3118	1.3118
85 mph 240 deg with No Ice (Reduced DL)	135.06	1.037	0.0007	1.2114	1.2114
85 mph 240 deg with No Ice (Reduced DL)	140.25	1.151	0.0011	1.4080	1.4080
85 mph 240 deg with No Ice (Reduced DL)	155.06	1.491	0.0007	1.3344	1.3344
85 mph 300 deg with No Ice (Reduced DL)	135.06	1.006	0.0030	1.1789	1.1789
85 mph 300 deg with No Ice (Reduced DL)	140.25	1.116	0.0043	1.3655	1.3655
85 mph 300 deg with No Ice (Reduced DL)	155.06	1.446	0.0034	1.3007	1.3007
85 mph 330 deg with No Ice (Reduced DL)	135.06	1.013	0.0020	1.1933	1.1933
85 mph 330 deg with No Ice (Reduced DL)	140.25	1.124	0.0033	1.3564	1.3564
85 mph 330 deg with No Ice (Reduced DL)	155.06	1.457	0.0022	1.3118	1.3118
Seismic Normal M1	135.06	0.374	0.0004	0.4362	0.4362

Seismic Normal M1	140.25	0.414	0.0004	0.5122	0.5122
Seismic Normal M1	155.06	0.535	0.0011	0.4736	0.4736
Seismic Normal M2	135.06	0.423	0.0019	0.5253	0.5253
Seismic Normal M2	140.25	0.472	0.0018	0.6336	0.6336
Seismic Normal M2	155.06	0.620	0.0024	0.5790	0.5790
Seismic 60 deg M1	135.06	0.373	-0.0005	0.4364	0.4364
Seismic 60 deg M1	140.25	0.415	-0.0008	0.5104	0.5104
Seismic 60 deg M1	155.06	0.536	-0.0012	0.4730	0.4730
Seismic 60 deg M2	135.06	0.424	-0.0017	0.5268	0.5268
Seismic 60 deg M2	140.25	0.474	-0.0021	0.6330	0.6330
Seismic 60 deg M2	155.06	0.622	-0.0024	0.5798	0.5798
Seismic 90 deg M1	135.06	0.374	-0.0005	0.4382	0.4382
Seismic 90 deg M1	140.25	0.415	-0.0007	0.5046	0.5046
Seismic 90 deg M1	155.06	0.536	-0.0013	0.4735	0.4735
Seismic 90 deg M2	135.06	0.422	-0.0023	0.5281	0.5281
Seismic 90 deg M2	140.25	0.472	-0.0025	0.6230	0.6230
Seismic 90 deg M2	155.06	0.620	-0.0030	0.5789	0.5789
Seismic 120 deg M1	135.06	0.374	-0.0004	0.4362	0.4362
Seismic 120 deg M1	140.25	0.414	-0.0005	0.5122	0.5122
Seismic 120 deg M1	155.06	0.535	-0.0011	0.4736	0.4736
Seismic 120 deg M2	135.06	0.423	-0.0019	0.5253	0.5253
Seismic 120 deg M2	140.25	0.472	-0.0018	0.6336	0.6336
Seismic 120 deg M2	155.06	0.620	-0.0024	0.5790	0.5790
Seismic 180 deg M1	135.06	0.373	0.0005	0.4364	0.4364
Seismic 180 deg M1	140.25	0.415	0.0008	0.5104	0.5104
Seismic 180 deg M1	155.06	0.536	0.0012	0.4730	0.4730
Seismic 180 deg M2	135.06	0.423	0.0021	0.5256	0.5256
Seismic 180 deg M2	140.25	0.472	0.0025	0.6315	0.6315
Seismic 180 deg M2	155.06	0.620	0.0027	0.5784	0.5784
Seismic 210 deg M1	135.06	0.374	0.0004	0.4382	0.4382
Seismic 210 deg M1	140.25	0.415	0.0006	0.5046	0.5046
Seismic 210 deg M1	155.06	0.536	0.0008	0.4735	0.4735
Seismic 210 deg M2	135.06	0.424	0.0011	0.5294	0.5294
Seismic 210 deg M2	140.25	0.474	0.0014	0.6244	0.6244
Seismic 210 deg M2	155.06	0.622	0.0015	0.5802	0.5802
Seismic 240 deg M1	135.06	0.374	0.0004	0.4362	0.4362
Seismic 240 deg M1	140.25	0.414	0.0005	0.5122	0.5122
Seismic 240 deg M1	155.06	0.535	0.0011	0.4736	0.4736
Seismic 240 deg M2	135.06	0.423	0.0019	0.5253	0.5253
Seismic 240 deg M2	140.25	0.472	0.0018	0.6336	0.6336
Seismic 240 deg M2	155.06	0.620	0.0024	0.5790	0.5790
Seismic 300 deg M1	135.06	0.373	0.0005	0.4364	0.4364
Seismic 300 deg M1	140.25	0.415	0.0008	0.5104	0.5104
Seismic 300 deg M1	155.06	0.536	0.0012	0.4730	0.4730
Seismic 300 deg M2	135.06	0.424	0.0017	0.5268	0.5268
Seismic 300 deg M2	140.25	0.474	0.0021	0.6330	0.6330
Seismic 300 deg M2	155.06	0.622	0.0024	0.5798	0.5798
Seismic 330 deg M1	135.06	0.374	0.0003	0.4382	0.4382
Seismic 330 deg M1	140.25	0.415	0.0006	0.5046	0.5046
Seismic 330 deg M1	155.06	0.536	0.0007	0.4735	0.4735
Seismic 330 deg M2	135.06	0.424	0.0011	0.5294	0.5294
Seismic 330 deg M2	140.25	0.474	0.0014	0.6244	0.6244
Seismic 330 deg M2	155.06	0.622	0.0015	0.5802	0.5802
Seismic (Reduced DL) Normal M1	135.06	0.371	0.0004	0.4329	0.4329
Seismic (Reduced DL) Normal M1	140.25	0.412	0.0004	0.5076	0.5076
Seismic (Reduced DL) Normal M1	155.06	0.532	0.0010	0.4695	0.4695
Seismic (Reduced DL) Normal M2	135.06	0.420	0.0019	0.5214	0.5214
Seismic (Reduced DL) Normal M2	140.25	0.469	0.0018	0.6283	0.6283
Seismic (Reduced DL) Normal M2	155.06	0.616	0.0024	0.5742	0.5742
Seismic (Reduced DL) 60 deg M1	135.06	0.371	-0.0005	0.4330	0.4330
Seismic (Reduced DL) 60 deg M1	140.25	0.412	-0.0008	0.5066	0.5066
Seismic (Reduced DL) 60 deg M1	155.06	0.532	-0.0012	0.4691	0.4691

Seismic (Reduced DL) 60 deg M2	135.06	0.421	-0.0017	0.5228	0.5228
Seismic (Reduced DL) 60 deg M2	140.25	0.471	-0.0021	0.6284	0.6284
Seismic (Reduced DL) 60 deg M2	155.06	0.618	-0.0024	0.5752	0.5752
Seismic (Reduced DL) 90 deg M1	135.06	0.371	-0.0005	0.4348	0.4348
Seismic (Reduced DL) 90 deg M1	140.25	0.412	-0.0007	0.5002	0.5002
Seismic (Reduced DL) 90 deg M1	155.06	0.532	-0.0013	0.4694	0.4694
Seismic (Reduced DL) 90 deg M2	135.06	0.420	-0.0023	0.5242	0.5242
Seismic (Reduced DL) 90 deg M2	140.25	0.469	-0.0025	0.6178	0.6178
Seismic (Reduced DL) 90 deg M2	155.06	0.616	-0.0029	0.5741	0.5741
Seismic (Reduced DL) 120 deg M1	135.06	0.371	-0.0004	0.4329	0.4329
Seismic (Reduced DL) 120 deg M1	140.25	0.412	-0.0004	0.5076	0.5076
Seismic (Reduced DL) 120 deg M1	155.06	0.532	-0.0010	0.4695	0.4695
Seismic (Reduced DL) 120 deg M2	135.06	0.420	-0.0019	0.5214	0.5214
Seismic (Reduced DL) 120 deg M2	140.25	0.469	-0.0018	0.6283	0.6283
Seismic (Reduced DL) 120 deg M2	155.06	0.616	-0.0024	0.5742	0.5742
Seismic (Reduced DL) 180 deg M1	135.06	0.371	0.0005	0.4330	0.4330
Seismic (Reduced DL) 180 deg M1	140.25	0.412	0.0008	0.5066	0.5066
Seismic (Reduced DL) 180 deg M1	155.06	0.532	0.0012	0.4691	0.4691
Seismic (Reduced DL) 180 deg M2	135.06	0.420	0.0021	0.5216	0.5216
Seismic (Reduced DL) 180 deg M2	140.25	0.469	0.0025	0.6270	0.6270
Seismic (Reduced DL) 180 deg M2	155.06	0.616	0.0027	0.5738	0.5738
Seismic (Reduced DL) 210 deg M1	135.06	0.371	0.0004	0.4348	0.4348
Seismic (Reduced DL) 210 deg M1	140.25	0.412	0.0006	0.5002	0.5002
Seismic (Reduced DL) 210 deg M1	155.06	0.532	0.0008	0.4694	0.4694
Seismic (Reduced DL) 210 deg M2	135.06	0.421	0.0011	0.5254	0.5254
Seismic (Reduced DL) 210 deg M2	140.25	0.470	0.0014	0.6192	0.6192
Seismic (Reduced DL) 210 deg M2	155.06	0.617	0.0015	0.5754	0.5754
Seismic (Reduced DL) 240 deg M1	135.06	0.371	0.0004	0.4329	0.4329
Seismic (Reduced DL) 240 deg M1	140.25	0.412	0.0004	0.5076	0.5076
Seismic (Reduced DL) 240 deg M1	155.06	0.532	0.0010	0.4695	0.4695
Seismic (Reduced DL) 240 deg M2	135.06	0.420	0.0019	0.5214	0.5214
Seismic (Reduced DL) 240 deg M2	140.25	0.469	0.0018	0.6283	0.6283
Seismic (Reduced DL) 240 deg M2	155.06	0.616	0.0024	0.5742	0.5742
Seismic (Reduced DL) 300 deg M1	135.06	0.371	0.0005	0.4330	0.4330
Seismic (Reduced DL) 300 deg M1	140.25	0.412	0.0008	0.5066	0.5066
Seismic (Reduced DL) 300 deg M1	155.06	0.532	0.0012	0.4691	0.4691
Seismic (Reduced DL) 300 deg M2	135.06	0.421	0.0017	0.5228	0.5228
Seismic (Reduced DL) 300 deg M2	140.25	0.471	0.0021	0.6284	0.6284
Seismic (Reduced DL) 300 deg M2	155.06	0.618	0.0024	0.5752	0.5752
Seismic (Reduced DL) 330 deg M1	135.06	0.371	0.0003	0.4348	0.4348
Seismic (Reduced DL) 330 deg M1	140.25	0.412	0.0006	0.5002	0.5002
Seismic (Reduced DL) 330 deg M1	155.06	0.532	0.0007	0.4694	0.4694
Seismic (Reduced DL) 330 deg M2	135.06	0.421	0.0010	0.5254	0.5254
Seismic (Reduced DL) 330 deg M2	140.25	0.470	0.0014	0.6192	0.6192
Seismic (Reduced DL) 330 deg M2	155.06	0.617	0.0014	0.5754	0.5754
Serviceability - 60 mph Wind Normal	135.06	0.322	0.0022	0.3763	0.3763
Serviceability - 60 mph Wind Normal	140.25	0.357	0.0022	0.4381	0.4381
Serviceability - 60 mph Wind Normal	155.06	0.463	0.0024	0.4146	0.4146
Serviceability - 60 mph Wind 60 deg	135.06	0.312	-0.0022	0.3656	0.3656
Serviceability - 60 mph Wind 60 deg	140.25	0.346	-0.0024	0.4226	0.4226
Serviceability - 60 mph Wind 60 deg	155.06	0.449	-0.0024	0.4034	0.4034
Serviceability - 60 mph Wind 90 deg	135.06	0.314	-0.0025	0.3704	0.3704
Serviceability - 60 mph Wind 90 deg	140.25	0.349	-0.0026	0.4219	0.4219
Serviceability - 60 mph Wind 90 deg	155.06	0.452	-0.0028	0.4072	0.4072
Serviceability - 60 mph Wind 120 deg	135.06	0.322	-0.0022	0.3763	0.3763
Serviceability - 60 mph Wind 120 deg	140.25	0.357	-0.0022	0.4381	0.4381
Serviceability - 60 mph Wind 120 deg	155.06	0.463	-0.0024	0.4146	0.4146
Serviceability - 60 mph Wind 180 deg	135.06	0.312	0.0022	0.3656	0.3656
Serviceability - 60 mph Wind 180 deg	140.25	0.346	0.0024	0.4226	0.4226
Serviceability - 60 mph Wind 180 deg	155.06	0.449	0.0024	0.4034	0.4034
Serviceability - 60 mph Wind 210 deg	135.06	0.314	0.0014	0.3704	0.3704
Serviceability - 60 mph Wind 210 deg	140.25	0.349	0.0015	0.4219	0.4219

Site Number:	**411046**	**Code:**	**ANSI/TIA-222-G**			
Site Name:	**Mendocino CA, CA**	**Engineering Number:**	**OAA718167_C3_04**			4/23/2019 4:10:38 PM
Customer:	**US CELLULAR**					
Serviceability - 60 mph Wind 210 deg		**155.06**	**0.452**	**0.0015**	**0.4072**	**0.4072**
Serviceability - 60 mph Wind 240 deg		**135.06**	**0.322**	**0.0022**	**0.3763**	**0.3763**
Serviceability - 60 mph Wind 240 deg		**140.25**	**0.357**	**0.0022**	**0.4381**	**0.4381**
Serviceability - 60 mph Wind 240 deg		**155.06**	**0.463**	**0.0024**	**0.4146**	**0.4146**
Serviceability - 60 mph Wind 300 deg		**135.06**	**0.312**	**0.0022**	**0.3656**	**0.3656**
Serviceability - 60 mph Wind 300 deg		**140.25**	**0.346**	**0.0024**	**0.4226**	**0.4226**
Serviceability - 60 mph Wind 300 deg		**155.06**	**0.449**	**0.0024**	**0.4034**	**0.4034**
Serviceability - 60 mph Wind 330 deg		**135.06**	**0.314**	**0.0013**	**0.3704**	**0.3704**
Serviceability - 60 mph Wind 330 deg		**140.25**	**0.349**	**0.0015**	**0.4219**	**0.4219**
Serviceability - 60 mph Wind 330 deg		**155.06**	**0.452**	**0.0014**	**0.4072**	**0.4072**